## Friday, 16 June 2023

| (10.00 am) | 2 |
| :--- | :--- |
| LADY HALLETT: Yes, Ms Blackwell. | 3 |
| MS BLACKWELL: Good morning, my Lady. The evidence today | 4 |
| will begin with me calling Professor Clare Bambra and | 5 |
| Professor Sir Michael Marmot, who are present in the | 6 |
| witness box. May they be sworn, please. | 7 |
| PROFESSOR SIR MICHAEL MARMOT (affirmed) | 7 |
| PROFESSOR CLARE BAMBRA (sworn) | 8 |
| Questions from COUNSEL TO THE INQUIRY | 9 |
| MS BLACKWELL: Thank you both. May I begin by thanking you | 10 |
| both for the assistance that you've given to the Inquiry | 11 |
| so far, and for agreeing to come and give evidence to | 12 |
| the Inquiry today. | 13 |
| During the questioning, please keep your voices up | 14 |
| and speak into the microphones so that the stenographer | 15 |
| can take a note. If I ask you a question that isn't | 16 |
| clear, please ask me to repeat it. | 17 |
| If you need a break at any time, please just | 18 |
| indicate. We will have a break part-way through your | 19 |
| evidence, but if you want one before that, please just | 20 |
| say and we will rise. | 21 |
| My Lady, the report that has been jointly prepared | 22 |
| by Professors Marmot and Bambra is at INQ000195843. | 23 | 1

an elected fellow of the Faculty of Public Health at the Academy of Medical Sciences, an honorary fellow of the Royal Society of Public Health, and the British Academy, and a foreign associate member of the Institute of Medicine.

In 2000 you were awarded a knighthood, and in 2023
made a companion of honour for services to public
health. In 2008 you chaired the World Health
Organisation Commission on Social Determinants of Health, and you led the seminal
UK Government-commissioned Marmot Review, Fair Society
Healthy Lives, in 2010, as well as the Health Equity in
England: The Marmot Review 10 Years On in 2020, and
Build Back Fairer: The COVID-19 Marmot Review in the same year.

Hot off the press, recently announced last week, you will co-chair the Global Council on Inequality, AIDS and Pandemics, researching and asks the questions: do inequalities drive pandemics, and what is the impact of pandemics and inequalities in health?

The report that you have prepared is split into topics, and we will deal with your evidence along the same lines, covering health inequalities, the health inequalities landscape in the UK, health inequalities in pandemic planning, the consequences of failing to take

It's currently on the screen. My Lady, you can see that it's signed at the foot of each page by each of the professors, confirming that it's their own work. Please may we have permission to publish the report?
LADY HALLETT: You do, thank you.
MS BLACKWELL: Thank you.
We can take that down.
I'm going to begin by providing an introduction of your professional backgrounds and areas of expertise.

Turning first to you, Professor Bambra, you are a professor of public health in the Population Health Sciences Institute, at the Faculty of Medical Sciences at Newcastle University. You have extensively researched health inequalities, including the unequal impact of the Covid-19 pandemic. In 2013, you were elected as a fellow of the Academy of Social Sciences and in 2022 you were awarded senior investigator status with the National Institute for Health and Care Research academic college.

You are an academic co-director of Health Equity North and a member of the World Health Organisation Europe's scientific advisory group on health equality.

Professor Sir Michael Marmot, you are a professor of epidemiology and public health at the Institute of Health Equity, University College London. You are

2
account of health inequalities, and the recommendations which lie at the end of your report.

May we put on the screen, please, page 4 of the report, and highlight paragraph 2. You begin your report in this way: explaining that:
"Health inequalities are the systematic, avoidable differences in health which exist between different social groups ... Health inequalities exist between different socio-economic groups (measured using indicators of socio-economic status, including income, education, occupation or area-level deprivation), by ethnicity, and are also experienced by other social minorities (such as 'inclusion health groups', or members of the LGBTQ+ community, or people with disabilities). The term health inequalities includes both (a) inequalities in health outcomes (eg mortality rates, life expectancy etc) as well as (b) inequalities in access to healthcare and inequalities in the outcomes of healthcare."

Please can you explain to the Inquiry what is meant by inequalities in health outcomes as compared to inequalities in access to healthcare, and how do these relate one to the other?
PROFESSOR MARMOT: Inequalities in health outcomes commonly we measure by mortality, life expectancy, healthy life
expectancy, or some specific measures of morbidity. 5

Government in 2008 commissioning you to conduct your review.

Was that review conducted only in relation to England and not the other three nations?
PROFESSOR MARMOT: Yes, because health is a devolved matter --
MS BLACKWELL: Yes.
PROFESSOR MARMOT: -- for the other nations, so although we think that our report for England clearly applies in Scotland, Wales and Northern Ireland, as well as England, but officially it was England. I've had quite a lot to do with the Welsh Government based on my English report, and they're very interested in it, so they clearly think the conclusions apply. But because health is a devolved matter, it was set up for England.
MS BLACKWELL: Do you know if any similar reviews were set up to deal with Northern Ireland, Wales and Scotland?
PROFESSOR MARMOT: In the wake of my 2020 review, Health Equity in England: The Marmot Review 10 Years On, the Health Foundation convened a review in Scotland -- I was on the advisory board for that review -- and it was very much along the same lines of my 2020 report.

Wales hasn't done it in the same way. They've had the Future Generations Act, which has been very important to thinking in Wales, but they haven't quite
There's been intense debate in the scientific field as to how much of the systematic inequalities between social groups in those health outcomes that I've just described can be attributed to inequalities in access to care.
MS BLACKWELL: Yes.
PROFESSOR MARMOT: When the Commonwealth Fund has looked at health systems in 11 countries, consistently until -maybe not anymore, but consistently until very recently, the NHS always ranked number one on equity of access. Which means that, by and large, most of the inequalities in health that we see are not directly related to inequalities in access to healthcare.
In the United States, for example, there's enormous interest in inequalities in access to healthcare because they are huge.
MS BLACKWELL: Yes.
PROFESSOR MARMOT: But in a way we're the control country.
Because we've done such a good job of getting equity of access to healthcare because of our National Health Service, by and large, the majority of the inequalities in health that we see are not attributable to inequalities in access to care.
MS BLACKWELL: Right. There are several social, economic
and environmental factors which impact on people's health and can give rise to inequalities; is that right?
PROFESSOR MARMOT: It's what we call the social determinants of health. I don't want to divert the Inquiry, but we have another term that we use. You introduced me, I'm the director of the Institute of Health Equity, and the reason we've introduced that term, WHO tends to use it, it's these avoidable differences in health which are judged to be avoidable and are not avoidable, are unfair, hence inequitable.
MS BLACKWELL: Right.
PROFESSOR MARMOT: That's why we tend to talk in terms of health equity, social justice, which is a judgement call, whereas what Clare -- forgive me if I refer to my colleague as Clare rather than Professor Bambra -- what Clare and I are looking at is the evidence of avoidable health inequalities, and they're avoidable, because we understand the social determinants of these systematic differences, and we've laid them out.
MS BLACKWELL: Yes.
The World Health Organisation in 2005 set up the global Commission on Social Determinants of Health to examine the social factors leading to ill health and health inequalities, and the commission was led by you, Professor Marmot, and culminated in the United Kingdom 6
done it in the same way.
MS BLACKWELL: And Northern Ireland?
PROFESSOR MARMOT: Northern Ireland hasn't. I've, from time to time, talked to government people, public health people, in Northern Ireland, but they haven't done it in the same systematic way.

Pleasingly -- drop that word. No, pleasingly, there's good collaboration in public health between Northern Ireland and the Republic of Ireland. That is pleasing that there's good collaboration. Because public health crosses borders and we talk to each other all over the place, and there's good collaboration, and the Republic of Ireland has been intensely interested in my review, and there's quite a lot of cross-border discussion, collaboration on the island of Ireland.
MS BLACKWELL: Thank you.
So social determinants of health inequalities are the conditions in which we are born, grow, live, work and age. I'd like to look at some of those individually, please.

If we can highlight paragraph 3 of your report. Thank you.
"Inequalities in health by social economic status are not restricted to differences between the most privileged groups and the most disadvantaged: health
inequalities exist across the entire social gradient ... Consistently, the finding has been that the lower the socio-economic position the worse the health, the higher the age-specific mortality rates and the shorter the life expectancy ... The social gradient in health runs from the top to the bottom of society and 'even comfortably off people somewhere in the middle tend to have poorer health than those above them' ... We first demonstrated the social gradient in health in the Whitehall Studies of British Civil Servants: the higher the grade of employment the longer the life expectancy ... By way of further example, on average, people in the highest occupational groups ... have better health outcomes than those in mid-ranking occupations ... who in turn have better health outcomes than those in the lowest occupational groups ... Similarly, people with a higher income or university-level education -- on average -- have better health outcomes than those with a lower income or no educational qualifications ..."

The key finding, then, is that the lower a person's socio-economic position, the worse their health, the higher the age-specific mortality rates and the shorter their life expectancy. Is that right? I can see you both nodding.
available, and it's pretty systematic and comparable.
Healthy life expectancy in one sense is much more
important, because it's quality of life as well as
length of life. But it's less readily available, and
it's less comparable, particularly between countries
within -- we are blessed in Britain -- I affirmed,
I don't know where I got "blessed" from. But we're
fortunate in Britain to have brilliant statistics, which
is why we know as much as we know, pre-pandemic, and why
we knew what we knew during the pandemic.
MS BLACKWELL: Yes.
PROFESSOR MARMOT: So we can look at healthy life
expectancy. There are various ways of doing it, but it's asking people about disability or about good health, and that tends to come from the census, and then doing a calculation.
MS BLACKWELL: Yes.
PROFESSOR MARMOT: What's striking is that the social gradient in life expectancy is steep, the social gradient in healthy life expectancy is even steeper.
MS BLACKWELL: I don't want to interrupt you, but we're going to look at those figures now.
PROFESSOR MARMOT: Okay.
MS BLACKWELL: So could we have on screen, please, the subparagraphs of paragraph 12 in the report. Thank you.

```
PROFESSOR MARMOT: Yes.
PROFESSOR BAMBRA: Yes.
MS BLACKWELL: You explore socio-economic geographical
inequalities in the United Kingdom at paragraphs 8 to 13
in your report. We don't need to look at them.
    And we can take that down, please.
    In summary, is it correct that those in more
        deprived areas have shorter lives and lives with more
        ill health?
PROFESSOR BAMBRA: Yes.
MS BLACKWELL: And that -- in terms of healthy life
        expectancy, are you able to give a definition of what
        that means in terms of inequality?
PROFESSOR MARMOT: Yes, I mean, we tend to look at life
    expectancy, it's an artefact, it's not predicting how
    long an individual will live, it's a way of summarising the current age-specific mortality rates. So it's saying if somebody born today was subject to today's age-specific mortality rates, that's how long they would live. But it's not predicting what the age-specific mortality rates will look like 50 years, 60 years, 70 years from now. So it's a summary. We tend to use it because everybody counts deaths, all over the world, and you can get good comparisons. Not because we think length of life is the only thing that matters, but it's 10
```

Could we just scroll down a little. Thank you.
So here are some of the figures, Professor Marmot, that you have just been explaining to us. Looking at paragraph 12.1 and dealing with the four nations separately:
"12.1. In England, healthy life expectancy at birth amongst men living in the $10 \%$ most deprived areas was 52.3 years in 2017-2019, compared with 70.7 years among those living in the $10 \%$ least deprived areas."

Now, I've had my calculator out overnight, my Lady, and that is a difference of 18.4 years.
"Women in the most deprived areas could expect to live 51.4 years in 'Good' health compared with 71.2 years in the least deprived areas ..."

A difference of 19.8 years.
Moving down to Scotland:
"12.2. In Scotland, healthy life expectancy at birth amongst men living in the 10\% most deprived areas was 47.0 years in 2017-2019, compared with 72.1 years amongst those living in the $10 \%$ least deprived areas."

Which is a difference of 25.1 years, so that's almost a third of the healthy life expectancy:
"Women in the most in the most deprived areas could expect to live 50.1 years in 'Good' health compared with 71.6 years in the least deprived areas."

Which is a difference of 21.5 years.
"12.3. In Wales, healthy life expectancy at birth in 2017-19 for men was lowest in the 10\% most deprived areas at 51.8 years and highest in the least deprived $10 \%$ of areas at 68.6 years, a difference of 16.9 years. Similarly, healthy life expectancy at birth for women in the most deprived areas was 50.2 years compared to 68.4 years in the least deprived areas ..."

Which is a difference of 18.2 years.
"12.4. In Northern Ireland, the healthy life expectancy inequality gap between the $20 \%$ most and least deprived areas was 13.5 years for men and 15.4 years for women [over the same time period] ... The data presented here for Northern Ireland is by quintile ( $20 \%$ bands) whereas [the difference] is by decile ( $10 \%$ bands) for the other three countries. This reflects cross-national differences in how the data is published."

Is that right?
PROFESSOR BAMBRA: Yes.
MS BLACKWELL: Right. Thank you, we can take that down, please.

In relation to inequalities arising from ethnicity in health, you explain that there has historically been a lack of routine data linking ethnicity to mortality records, explaining an absence of official regular 13
morbidity, than white people in England.
PROFESSOR BAMBRA: Yes, there's better data for the various groups, including minority ethnic groups, when it comes to morbidity as opposed to mortality.
MS BLACKWELL: Right.
PROFESSOR BAMBRA: Obviously it's something that you can do on a survey basis, it's less complicated to measure and, yes, it varies obviously by different minority ethnic group, but there are certain conditions that are more likely to be worse in some groups than others. And certainly for indicators such as self-reported health or mental health, it's particularly poor in certain ethnic minority groups, yes.
MS BLACKWELL: Is the pattern in terms of the data or lack of data similar one in Scotland and Wales?
PROFESSOR BAMBRA: Yes, that's correct, and there's even less data available in Northern Ireland.
MS BLACKWELL: Minority ethnic groups in England, Scotland and Wales experience substantial inequalities in the social determinants of health, and so you said, Professor Marmot, in your 2020 report.

Could we display paragraph 28 of their report, please.

All right, now, there are a series of inequalities in the social determinants of health in relation to

15
information on life expectancies for different ethnic groups; is that right?
PROFESSOR BAMBRA: Yes, that's right. There are complexities around calculating life expectancies by ethnicity, which we go into in detail in the report.
MS BLACKWELL: Yes. What's the importance of data collection in respect of protected characteristics and other axes of inequalities, including the importance of disaggregated data?
PROFESSOR BAMBRA: Yes, as Michael said, we have brilliant
data when we're looking at area-level disadvantage in England and the other devolved nations, but when it comes to other groups that suffer from health inequalities, such as ethnic minorities, people from LGBTQ or inclusion health groups, then it's like a contrast of riches in terms of data compared to almost no or sparse data, where it mainly has to come from cohort studies conducted by individual universities and so on.

The issues are that if you don't have any data, you don't know sufficiently what the health needs are of different populations in your community.
MS BLACKWELL: But despite the absence of data, in your report you say that there is some evidence that ethnic minority people may have much poorer health, that is 14
minority ethnic groups set out in subparagraphs of paragraph 28 , starting with the:
"28.1. Educational attainment at GCSE and degree levels [which] is highest for ... Chinese and Indian ethnic groups [but] Gypsy and Irish Travellers have the lowest level of qualifications at both levels ..."

If we could move over the page, please, we can see that:
"28.2. White and Indian minority ethnic groups are more likely to be in employment, with unemployment highest among Black and Bangladeshi/Pakistani populations ..."

And that your review, Professor Marmot:
"28.3 ... noted that ... people from ethnic minority groups are 'more likely to be in low-paid, poor quality jobs, with few opportunities for advancement, often working in conditions that are harmful to health. Many are trapped in a cycle of low-paid, poor-quality work and unemployment'."

And that:
"28.4. 'Workers from minority ethnic groups are more likely to be on zero-hours contracts than White workers: 1 in 24 minority ethnic workers is on a zero-hours contract compared with one in 42 White workers, and minority ethnic workers are more likely
than White workers to be on agency contracts ..."
"28.5. Bangladeshi, Pakistani, Chinese and Black groups are about twice as likely to be living on a low income, and experiencing child poverty, as the White population ... In Wales, for example, there is a $29 \%$ likelihood of people whose head of household came from a non-white ethnic group living in relative income poverty compared to a $24 \%$ likelihood for those whose head of household came from a white ethnic group ..."

## And so it goes on.

I want to just divert slightly to ask you both: what is the impact that racism can have on health inequalities?
PROFESSOR BAMBRA: There are different types of racism.
MS BLACKWELL: Yes.
PROFESSOR BAMBRA: At the interpersonal level, institutional
level or at the structural level. A lot of the research that's been conducted has been done on interpersonal racism, so that's harassment, discrimination, and violence. Those studies obviously find significant impacts particularly on mental health but also on general health, and that that lasts across people's life course.

In terms of institutional and structural racism, there has been less research done in the UK on that, 17

PROFESSOR MARMOT: I think of it in two ways. One exactly
as Clare has just described, that racism leads to social disadvantage, but the second is what Clare was describing earlier, the direct psychosocial effect of racism. It's pretty miserable to be discriminated against.

And we've got -- this is emerging since Clare and I prepared our report -- we've got emerging evidence that if you look at school performance, early childhood, minority ethnic groups do well. Poor Bangladeshi kids do better than poor white kids in school. The discrimination and the prejudice seems to happen afterwards, when they go into further education or into employment.

So exactly what we've documented here of the employment disadvantage of belonging to a minority ethnic group, it's almost as if something happens after early education.

So, I think -- we're in agreement on this -- there are two ways to think about it: racism leads to social and economic disadvantage, but there may be direct psychosocial effects of racism.
MS BLACKWELL: Thank you.
I want to turn away from racism and race for a moment and look at what are described as "inclusion
health groups".
Can we please display paragraph 33 of the report. Thank you. Could we highlight paragraph 33. Thank you very much.
"According to NHS England ... inclusion health groups are people who are socially excluded 'who typically experience multiple overlapping risk factors for poor health, such as poverty, violence and complex trauma'. Inclusion health groups include 'people who experience homelessness, drug and alcohol dependence, vulnerable migrants, Gypsy, Roma and Traveller communities, sex workers, people in contact with the justice system and victims of modern slavery'. People belonging to inclusion groups tend to have poor health outcomes, negative experiences of healthcare and a lower average age of death ... For example, a systematic review of over 300 scientific studies conducted in high-income countries (including the USA, Australia, Sweden, Canada and the UK) which was published in The Lancet found that mortality rates were significantly higher amongst people with a history of homelessness, imprisonment, sex work, or substance use disorder than amongst the general population, particularly for deaths due to injury, poisoning, and other external causes ... Research suggests that the adverse health experiences of 20
inclusion health groups result from stigma, trauma, social exclusion, discrimination and victimisation."

That's quite a wide description of various factors that might affect someone's life. But is the analysis of the level at which their lives are affected, in terms of the lower average age of death and negative consequences of healthcare, quite common amongst those groups?
PROFESSOR BAMBRA: Yes, as it's stated there from the
scientific evidence.
MS BLACKWELL: Yes.
Can you explain to us what is meant by intersectionality, please?

PROFESSOR BAMBRA: Yes, intersectionality is a way of thinking about how people have different aspects of social identity, so, for example, I'm a women but I'm also white and I'm also LGBTQ, and so I would get certain advantages in life, for example, from whiteness, but I might get disadvantages from being a women. So I experience the social world and therefore the health consequences of that in different ways, from a privilege or subordination.22
MS BLACKWELL: Thank you. ..... 23
Finally on this topic, could we highlight ..... 24
paragraph 34 , please:
curve. The rate of improvement slowed dramatically and then stopped improving. One question this raises is whether we have simply reached peak life expectancy; the rate of improvement has to slow some time. However, comparisons with other countries answer this question.
The slowdown in life expectancy growth during the decade after 2010 was more marked in the UK than in any other rich country, except Iceland and the USA ..."

Is it right that the only G7 country with lower life
expectancy going into the pandemic than the UK was the
United States?
PROFESSOR MARMOT: That's correct.
MS BLACKWELL: Yes.
Are you able, Professor Marmot, to give us a picture of how the healthcare situation, the state that it was in at the time that the pandemic hit, not only in terms of healthcare but also in terms, for instance, of vacancies in hospitals or the situation in which nurses found themselves, and give us a full complexion of what that picture looked like?
PROFESSOR MARMOT: As I said earlier, most of the health differences that we see are not attributable to healthcare, but to health. Let me make two comments about this slowdown in improvement in health post-2010. The first is close to unprecedented -- it's hard to
"LGBTQ+ groups (lesbian, gay, bisexual, transgender, and queer or questioning), also experience health inequalities. Whilst data is lacking in terms of mortality, life expectancy or physical health, there is strong evidence of higher prevalence of mental health issues amongst LGBTQ+ people ... For example, a review of UK studies found higher rates of mental health problems amongst LGBTQ+ people including attempted suicide, self-harm, anxiety and depression ... This review also found evidence of higher substance (alcohol and tobacco) abuse amongst LGBTQ+ people. Mental health services were perceived to be discriminatory by LGBTQ+ people. Researchers have suggested that this increased morbidity is potentially a result of stigma, social exclusion, discrimination and victimisation ..."

Thank you.
I'm going to move on now to ask about the health inequalities landscape in the United Kingdom, and begin, please, with what is described in your report as a slowdown in health improvement.

Could we display, please, paragraph 36 at page 15:
"Until 2010, life expectancy in the UK had been increasing at about one year every four years. This trend had continued for all of the 20th century, with small deviations. In 2010/11, there was a break in the 22
overstate how important this is: that we were used, as a country, based on the evidence, to expect health to get better every year. Fewer babies would die, fewer old people would die, health would improve year on year and that's what the history of the 20th currently led us to expect. And in 2010 that rate of improvement slowed dramatically, more marked in the United Kingdom than in any other rich country except Iceland and the United States. That's really dramatic. It slowed in many countries, but nowhere near to the extent that that improvement in life expectancy slowed in the UK.

Second -- we've described the social gradient in health -- the social gradient got steeper, so the inequalities got bigger, and, particularly for people from the northeast, what we saw was a decline in life expectancy. A decline. Not just a slowdown in improvement, a decline in life expectancy for people in the bottom $10 \%$ of deprivation, the most deprived, in every region of the country except London.

So the regional inequalities got bigger.
If you were lucky enough to be in London, then the consequence of deprivation for your health was not as bad as if you were deprived in the northeast or the northwest.
MS BLACKWELL: I'm going to display some charts now which 24

| I hope you can take us through that demonstrate the | 1 |
| :--- | :---: |
| evidence you've just given, Professor Marmot. | 2 |
| Could we have on the screen, please, paragraphs 39 | 3 |
| and 41. Thank you very much. | 4 |
| What do we see here, Professor Marmot or | 5 |
| Professor Bambra? We can see that the title of the | 6 |
| figure is "Life expectancy at birth by sex, four | 7 |
| countries of the UK", so that's between 2010 and 2012 to | 8 |
| 2016 to 2018. | 9 |
| PROFESSOR MARMOT: Well, I say to my Welsh colleagues, "You | 10 |
| look like England, only more so" -- which they don't | 11 |
| like much -- because the slowdown was more marked in | 12 |
| Wales and Scotland than in England. Now, there may be | 13 |
| a number of reasons for that. One might be that England | 14 |
| is the wrong comparator for Wales, maybe it should be | 15 |
| northeast or northwest England, because of | 16 |
| post-industrial effects on poverty and the like. But | 17 |
| what we see is this slowdown in improvement in all four | 18 |
| countries of the United Kingdom. | 19 |
| MS BLACKWELL: Let's look, please, briefly at each of the | 20 |
| countries separately, starting with Scotland, at | 21 |
| paragraphs 40 and 41. Next page, please. | 22 |
| (Pause) | 23 |
| Figure 3 on page 20, please. Yes, thank you. | 24 |
| PROFESSOR MARMOT: So, Scotland, when I said Wales is like | 25 | 25

PROFESSOR MARMOT: The patterns are pretty much the same.
There is a consistent phenomenon in the data globally -well, amongst high income countries -- that if you look at life expectancy, the variations tend to be bigger for men than for women. When you look at ill health, the variations tend to be bigger for women than for men. And Clare may have a better answer to that than I do, but if I say I don't know the reason for that, I can then speculate, but it's troubled all of us for a very long time that women seem to have more morbidity, more ill health, and in fact, with what happened post-2010, we saw a particular impact on ill health in women going up. So the life expectancy figures, it's both genders, but particularly reported ill health was going up for women.
PROFESSOR BAMBRA: The life expectancy for women in the most deprived areas has had declines in some cases as well. So, for example, in some of the areas of the northeast, it's lower than it was ten years ago.
MS BLACKWELL: Thank you.
May we go to figure 4 on page 21, please. We can see the same information plotted on figures for Wales, and is this a similar pattern to what we have seen in the previous two --
PROFESSOR MARMOT: Yes.

England only more so, Scotland is like the northeast and northwest of England, only more so. Look at the decline in life expectancy in the most deprived group.
MS BLACKWELL: Which is at the bottom of each of these figures, yes.
PROFESSOR MARMOT: So this is using an index of multiple deprivation, the same index across the UK, and you can see the improvement in life expectancy in the least deprived quintile --
MS BLACKWELL: Yes.
PROFESSOR MARMOT: -- and going up a bit in the next two quintiles, you can see it declining after 2010 in the second poorest quintile, and declining quite markedly in the poorest quintile. So the inequalities are getting bigger and life expectancy for the bottom 40\% -- earlier I said the bottom $10 \%$-- the bottom $40 \%$ is getting worse.

That's really -- I mean, I can't overstate it, it's really shocking to those of us in the health field, as well as to ordinary people: the idea that it's no longer the case that you can look forward to better health year on year, it's actually getting worse.

MS BLACKWELL: Just to confirm, the top figure relates to males and the bottom figure relates to females, but the patterns are pretty much the same.

26

MS BLACKWELL: -- charts? Thank you.
Then, finally, can we go to Northern Ireland, please, which is on page 22 , figure 5 .
PROFESSOR MARMOT: Look at the dramatic decline. There you can actually see for the bottom $60 \%$, the most deprived 60\%.
MS BLACKWELL: In relation to both men and women?
PROFESSOR MARMOT: Yes.
MS BLACKWELL: Yes.
PROFESSOR MARMOT: So you asked me -- I hadn't finished answering your question --
MS BLACKWELL: Sorry, I interrupted you.
PROFESSOR MARMOT: -- where we were up to 2019.
MS BLACKWELL: Yes.
PROFESSOR MARMOT: In my 2010 review, drawing both on the
World Health Organisation Commission on Social Determinants of Health, which I chaired, and the work of nine task groups, expert task groups that we set up to bring the evidence together, we made six domains of recommendations: give every child the best start in life; education and lifelong learning; employment and working conditions; number four was everyone should have at least the minimum income necessary for a healthy life; number five was healthy and sustainable places in which to live and work; number six, taking a social

28
determinants approach to prevention.
We said: if you follow these six domains of recommendations, health will improve and health inequalities will diminish.

So then we get to -- notice we didn't say anything about healthcare, for the reasons that I said earlier, that the National Health Service delivered great equity of access to healthcare, and in fact -- a slightly complicated point -- in a way, it goes the other way. What we see is that the usage of the healthcare system follows the social gradient in that the more deprived the area the greater the usage of the healthcare system. Not because people are overusing it, but because they're sick. There's more illness. So it's actually inequalities in health that are putting the burden on the healthcare system, not the healthcare system that's responsible for inequalities in health. It actually goes the other way.

That said, we do need a healthcare system when we get sick, and where we were pre-pandemic, if you look at funding for the healthcare system -- and we put this in the report, adjusting for the size of the population and the ageing of the population -- if you've got more people, you need to spend more money on healthcare; if you've got more older people, you need to spend more 29

There were already vacancies climbing in --
MS BLACKWELL: Vacancies of clinicians --
PROFESSOR MARMOT: Oh, doctors and nurses.
MS BLACKWELL: Yes.
PROFESSOR MARMOT: Climbing. I can't give you the figures
for 2019. The most recent figures suggest 150,000 vacancies of doctors and nurses, but there were already vacancies, which puts great pressure on the existing staff. Then we know there were real problems of morale. There had been the first doctors' strike in the 2010s.
There was real concern over pay for doctors and nurses,
which was part of the concern over public sector pay in
general. But before the cost of living crisis, nurses' pay had gone down by $5 \%$ over the period from 2010.

I'm not going to get into the intricacies of the
doctors' calculations of which is the right figure, but doctors' pay had clearly gone down.

So pay and conditions, vacancies, morale, were
really adverse in 2019 before the pandemic.
MS BLACKWELL: The figures that you gave a moment ago relate to funding the NHS in England. What about social care?
LADY HALLETT: Sorry, before we go on, I think there are two separate issues. We have had the graphs on life expectancy and we've now moved on to funding of the NHS. Can I just go back to the graphs for a second.
money on healthcare. Older people get sick, that's the nature of it. So just looking at a blanket figure for spending doesn't tell you enough. And we drew on figures from the Nuffield Trust that said during the government from 1979 to 1997, healthcare spending went up about $2 \%$ a year, after you adjust for the size of the population and the ageing of the population.

## MS BLACKWELL: Yes.

PROFESSOR MARMOT: In the government from 1997 to 2009, it
went up at $5.7,5.8 \%$ a year. 2010, it went up by minus $0.07 \%$, and then the next five years, minus $0.03 \%$.

So, adjusting for the size of the population and the ageing of the population, the increase was negative after 2010.

Now, we know, even after adjusting for population size, you need positive growth because of new technology, which is expensive and so on. So the funding of the healthcare system was inadequate post-2010.

If you take January 2009 the number of people waiting for NHS treatment as a benchmark, it was at the -- in 1997 it was about 2.3 times what it was at the low level of 2009. By 2019 it had doubled compared with 2009. So pre-pandemic the number of people waiting for NHS treatment was twice as high as it had been in 2009. 30

PROFESSOR MARMOT: Sure.
MS BLACKWELL: Of course.
LADY HALLETT: Forgive me for interrupting, Ms Blackwell.
MS BLACKWELL: Not at all.
LADY HALLETT: I confess a lack of understanding of graphs on occasion -- I used to describe to colleagues I had graph blindness -- so forgive me if I don't really follow. But could we go back to the graph which is on the screen at page 22.

The funding point is obviously really important and we will get back to it, I promise.

But, as I understand it, graphs -- the way in which you can get lines going like that or going like that can depend a lot on the extent of space you give to your differences, to your various criteria.

So when we look at the bottom graph, females, am I reading it correctly, one or both of you, the vertical graph, the vertical line axis is $78,81,84$ years of age. Is that right?
PROFESSOR MARMOT: That's correct.
LADY HALLETT: So between 78 to 81 we have got 79,80 , so if we roughly fit it in, the graph seems to start, in 2015-2017, at the age of 80, have I got that -- no, it's probably about 79.5. It's hard to say.
PROFESSOR MARMOT: Yes.

LADY HALLETT: Then it goes along and then it comes down, and I'm going to guess it comes down to about 79.
MS BLACKWELL: My Lady, are you looking at the female chart?
LADY HALLETT: I'm looking at the female chart, the most deprived.
PROFESSOR MARMOT: Yes.
LADY HALLETT: So I get from the graphs the significant difference between the most advantaged and the most deprived. At the moment what I'm not getting -- and that's why I'm asking for your help -- is a dramatic decrease in life expectancy if you take into account what -- the line really is reflecting what ages. So we're going from roughly 79.5 to about 79 , and so my question is: is that a dramatic decrease?
PROFESSOR MARMOT: Yes. Forgive me for this comment, I think you understand the graph perfectly well. I don't think you've got graph blindness at all.

Yes, it is dramatic. Half a year doesn't sound like much, but if you think that the history had been increasing one year every four years, half a year means we've just lost two years of improvement. So it doesn't sound like a lot, but it's actually a lot.

I mean, one year every four years, if you say to somebody, you know, "Run round the block three times a week and you'll add to year to your life expectancy", 33

MS BLACKWELL: As we have seen, the downward trajectory, the pattern is the same, for women and for men, in all four nations.
PROFESSOR MARMOT: In all four nations. And, as I said earlier, in England we see a bigger fall in northern parts of the country than we do in London and the southeast.
MS BLACKWELL: Well, before we leave this area of evidence, may we put up figure 6 at page 24 , please. This is the figure for life expectancy at birth by sex for the least and most improved deciles in each region between 2010 and 2016 or 2018.

What do we see here, Professor Marmot?
PROFESSOR MARMOT: The first thing we see is, if you look at the least deprived decile, the regional differences are relatively small. If you're rich, it matters less which part of the country in which you reside and I think that's quite important. The poorer you are, which is actually in figure 7, but the poorer you are, the more it matters where you live.
MS BLACKWELL: Well, let's look at figure 7, please, because I think that is of greater interest to what you're saying. Here we see "Life expectancy at birth by sex and deprivation deciles in London and the North East", and this is what you were talking about before, the 35
they would probably say, "The game's not worth the candle. A year, who the hell cares?" Because it's the nature of the measure, it's not very informative, it hardly seems worth running round the block just to get another year, from 79 to 80 . But it's a summary measure. So half a year is really quite a lot, it's quite a great deal.

I mean, your point is well taken. If we had, as we're taught in first year, to put the zero and -- you wouldn't be able to see any difference, because it would all be clustered up the top. So, to that extent, we've disobeyed the rule of always putting it at zero, so you could actually see the differences.

So your question is perfectly appropriate, but the comparison is not: well, what does half a year mean? It's: we expect one year every four years, and we got half a year drop. That's really quite a dramatic difference.
PROFESSOR BAMBRA: And if I could just add, it's in this historical trend of increasing life expectancy over the 20th century, with the exception of World Wars, so a fall like this -- and we've also seen a corresponding increase in infant mortality rates in the lead-up to the pandemic -- are historically unprecedented from a public health perspective.

## 34

stark difference between the area in the country that you live, in which you live.
PROFESSOR MARMOT: And it's really terribly important, because this is a national index of multiple deprivation, so it's the one index that's being applied, and if you're deprived, it's worse to be in the north, if you're in the north it's worse to be deprived. I mean, it's almost intersection in the way --
PROFESSOR BAMBRA: Yes, intersection of place, yes.
PROFESSOR MARMOT: -- Clare was describing it before.
MS BLACKWELL: What do we see in these charts at figure 7,
please?
PROFESSOR MARMOT: So the greater -- for both London and the northeast, the greater the deprivation, the shorter the life expectancy. The gradient is steeper in the northeast than it is in London. So, as I was describing, the consequences for life expectancy are bigger if you're in the northeast and deprived than if you're in London and deprived.

Then, crucially, if you look at the dotted line -look at London and look at the dotted line and the solid line. So the dotted line --
MS BLACKWELL: Is the earlier period, isn't it?
PROFESSOR MARMOT: The dotted line is 2010 to 2012, and the solid line is 2016 to 2018. Look at London. You see at 36
every point along the gradient life expectancy improved. Now look at the northeast. Life expectancy -- and particularly you see it more clearly for women. Look at the bottom graph for women. Life expectancy fell in the poorest decile. It fell marginally in the next poorest decile. It didn't improve for the bottom six deciles. It's only in the top 40\% that you get an improvement. And you see it more clearly for women, it's a similar picture for men, but more clearly.

So if we then go back to figure 6 , if we may, it's not just the northeast, it's every region virtually outside London. If you're in the least deprived $10 \%$, life expectancy went up a bit, the regional differences were relatively small. If you're in the most deprived 10\%, the regional differences are much bigger, and life expectancy went up in London and went down in virtually every region outside London.
MS BLACKWELL: Is that more pronounced in the bottom figure here for females? We can see it very clearly.
PROFESSOR MARMOT: Yes, it is, and -- I'm sorry if I'm jumping ahead to your next question.
MS BLACKWELL: Not at all, no, please.
PROFESSOR MARMOT: But I said that I can't explain the male/female differences. When we published these figures in our 2020 report, it was put to me that the 37

If you look at spending per person, total spending per person by local authorities, in the least deprived $20 \%$ the spending per person went down by $16 \%$, and then the greater the deprivation, the greater the reduction. In the most deprived $20 \%$, it went down by $32 \%$.

Now, if you were in government and worked on the assumption that everything local government does is a waste of space, then you can cut and not expect any adverse consequences. If you're not of that view, and I and Clare are not of that view, what local government does is quite important, like adult social care, like amenities, like childcare and all the good things that local government does.

If you cut in that regressive way -- and I've shown these figures to economists who say, "You're making this up, I've never seen such neatly regressive settlements", but these are the government figures, the graph l've got comes from these two fiscal studies but it's based on government figures; the greater the deprivation, the greater the need; the greater the need, the greater the reduction in local authority spend in general, and on adult social care specifically -- that will damage the health of people, other things equal, and will contribute to inequalities in health.
burden of austerity fell on women to a much greater extent than on men. The various cuts had a bigger impact on women's lives than on men's lives. And when that was put to me -- we didn't put it in our report -I had to say, "Yes, that sounds credible to me". So I hadn't put it in my 2020 report, but it's at least a credible explanation for what's going on here.
MS BLACKWELL: Thank you.
So we've looked -- we can take that down now, thank you very much -- at life expectancy, we've looked at NHS funding, and I was coming on to ask you about social care funding and what happened to social care funding. What was the effect of it over the course of the ten years leading up to the pandemic?
PROFESSOR MARMOT: If you look at social care funding per person by local authority, the spend per person by local authority, for the least deprived 20\% of local authorities, social care spending per person went down by $3 \%$, and then the greater the deprivation of the area, the steeper the cuts in social care spend. In the most deprived $20 \%$, it went down by $17 \%$.

Now, arguably the greater the deprivation, the greater the need. The greater the need, the greater the reduction in spending and it was part of the settlement to local government spending in general. 38

MS BLACKWELL: Thank you.
I want to draw all this together now, please, and have a look at your expert opinion as you've set out in the course of your report.

First of all, may we look at paragraph 57. That's at page 29. Thank you.
"The overall impression that UK government austerity policies post-2010 had an adverse effect on health inequalities is also supported by analyses of England showing that health inequalities narrowed in the period of high public expenditure from around 2000 to 2010, and began to widen again post-2010 ... "

As you have outlined in your evidence.
"Scientific research has found that between 2000 and 2010, geographical inequalities in life expectancy, infant mortality rates and mortality amenable to healthcare were reduced in England ... In contrast, these inequalities have increased since 2010 ..."

The next paragraph, please:
"Substantial systematic health inequalities by socio-economic status, ethnicity, area-level deprivation, regime, socially excluded minority groups and inclusion health groups existed during the relevant period."

The relevant period being between 2010 and the onset 40
of the pandemic.
"There is evidence that such health inequalities increased during the relevant period. The majority scientific view is that the underlying causes of health inequalities are the social determinants of health: the conditions in which people are born, grow, live, work, and age. It is plausible that adverse trends in these social determinants of health since 2010 led to the worsening health picture in the decade before the onset of the pandemic. In short, the UK entered the pandemic with its public services depleted, health improvement stalled, health inequalities increased and health among the poorest people in a state of decline."

Does that accurately reflect your conclusion in this area?
PROFESSOR BAMBRA: Yes.
PROFESSOR MARMOT: Yes.
MS BLACKWELL: Thank you.
My Lady, I'm about to move on to health inequalities and pandemic planning, and I wonder whether that would be a suitable time to take our mid-morning break.
LADY HALLETT: Certainly. I shall return at 11.20.
(11.06 am)

## (A short break)

(11.20 am)

41

MS BLACKWELL: More recently, however, and post pandemic, the documents that you have considered and analysed do tend to begin, at least, to consider those with vulnerabilities and health inequalities; is that right?
PROFESSOR BAMBRA: Yes, there has been an improvement and a broadening of what the term "vulnerable" means within the risk registers, which is to be welcomed.
MS BLACKWELL: Thank you.
You also looked at the Civil Contingencies Act of 2004, and a series of both statutory and non-statutory guidance that is relevant to that Act of Parliament.

What did you find in relation to those bodies of work in terms of reflection on vulnerabilities and inequalities?
PROFESSOR BAMBRA: Obviously these documents refer to all different types of civil emergency, so it could be a flood, a terrorist act, or indeed a pandemic. So the definition of vulnerability used within those documents is often quite narrow, such as, you know, people who might have difficulties helping themselves in the event of an emergency, very narrow and somewhat outdated, and doesn't really apply across when we think about it from a public health or a pandemic perspective.
MS BLACKWELL: On that point, may we display paragraph 97 of 43

MS BLACKWELL: Thank you, my Lady.
We're now going to consider the extent to which inequalities were taken into account in pandemic planning by the United Kingdom Government and the devolved administrations. I think, Professor Bambra, it falls to you to answer most of the questions in relation to this topic.

You were good enough to consider a wealth of documentation which was provided to you, most of which has been obtained by the Inquiry during the course of its preparation for these public hearings, including a series of National Security Risk Assessments and National Risk Register processes.

Am I able to summarise the position in relation to the NSRA and NRR documents in this way: that up to very recent editions of those assessments, there has been no mention at all of consequences, risk consequences on any vulnerable groups?
PROFESSOR BAMBRA: Yes, the risk registers pre-pandemic that we reviewed had very little by way of vulnerability other than clinical risk factors or age in some cases, and there was certainly nothing in terms of, for example, minority ethnic groups, deprivation, other things which we know are major factors in the Covid pandemic.

## 42

your report, please. I'm afraid I don't have a page number for that.
LADY HALLETT: 40?
MS BLACKWELL: I think it might be page 40, thank you.
The previous page, thank you.
Here, just to underline the point -- thank you --
you are referring to the glossary of the Civil
Contingencies Act and you say:
"... vulnerability is defined as 'the susceptibility
of individuals or a community, services or infrastructure to damage or harm arising from an emergency or other incident' ..."

What comment do you have upon the description there and the definition?
PROFESSOR BAMBRA: I think from a health perspective we'd obviously define vulnerability differently, as we did in our earlier comments about the different types of health inequalities.
MS BLACKWELL: Yes. All right.
I'd like now to look, please, at a different document. It's the witness statement of Mark Lloyd, who is the chief executive of the Local Government Association. It's at INQ000177803.

Can we go, please, to page 43, which is paragraph 160.

Just to put this in context, one of the
non-statutory pieces of guidance which you looked at to the Civil Contingencies Act is the emergency response and recovery guidance; is that right?
PROFESSOR BAMBRA: That's right.
MS BLACKWELL: Thank you.
It's page -- thank you. Now, paragraph 160 of Mr Lloyd's statement reads as follows:
"There is an expectation that in formulating emergency plans, LRFs and individual agencies including local authorities will take into account the needs of vulnerable people. Vulnerability is not framed in government guidance in terms of protected characteristics, nor is it clearly, or narrowly, defined, but instead includes broad references to children and young people; faith, religious, cultural and minority ethnic communities; and elderly people and people with disabilities. Previous research from the British Red Cross ... published shortly before Covid indicates different practices on whether vulnerability is defined in local plans, and on whether this is seen as a responsibility of the [local resilience forum] or of councils. However, the [Local Government Association] understands that there is very limited direction and no specific requirement from Government as 45
terms?
PROFESSOR BAMBRA: Yes, I think part of the problem with some of the work that we reviewed is that because the Civil Contingencies Act, as I said, is for all different types of emergency --
MS BLACKWELL: Yes.
PROFESSOR BAMBRA: -- they're either going to have a very broad definition or, you know, potentially a narrow one. But when we're thinking specifically about pandemic planning as an emergency, then obviously, for the reasons that Michael and I outlined earlier, it's very important you think about which groups are going to have the highest health risk and that, of course, could differ completely from people who might be most affected by a flood or terrorism. We have much better data on being able to predict and ascertain which social and economic groups would be most impacted by a pandemic, and that needs to be reflected in these types of guidance when they're thinking about a pandemic.
MS BLACKWELL: Thank you.
You also looked at the Dame Deirdre Hine review from July of 2010, which was brought about as a result of the swine flu in 2009, the H1N1 pandemic response.

What did you discover about the level of consideration within that review to vulnerable groups?
inequalities were, and we don't need to put this up now, but these are set out in paragraphs 174 through to 176 in your report, the mortality rate in the most deprived 20\% of England's neighbourhoods, in relation to swine flu, was three times higher than in the least deprived $20 \%$, and a study of ethnic inequalities in mortality from the swine flu in England found people from some minority ethnic groups experienced an increased mortality risk compared to the white population during the pandemic, with the highest risk of death being in those of Pakistani ethnicity and the lowest in the black minority ethnic group.
PROFESSOR BAMBRA: That's correct.
MS BLACKWELL: Thank you.
You also looked at the United Kingdom influenza pandemic preparedness strategy for 2011, and what did you find in relation to any reference to vulnerabilities or inequalities in that document?
PROFESSOR BAMBRA: That reflected the Hine review and was an update of the previous 2007 flu strategy. Again, as with the other documents, clinical risk factors and age are the only references to vulnerability or inequalities.
MS BLACKWELL: Nothing --
PROFESSOR BAMBRA: Nothing in terms of socio-economic status 49

MS BLACKWELL: Yes.
PROFESSOR BAMBRA: So the concern from that point of view would be that there would be no anticipation or planning or thinking about how different groups, different communities, different parts of the country, could potentially be more at risk and more affected by a pandemic.
MS BLACKWELL: You reviewed the material generated by several exercises, Winter Willow, Taliesin, Valverde, Alice, Silver Swan, Broad Street, Cerberus and Pica.

Were health inequalities examined in any of those exercises?
PROFESSOR BAMBRA: No, they were not.
MS BLACKWELL: You also considered the material surrounding Exercise Cygnus, to which you've just made reference, in 2016. Does the Cygnus report mention planning for local surges? I think this is set out in paragraph 137 of your report where you say it does mention local surges:
"... but the potential role of area-level deprivation or other community characteristics (eg the ethnic composition of the population) in leading to local surges is not discussed [at all]."
PROFESSOR BAMBRA: Yes, so thoughts about where you might get local surges or where you're more likely to get them 51
or minority ethnic groups, for example.
MS BLACKWELL: There was also an additional document connected to that strategy, entitled "Analysis of Impact on Equality" report. Did you look at that as well?
PROFESSOR BAMBRA: Yes, I looked at that, it was an equality impact assessment that they needed to do under the Equality Act.
MS BLACKWELL: What are your concerns, if any, about the way in which that was carried out?
PROFESSOR BAMBRA: Again, it's limited in terms of -- it's trying to think about how the flu strategy might have unequal effects, and I think it's very limited in terms of how it conceives that, and thinking about how different groups might be differently affected is not thought about within that, that exercise.
MS BLACKWELL: If that document, the strategy, was still in place in the run-up to the pandemic -- which we know it was -- and had not been updated, what do you have to say about the fact that that document had very little, if any, consideration of the effect of a pandemic on those with health inequalities and vulnerabilities?
PROFESSOR BAMBRA: So the 2011 document was updated, for example, after Exercise Cygnus in 2016, but again it still did not have any references to the health inequalities we've talked about. 50
because of the risk profile of the community is not thought about.
MS BLACKWELL: Yes, finally on this topic, may I ask that the following document is displayed: INQ000192271, at page 4, paragraph 15.

This is the witness statement provided to the Inquiry by Sir Christopher Wormald, Permanent Secretary of the Department of Health and Social Care, which of course, as you know, was the lead government department for pandemic risk.

If we can highlight paragraph 15 , please:
"In terms of how the Department [that's the Department of Health and Social Care] approaches its duties in respect of equalities, any such impacts are routinely assessed and taken into account during the formation of policies and the decision-making process, which generally takes place in the usual Government fashion [that is] by the provision of submissions to the decision-maker(s)."

Based upon the evidence that you have seen and the wide range of documents that you have considered, does it appear that equality impacts have been routinely assessed and taken into account in the formation of policies relating to pandemic preparedness?
PROFESSOR BAMBRA: In the documents that we looked at, there 52
was only the one equality impact assessment, which we've 1 just discussed, so out of a whole body of work there was only one from 2011, so I don't think we could see that as routinely assessed in regards to the planning.
MS BLACKWELL: Thank you.
We can take that down, please.
You were asked by the Inquiry team to address the following question: did the specialist structures concerned with risk management and civil emergency planning allow for the proper consideration of structural racism and its impact?

Did you find that there was no mention of structural racism or its potential impacts in any of the planning documents reviewed under this topic, nor were there any considerations of other causes of health inequalities in the documents, such as social determinants of health or austerity?
PROFESSOR BAMBRA: No, there was no mention of health inequality, so there was certainly no mention of any of the causes of the health inequalities.
MS BLACKWELL: Are you able to give the Inquiry an example of how structural racism might have been utilised during the course of the preparation of these documents? How it might have appeared?
PROFESSOR BAMBRA: I think having a knowledge of who was 53

Turning, then, please, to the consequences of failing to take account of health inequalities, you describe, Professor Bambra, the Covid-19 pandemic as syndemic. Can you explain to us, please, what you mean by that?
PROFESSOR BAMBRA: Yes, it's because Covid acted synergistically with existing socio-economic and health inequalities to exacerbate and amplify the impacts of the pandemic but also the impacts of those existing inequalities.
MS BLACKWELL: Within the report you outline five key pathways through which existing inequalities in the social determinants in health result in higher mortality and morbidity from an infectious respiratory virus. Could you take us through those, please.
PROFESSOR BAMBRA: Yes, the first one is about how people are unequally exposed to the virus. So if we think, for example, of key workers, many of whom were from minority -- disproportionately from minority ethnic groups and from low paid employment sectors, then they were more likely to be exposed because they were still going in to work when a lot of office workers were working from home.

The second pathway is about unequal transmission. So once you have an infection within a community, if
most likely to be at risk and why that might be the case would be the way that you would think about using that within a planning document. But, as I said, there is kind of no reflection on which groups might be at risk. So it would be quite difficult for them then to think about why they might be at risk when they're not thinking about them at all.
MS BLACKWELL: So let's move, please, to look at paragraph 149 of your report. In fact we don't need to display this, I'm able to summarise it in these terms: did you both conclude in relation to this topic that, with some exceptions, the specialist structures concerned with risk management in civil emergency planning did not properly consider societal, economic and health impacts in light of pre-existing inequalities and the UK Government and the devolved administrations and relevant public health bodies did not systematically or comprehensively assess pre-existing social and economic inequalities and the vulnerabilities of different groups during a pandemic in their planning for risk assessment processes?
PROFESSOR BAMBRA: That's correct, that's our expert opinion.
PROFESSOR MARMOT: Yes.
MS BLACKWELL: Thank you very much.
54
people are in an urban area or if they're in a smaller property, more overcrowded property, then it's much more likely to spread. If they're less likely to self-isolate because of, for example, low payments for being off sick during the pandemic, then that could increase spread, again a risk that is higher in more deprived areas and amongst minority ethnic groups.

The third one is the unequal vulnerability, and so this is thinking about pre-existing health conditions. So, for example, if you have diabetes or a heart condition, then you're more vulnerable if you get the illness.

The fourth one is the unequal susceptibility. So this is thinking about actually, as Professor Marmot's work has shown, people have lower immune responses from the result of the chronic stress of psychosocial factors, so we can think about that, that links across to what Professor Marmot was saying about the psychosocial impacts of racism and being in a social hierarchy, so you have a suppressed, compared to someone more affluent, for example, immune system, so again, you're more vulnerable to an adverse event as a result of your infection.

The final pathway would be about unequal treatment, so in terms of, for example, access to antivirals or the
vaccine. Of course, in the UK case, that inequality is there, we can see that in the vaccine uptake, for example.
MS BLACKWELL: Thank you.
So did you conclude in relation to this topic that:
"The UK entered the pandemic with increasing health inequalities and health among the poorest people in a state of decline. [That you] knew from previous pandemics and research into lower respiratory tract infections that people from lower socio-economic backgrounds, people living in areas or regions with higher rates of deprivation, and people from minority ethnic groups and people with disabilities, are much more likely to be severely impacted by a respiratory pandemic. Lack of consideration of pre-existing social and ethnic inequalities in health in our pandemic plans may have meant that our responses were unable to mitigate the disproportionate impact experienced by minority ethnic, low socio-economic status and other socially excluded communities."
PROFESSOR BAMBRA: Yes. 21
MS BLACKWELL: Thank you.
Before we turn to your recommendations, I just have a couple of questions to ask you about what is contained in section 6 of your report under the topic whole-system 57

I was in New Orleans a year and a bit after Hurricane Katrina. We had a workshop there and, as my colleague said, Katrina -- the reason for the workshop was not to hit the US Government round the head because of their mismanagement of the hurricane and its consequences, but it exposed the fault lines in American society.

The people who were affected by Katrina were poor and African American, overwhelmingly. In the Lower Ninth Ward, which was flooded, coming back, what was left were liquor stores, no health clinics, no place to buy groceries, nothing normal. If you were sick, you couldn't get treatment a year and a half after Katrina.

So you get these big external shocks and that's why we say they expose the underlying inequalities in society and amplify them.

Now, I don't think of dental caries as a big external shock, but the reason I started with that was to show that, whatever's happening, we see your social position determines your susceptibility to that big shock.
MS BLACKWELL: Thank you.
Going back some time to the Spanish flu and when that hit in England and Wales, have you, Professor Bambra, considered a case study that
catastrophic shocks. To what extent do whole-system catastrophic shocks expose or amplifies pre-existing health inequalities, please?
PROFESSOR MARMOT: Building on what Clare has just laid out in relation to infectious disease, if you plot on a graph -- I know this is Module 1, but if you plot on a graph mortality from Covid, now plot on a graph childhood obesity by deprivation, it looks the same. The more deprived, the greater the childhood obesity. It looks the same. We don't think childhood obesity is caused by a virus. Now, plot a graph and look at dental caries in children by deprivation. Looks the same.

So, in other words, social and economic inequalities are increasing risk to whatever the threat is going to be. So then when you get a big external shock, a pandemic, of course, a hurricane, a tsunami, civil unrest, it is entirely predictable, and that's exactly what happens: the lower the socio-economic position, the greater the deprivation, the greater the consequences of this big external threat.

So we know in Puerto Rico, when Hurricane Maria hit, the excess mortality, over predicted, was highest in people of low socio-economic position, middle in people of socio-economic position, and lowest in people of high socio-economic position.
demonstrates strong geographical inequalities, even at that time, in terms of who was affected and the manner and severity with which they experienced the pandemic?
PROFESSOR BAMBRA: Oh, yes, and it reflects what Michael was saying about the social patterning. When you look at what happened in 1918 Spanish flu, then you find there were socio-economic inequalities. We can see that from data, historical data from different European countries and from North America, there were racial inequalities in the mortality. Higher amongst people with disabilities, for example, in a Norwegian study. And in England and Wales, higher in urban compared to rural areas and also higher in the north and parts of Wales than in the south of England.
MS BLACKWELL: Thank you.
So moving, then, please, to your recommendations.
Can we display, please, page 82 of your report, and begin at paragraph 199. Thank you.

If we read through this together, please. You begin your recommendations in this way:
"Based on the research and analysis conducted within this report, [you] make the following recommendations:
"199.1. Reduce health inequalities so that the health of all communities across the UK is better placed to withstand future pandemics. This requires different 60
actions in each of the four UK nations but in each case, it should be based on ..."

I'm sorry, my screen has gone off -- there we are, it's back on, mid-sentence.

I'll start from the beginning of that sentence again:
"This requires different actions in each of the four UK nations but in each case, it should be based on key learning from the Marmot Reviews of 2010 and 2020 which set out the following six evidence-based areas for policy action ..."

Now, Professor Marmot, you've made reference to this already, but would you please take us through these subparagraphs.
PROFESSOR MARMOT: "Give every child the best start in life."

We know that early child development is actually crucial to what happens to children in school. What happens in school is crucial to what happens post school, in the world of work, which is important for income, where you live, and in terms of health and health inequalities. So it all starts at the beginning of life. Not just because of health of children, but because of the consequences of early child development for what happens later. And we know that adverse 61
at the evidence from previous pandemics, including the current one that we're considering --
MS BLACKWELL: Yes.
PROFESSOR MARMOT: -- that the impact of the pandemic is very much influenced by pre-existing inequalities in society, including inequalities in health.
MS BLACKWELL: Yes.
PROFESSOR MARMOT: So action -- it's not just specific pandemic planning, it's not just whether there's a report somewhere in government about planning for a pandemic; you've got to plan for better health, and narrow health inequalities, and that will protect you from the pandemic.
MS BLACKWELL: Thank you.
PROFESSOR MARMOT: So that's the general point. MS BLACKWELL: That's the point.

Let's move, then, please, to paragraph 199.3, because here I think you do draw together the health equity lens and the pandemic planning and preparation that my Lady needs to consider in her recommendations.
"Pandemic planning and preparation should integrate a health equity lens across all aspects of the process. It should consider if, in future pandemics, additional social groups should be added to those based on age or clinical risk. This could lead to prioritising access
to testing, PPE, vaccines, and antiviral medications. Public communication messages about risk and mitigating actions should be both universal for the whole population and targeted to specific at-risk communities. Suitable PPE equipment should be stockpiled in advance and distributed according to relative occupational risk. Enhanced testing should be conducted within at risk communities. Inequalities between and within communities (eg Local Authorities, voluntary sector and NHS capacity) in terms of the ability and capacity to respond to pandemics needs to be addressed. A 'universal proportionalism' strategy should be applied in future pandemic planning so that mitigations are delivered for the whole population (universalism) but enhanced for those most in need (proportionalism)."

So, planning, taking into account all of the vulnerabilities and health inequalities, but also enhancing preparations, resources, for those who are most at need?
PROFESSOR BAMBRA: Yes, this reflects what we looked at in terms of the planning documents and the lack of regard for different types of social inequality, so we're suggesting here that these, ethnicity, deprivation and so on, should be added as risk factors in terms of pandemic planning, and then of course this has
implications. It's not just about having a plan, like
Michael says, but what does that plan mean, for example in terms of public communications? Having it translated into minority ethnic languages, for example, would clearly be a strong recommendation.
MS BLACKWELL: So it's all well and good having a set of documents that purport to have considered these issues, but what really matters are the practicalities that need to be in place for when the next pandemic hits?
PROFESSOR BAMBRA: Yes, what does it mean and what do we need to do differently and better, and we've made some suggestions, my Lady, as a way to start off thinking about this, yes.
MS BLACKWELL: Thank you very much.
Well, my Lady, those are my questions.
PROFESSOR MARMOT: Can I--
MS BLACKWELL: Would you excuse my back, please, whilst I just take instructions on who is going next?
LADY HALLETT: Of course.
MS BLACKWELL: Thank you.
(Pause)
My Lady, as with other witnesses, you have given a provisional indication that those representing the Covid-19 Bereaved Families for Justice UK are entitled to ask questions on a particular topic, and I think 65
everyone. So the response rates are much lower, for example, in some minority ethnic groups. So that means you don't necessarily have a clear concise knowledge of the population size. We also have difficulties in recording mortality, so the deaths, in terms of whether ethnicity is coded or not.

Putting those together, and obviously it's more complicated that I've alluded to here, and we go through some of the further issues in the report, it means you haven't got the numbers correct either in terms of population size or deaths in order to make accurate estimates, for example of life expectancy, and we also have migration patterns where people come in and go out, and so you find different results in terms of life expectancy for British minority ethnic groups who are British-born compared to more recent migrants, for example.

So there are complexities. The ONS has produced what they call experimental statistics, and that's because of these complexities in the calculation to do with the data, what data is available.

As to why we don't try to have better data in terms of minority ethnic groups and other socially excluded populations, I'm afraid I don't have an answer for that one. But clearly the health and public health community

Ms Munroe King's Counsel is ready to step up and ask her questions now, subject to your Ladyship's permission.
LADY HALLETT: Certainly. Yes, please, Ms Munroe, thank you.

## Questions from MS MUNROE KC

MS MUNROE: Thank you, my Lady.
Good morning, Professor Bambra, good morning, Professor Marmot. My name is Allison Munroe and I represent the Bereaved Families UK, and I just have a very few questions to ask you on the topic of data capture, surveillance monitoring.

Ms Blackwell King's Counsel very helpfully raised the issue and introduced it earlier this morning, and in answer to a question from her regarding the paucity of data and statistics for certain groups in the population, Professor Bambra, you said:
"The issues are that if you don't have any data, you don't know sufficiently what the health needs are of different populations in your community."

Are you able to explain why there has historically been this lack of routine and reliable data, firstly in relation to ethnicity?
PROFESSOR BAMBRA: Yes. So we're very reliant on the census in terms of, for example, thinking about calculating life expectancy, but the census doesn't actually capture 66
need to do better in terms of making sure that we record people, because if there's no data, there's no problem, we don't see the health needs, we don't see the disparities.
MS MUNROE: Thank you.
Likewise, are you able to assist with this question: the paucity of, again, reliable, regularly reported data in respect of other marginalised communities, such as the LGBTQ+ community, disabled people?
PROFESSOR BAMBRA: Yes. So could in a way be seen as kind of hidden populations, so it's only in the most recently census that there has been questions asked about, for example, people's sexual identity. But again, you wouldn't necessarily have that recorded at the mortality point. So it's about how much data you want to record and how much data people are happy to share. But certainly that's why there's less.

There is more in terms of survey data, for example, hence we know quite a bit about mental health, but there is less when we're looking at mortality or causes of death.
MS MUNROE: Would it be correct to say that during the relevant period that this Inquiry is concerned with, that you both are of the view that there was an obvious need for a national system of data capture based upon 68
race, ethnicity and the other marginalised groups that we've been discussing this morning?
PROFESSOR BAMBRA: I think if we had had that, with the caveats that I've outlined, then we certainly would have had more knowledge of who was most likely to be impacted, their specific health needs, and so on. However, because of looking at the planning documents, I'm not sure that would have been taken into account in planning, even if we had had such a robust data capture system.
PROFESSOR MARMOT: If I could add, I lamented in my 2020 review the lack of routine data on minority ethnic groups. I'm pleased to say that the Race and Health Observatory, the NHS Race and Health Observatory, is now set up with the explicit mission of redressing that problem, of making sure that we do get regular data by minority ethnic status.
MS MUNROE: Professors, when one talks about national systems, are we talking about a UK-wide data capture or does it need to be broken down into the constituent parts of the UK?
PROFESSOR BAMBRA: Currently the data -- because health is devolved, then the data is set up by each nation, so if that process would continue then each country would need to do that, yes, and then it would be up to them if they 69
social determinants of health, and so we need to understand ethnic differences in all the key determinants.

Saving my Lady's patience, I won't go through them all, but we do need to understand not just socio-economic differences but ethnic differences in those social determinants. So it means we need to have them across all those domains.
MS MUNROE: Ade Adeyemi, who is from the Federation of Ethnic Minority Healthcare Organisations, FEHMO, who will in due course be giving evidence to the Inquiry, he has described the absence of a national system of data capture regarding race and ethnicity as being perhaps one of the most egregious and the biggest system failures in emergency planning to be exposed by the pandemic.

Would you concur with his observations there?
PROFESSOR BAMBRA: I guess there were quite a few flaws, in the planning that we've talked about today, with regard to health inequalities and groups not being considered within, for example, the risk register or the contingencies and civil emergency planning. And certainly the lack of data is also an important hindrance, yes.
MS MUNROE: And you've talked about the lack of data and how
wanted to harmonise that across the UK.
MS MUNROE: What, in your opinion, has been the impact of the lack of data with regards to pandemic planning and preparedness, for example, modelling and tracking the pandemic disease? What has been that impact of the lack of data?
PROFESSOR BAMBRA: So, again, if you're not -- when you're thinking of modelling what the pandemic might look at and you're only looking at average or overall effects, you're obviously missing, then, whether it's going to affect some groups of people, some areas, more than others, so that might influence your decisions about what you'd do. So if you had health inequalities embedded in your modelling, in your data collection processes, then you could feed that in to how you think about resource deployment, for example, in the early stage of the pandemic.
MS MUNROE: Should that data gathering, and specifically we're talking about minority ethnic groups, other marginalised groups within the population, disabled people, LGBTQ community, should such data gathering reach beyond healthcare?

Professor Marmot, you're nodding.
PROFESSOR MARMOT: Yes, very much so. I mean, if -- the whole thrust of what we have been doing is about the 70
that impacts upon planning, modelling, tracking the disease. Would you agree that it's also important in terms of laboratory and case studies, in epidemiological studies in any event?
PROFESSOR BAMBRA: Yes, absolutely, as Michael was outlining, we would need to have more data, not just in studying pandemics and planning, but in studying all other issues of health and disease as well.
MS MUNROE: Finally, if we can just go back to your conclusions, if we could have it up, please, my Lady, at page 83 of the report.
LADY HALLETT: Sorry, which of the questions you were going to ask is this one, Ms Munroe?
MS MUNROE: Yes, it is, my Lady, it's the last. I've changed the order slightly. I think that's ...

Thank you. If we could look at paragraph 199.6, that's your very final paragraph, where you've identified the need for robust data surveillance and monitoring of health -- healthcare inequalities in respect of protected characteristics, other minority and marginalised groups in the UK, as a whole.

Dr Marmot, I think it was you who said, just before I stood up, that reducing health inequalities means better health, and that means protection from pandemics.

So is it fair to say that a robust data surveillance 72
and monitoring system is also crucial in order to identify, assess and, importantly, mitigate against health inequalities generally?
PROFESSOR MARMOT: Absolutely. I said earlier that we have excellent statistics, routine statistics, available in this country, much better than most other countries, but a lack has been the one that we have just been discussing, the routine data available for minority ethnic groups, which is absolutely crucial to understanding health, health inequalities, and the likely impact of a pandemic.
MS MUNROE: Thank you very much, Professor Marmot, Professor Bambra. Thank you, my Lady.

My Lady, before I sit down, before I stood up actually, I think -- I may be wrong -- that Professor Marmot looked as if he had his hand up to say something else. I don't know if that's right.
PROFESSOR MARMOT: I did, but that was long past.
LADY HALLETT: You can't remember now? I have had that feeling before now.

Thank you very much indeed, Professors Marmot and Bambra, you have been extremely helpful, if some of the stuff you have had to tell me has been rather depressing. But anyway, thank you very much indeed for all that you've done.
administrative matters relating to your evidence.
You've produced two witness statements, I believe, the
first a first witness statement dated 3 April 2023, could we have that, please, on the screen, INQ000145773.
Then the last page, page 35, please. Is that your
statement of truth and your name?
A. It is.
Q. Then your second statement, incongruously perhaps called the third witness statement, INQ000203354. Thank you. Ah, no, it's the "Supplementary witness statement", not a third, although I think it says "Statement No. 3" in the top right. Then page 4, please. Again, is that a statement of truth, which you've signed, and your name and date?
A. It is.
Q. You've produced, very helpfully, a number of exhibits.

We won't go through them all, or perhaps even many. But have you also made yourself familiar with the corporate witness statements provided on behalf of the Cabinet Office --
A. Yes.
Q. -- in which, of course, you worked during part of the relevant period? You have seen and considered, no doubt, the statements from your colleague,
Mr Hargreaves, there have been a number of those 75

PROFESSOR MARMOT: Thank you.
MS BLACKWELL: Thank you, my Lady, and that concludes their evidence.

I think we are ready to go straight on to the next witness, Katharine Hammond. It just needs a quick change around in the witness box. I don't think, my Lady, you need to rise. Thank you very much.
(The witnesses withdrew)
MR KEITH: Yes, if the oath or affirmation could be put, please.

## MS KATHARINE HAMMOND (affirmed)

 Questions from LEAD COUNSEL TO THE INQUIRYLADY HALLETT: Thank you for coming a bit earlier than expected, Ms Hammond, we're very grateful.
THE WITNESS: No problem.
MR KEITH: Ms Hammond, whilst you give evidence, could I remind you to try to keep your voice up. It's very important that we hear what you have to say, and also that the stenographers can hear you clearly for the transcript.

If I ask a question that's not clear, which is quite possible, please ask me to put it again. There will be a break at lunchtime, and we'll break in the course of the afternoon as well.

May I please commence with just some of the 74
statements, and also the statement of Alex Chisholm, who was the Permanent Secretary at part of the relevant time for the Cabinet Office, and its chief operating officer, or at least the chief operating officer for the Civil Service. And also a statement from a Mr Matthew Collins, who was the Deputy National Security Adviser. So you have had an opportunity of looking at that material?
A. I have.
Q. Ms Hammond, in August of 2016, you became the director of the Civil Contingencies Secretariat in the Cabinet Office. Is that the same job that Bruce Mann, from whom we heard yesterday, held a few years prior to your occupation of that post, in fact between 2004 and 2009?
A. Yes, it is.
Q. Is it the same job, in fact, that Mr Hargreaves, to whom I've just made reference, who provided the corporate statements, has held since you left that post in 2020 ? I think you left in August 2020 and he took up the position in October 2020.
A. That's right, although the structure has evolved since then, and Mr Hargreaves now leads the COBR unit rather than the Civil Contingencies Secretariat as a whole.
Q. Indeed.

Now, Ms Hammond, it's plain to the Inquiry that you're not responsible, of course, for the drawing up, let alone the management and supervision of the EPRR systems in this country. You're also not a corporate witness for the whole of government. But are you in a position to assist the Inquiry with areas relating to the EPRR system that might technically go outwith the precise functions identified as the director, once upon a time, of the Civil Contingencies Secretariat?
A. I will do my absolute best to assist.
Q. Thank you.

May we start with the position of the Cabinet Office. In relation to the issue of the management or supervision of or liaising between other government departments, what is the Cabinet Office's primary role? What does it do in the field of civil contingencies insofar as other government departments are concerned?
A. The Cabinet Office role is primarily one of co-ordination between departments. That, I think, is the simplest way of putting it.
Q. So it supports government decision-making, it acts as a broker, it promotes and advances, as best it can, the corporate position of the government; it helps set it out, it helps manage it, and it helps bring about proper 77
Q. -- without a difference.

But in any event, Ms Hammond, the CCS was the body in the Cabinet Office essentially charged with preparing for, responding to, recovering from and learning lessons from major civil emergencies?
A. That's right.
Q. If one was to ask the very basic and perhaps a little unfair question, "Who is in charge, which body or which secretariat or which part of the government is in charge, or was in charge at the time you were director of civil emergencies in the United Kingdom?" what body would that have been?
A. I think CCS is the point at which that comes together "In charge" implies that there are --

## (Alarm)

Q. Just pause a moment.
A. Sure. I haven't touched anything.
Q. Don't worry, Ms Hammond.

LADY HALLETT: I was told there wouldn't be a fire alarm today.
MR KEITH: I don't think we were anticipating a test, which may require us, in the best traditions of civil emergencies, to leave. Or not.

Could you tell my Lady, please, in very broad terms, the difference between hazards and threats. Were they, 79
and efficient government, which is an extremely complex area?
A. And I would add to that list, manages effective decision-making, which is a really important Cabinet Office function.
Q. In the context of the Civil Contingencies Secretariat, of which you were the director, is that the broad function of the secretariat, in the specific field of civil contingencies or was it when you were there?
A. Broadly, yes.
Q. So, as the director, your secretariat was responsible for co-ordinating government preparation, it was responsible for oversight of the necessary policies, the documents, the guidance that would go out to various parts of the government, as well as ensuring that, in practice, other parts of government stepped up to the mark? You had to supervise, to a very large extent, what went on?
A. I wouldn't describe it as supervise. There is a well established lead government department model, which I know the Inquiry has heard evidence on already. I don't think the Cabinet Office's role is supervisory in relation to that. It's co-ordination.
Q. All right. That may be a distinction, we will see --
A. That may be so.
are they matters which were regarded as different beasts and to which the government would, in very general terms, respond differently?
A. So, in simple terms, a hazard has a non-malicious cause, and a threat has a malicious cause. Both threats and hazards give rise to risk, which is a combination of likelihood and impact. Forgive me, Mr Keith, I've forgotten the second part of your question.
Q. It was simply to ask you to identify whether or not the government, in very general terms, responded differently to hazards as opposed to threats, as opposed to identifying the conceptual difference?
A. There's a lot of commonality between the two. There are some capabilities that are essential for both, the police being the most obvious. The departmental responsibilities are different, so it tends not to be quite the same departments focused on hazards as on threats. But a lot of the same underpinning doctrine is used between the two, particularly around risk assessment.
Q. So hazards are, as you say, non-malicious matters, they are risks with non-malicious causes such as flooding or infectious disease?
A. Exactly.
Q. Threats, which are known as risks with a malicious 80
cause, would be, as you have rightly said, something addressed by the police: terrorism, cyber crime, a cyber attack or a CBRNE attack, a chemical, biological, radiological, nuclear or explosive attack; it's malicious?
A. Anything with a malicious actor, yes.
Q. All right.

Now, the Civil Contingencies Secretariat used to sit within a part of the Cabinet Office called the National Security Secretariat; is that correct?
A. Correct.
Q. Was that, and perhaps it may still be, headed by the National Security Adviser?
A. Yes.
Q. The National Security Adviser is the senior adviser in government on national security.

Were there, when you were a director, a number of Cabinet Office NSC, National Security Council, committees --
A. Yes.
Q. -- which addressed both threats and hazards?
A. There tended to be a division between the two. So the subcommittee which was most concerned with hazards had the acronym THRC, threats, hazards, resilience and contingencies. It tended to focus more of its efforts 81

LADY HALLETT: Carry on.
MR KEITH: -- committee attended by officials met weekly.
How often did the analogous committee that dealt with, as you've said, threats, hazards, resilience and contingencies, the non-malicious committee, meet?
A. So the ministerial version of that or the officials version of that, which are you referring to?
Q. Whichever you prefer to deal with first.
A. So the ministerial version, when I arrived in post, hadn't physically met for some time, two or three years, and you have, I think, in my evidence the rhythm of meetings from early 2017 onwards, which was more frequent than that.

Beneath it sit two officials committees, a THRC(O), which was chaired by the Deputy National Security Adviser, and that would meet, I think, roughly once a quarter -- forgive my memory if that's not right, but something like that -- and a further acronym, I'm afraid, $\operatorname{THRC}(\mathrm{R})(\mathrm{O})$, with the R standing for resilience, chaired by me, as director of the Civil Contingencies Secretariat, and that would meet on a sort of eight to ten-week rhythm or so. I can check more precisely, if you'd like.
Q. So the national security malicious committee, staffed by officials, met weekly, but on the non-malicious side,
on hazards.
Q. Was there a committee called the national security -- at the NSC, officials committee --
A. Yes.
Q. -- which was comprised, as it says on the tin, by officials --
A. Yes.
Q. -- and which would meet to discuss, in general terms, malicious threats?
A. It could take either threats or hazards. I didn't attend that committee routinely, but I think it spent more of its time on threats than on hazards, would be fair to say.
Q. How often did the threats -- the malicious threats officials committee of the national security council meet, in your experience?
A. It varies over time, but on a regular basis.
Q. Weekly?
A. Yes, sometimes weekly.

## (Alarm)

MR KEITH: That sounds rather more serious, my Lady.

## (Pause)

LADY HALLETT: Apparently it was something on the second floor, and it's been dealt with.
MR KEITH: So the malicious -- the threats --
82
the hazard side, on the ministerial side, it hadn't sat or convened at all for a number of years when you came into position?
A. That's right, although I think a qualification is that NSC(O) wasn't exclusively talking about threats, it did on occasion take hazard risks too. That was also true of the NSC.
Q. Yes, but it was an occasional thing?
A. It was not the biggest proportion of its business, is how I would frame it.
Q. No, and the ministerial committee, which provided oversight, the ministerial National Security Council committee, threats, hazards, resilience, contingencies, failed to convene at all for a number of years, and during your tenure of the directorship of the Civil Contingencies Secretariat, was that ministerial committee in fact abolished altogether?
A. It was taken out of the committee structure in July 2019, which was the point at which the whole structure was being rationalised to take into account the focus on Brexit. When it was taken out of the structure, it was always my understanding that it would be reinstated once that phase was over.
Q. Ms Hammond, when a committee is taken out of the committee structure, it no longer exists, does it? 84
A. True, but with one qualification, which is that at that point it was really clear it could be reconvened if needed, for example to provide clearance for the risk assessment.
Q. Was it abolished?
A. If you wish to use that word, yes.
Q. Did it ever sit again?
A. It didn't sit again in my time in CCS.
Q. No. There is evidence before the Inquiry and before my Lady that there was a sense in government that more focus was paid to threats, malicious threats, than to non-malicious hazards, in terms of the roles of the National Security Adviser, his or her deputy, the amount of time devoted to those two issues. Would you agree?
A. Yes, I think that is true of the centre of government. There are obviously a lot of departments who focus more on hazards than on threats.
Q. Yes.

The evidence shows that, in terms of the ministerial side and the lines of accountability, there were a number of ministerial roles that may have been responsible for civil contingencies and general resilience. So could you help, please, my Lady with explaining the difference between the positions of the Minister for Implementation, the Minister for the 85
Q. Yes.

So, in terms of relative ministerial clout, where did civil emergencies, resilience and non-malicious hazards come in the general order of things?
A. Well, in terms of clout, Cabinet Office ministers tend to have rather a lot of that. Sitting at the centre, close to the Prime Minister, they can wield a lot of influence. In my time in CCS, Cabinet Office ministers did use that clout in relation to civil contingencies, we had two CDLs who paid close attention to this, and, likewise, ministers for the Cabinet Office. But, as you rightly say, it's part of a busy job.
Q. When you say CDL, do you mean the Chancellor of the Duchy of Lancaster?
A. I do, sorry.
Q. You don't need to apologise, but if I may gently suggest that acronyms aren't always welcome in this room.
A. Understood.
Q. So Chancellor of the Duchy of Lancaster.

The Civil Contingencies Secretariat was, as you absolutely correctly said a few moments ago, split after your time as the director, and it was split into two parts: the COBR -- and I'm going to use the acronym -the Cabinet Office Briefing Room unit, which went into what is called the National Security Secretariat, and 87

Cabinet Office, and the Chancellor of the Duchy of Lancaster? We've been confronted with a number of ministerial roles, and it's not altogether clear
A. I think some of the lack of clarity comes from the fact that the Cabinet Office ministerial structure isn't fixed, it changes over time. The period you're considering includes a change of government. Basically the first two ministerial positions you described are the more junior in the Cabinet Office, and CDL is the more senior, the secretary of state-level minister.
Q. Is the Chancellor of the Duchy of Lancaster, CDL, responsible solely for civil emergencies, general resilience, or is that a ministerial position post which addresses an omnibus of different areas?
A. In my time he had a very wide portfolio, yes.
Q. The Minister for Implementation is something different. Did the Minister for Implementation deal with the following areas: cross-government delivery, civil service, human resources, fraud error, government digital service, government security group, government property, government commercial function, and resilience?
A. I couldn't verify the whole list but --
Q. Does that sound about right?
A. It sounds about right.

86
that is, I suppose, the physical or the direct part of government dealing with crisis management, and a second part, the Resilience Directorate.
A. Yes.
Q. Can you assist with why, after the onset of the pandemic and its impact, the Civil Contingencies Secretariat was split into two parts and then posted, if you like, in different areas of the Cabinet Office? What had led to that split?
A. Well, I think the answer is in the report that you have from Mr Rycroft and Mr Wilson.
Q. Crisis capabilities review?
A. Correct. I have to say I was not part of those discussions so I can't really describe to you any more than that.
Q. But if you know of the report, Ms Hammond, and you know its authors, you surely know of the very general conclusion in relation to the COBR unit?
A. Yes.
Q. And what is it?
A. I think in broad terms they recommended consolidation of those response resources and separation from the planning teams.
Q. Could you elaborate on that?
A. Well, I think the role of the Resilience Directorate is 88
to focus on risk assessment and long-term planning. The role of the COBR unit is to respond when something has happened. So the separation of those two functions is part of the recommendation, I think in order to allow for sufficient focus on both.
Q. Would you agree that the crisis capabilities review reached the conclusion that there was a need for that split, for the functions in your former secretariat to be split, because, under the intense pressure of Covid, the general, the generic governmental system in the CCS had not performed terribly well? Now, that's nothing to do with the individuals, it's to do with the structure.
A. I think that's the conclusion reached in the report, yes. I'm not sure I would agree with it.
Q. The Cabinet Office Briefing Room is the United Kingdom's national crisis management capability, to use a phrase from your own statement. Did it essentially, and does it essentially, manage national crises?
A. Yes, it's where you take -- COBR is a Cabinet subcommittee that takes decisions quickly in a crisis.
Q. It's self-evident, is it not, Ms Hammond, that there will be different types of emergencies that a country or a region or a locality in a country may face, and some emergencies are more serious than others, and if there is what's known as a level 2 or 3 emergency, 89

Cabinet Office Briefing Room, played less and less of a role and the other committees to which l've made reference began to take over?
A. I'm afraid I can't give you evidence on that point.
Q. All right.
A. That would be for others.
Q. One other important area dealt with, or one other area within the functions of the Civil Contingencies Secretariat, was dealing with training doctrine and standards.

Training appears to be a relatively self-evident word, as is doctrine. But there are a lot of references to standards in the paperwork. What do you mean by standards? What is meant by standards?
A. Standards, the process of describing what good looks like. Specifically in my time in CCS it meant contribution to international standards on resilience and civil protection, and it meant development of the first set of resilience standards for use by local resilience fora in the UK, which you have in your evidence, I think.
Q. As part of the Cabinet Office's management of training doctrine and standards in the field of civil contingencies, was it a co-manager in fact of the United Kingdom's sole planning college?
a catastrophic emergency, something threatening the nation as a whole, that is the sort of thing that would be dealt with by, would lead to the convening of, the Cabinet Office Briefing Room, COBR?
A. Yes.
Q. It operated at least at the start of Covid, did it not?
A. Yes, and was still operating in support of Covid as I left in August 2020.
Q. Did it continue to be the primary body leading the defence to Covid, do you know, or were its functions in practice taken over by ministerial implementation committees, Covid operation committees, and the like?
A. For the period I was in post, those things operated in parallel and had slightly different functions. One of the key things that COBR did was bring together four-nation decision-making at the most senior level. Some of those other groups you've described did more detailed work on specific policy areas and issues. So the two operated in parallel for quite some time.
Q. But not all the time?
A. Whilst I was in post, both were in operation, I think.
Q. But you, of course, left the directorship of the CCS in August of that first terrible year?
A. Correct.
Q. But you're aware that thereafter COBR, the 90
A. So the Emergency Planning College, which I think is what you're referring to, the contract for the operation of that was managed by CCS. The college itself was managed by a private sector provider.
Q. Was that the sole institute or body for the training of central government civil servants, of local authority responders --
A. No.
Q. -- or were there other bodies?
A. No, not the sole one. It's the only one with that link to CCS. There are other training providers, there are universities who provide training, so it's certainly not the only point you can go to for it, no.
Q. But it is the sole formal institute with the imprimatur of government with it that provides training at the behest of the Cabinet Office?
A. It's the only one with a link to the Cabinet Office, yes, but others provide quite similar material.
Q. All right.

Can we then turn to the principle and the notion of lead government departments. We've heard evidence about lead government departments, and the principle appears to be that under the system of civil contingencies, the lead government department will be responsible for identifying and managing risks which arise in whatever
area that that government department has responsibility for, and then it will take on the obligation of making sure that its approach, its own approach to those risks is properly managed and assured, which is another word for being tested, and also that thereafter it takes responsibility for responding in central government to whatever the emergency is which engages it. So in the context of a pandemic, infectious disease, it's obviously going to be the Department of Health and Social Care.
A. Broadly, yes, with one qualification, that lead government departments are called lead for a reason, it's not assumed that they would do that on their own.
Q. Indeed.
A. You have, I think, a really good description of how that system works with other departments in the statement from Sir Philip Rutnam, who describes that both from the perspective of his departments in the lead and in support of others.
Q. Was Mr Rutnam the Permanent Secretary of the Home Office until February 2020?
A. I think that's right, yes.
Q. Yes.
So just to introduce a bit of history, the principle of lead government department I think has its genesis in 93
extent can the Cabinet Office intervene or take charge or manage? Does it have a formal position thereafter, or is it a matter of political persuasion and ensuring, by personal contact and by virtue of the importance of the Cabinet Office, that things are done?
A. It would be a very close working relationship, and, depending on the magnitude of the risk, would be a joint decision between the lead government department, the Cabinet Office and Number 10 on whether, for example, to activate the COBR committee.
Q. Once an emergency ensues, does the Cabinet Office have any formal powers to ensure co-ordination and accountability across departments?
A. Well, it has the power of being the department at the centre of government. I think if you are asking me to point to a power in a piece of legislation, I can't do that. But that convening power of a department which has oversight across others I wouldn't underestimate.
Q. The former Cabinet Secretary, Lord O'Donnell, has indicated in his evidence that:
"The Cabinet Office had no formal powers to ensure co-ordination and accountability across departments; we had political persuasion."

Would you agree?
A. I'm sure that's technically right, but I would say I --
a Parliamentary question in July 2002, and then guidance was issued by government in March 2004.

Would the lead government department therefore lead co-ordination on all phases of emergency management?
A. Yes, working alongside the Cabinet Office.
Q. If, in the course of reacting to and dealing with the management of an emergency, it becomes apparent that it is more sensible that a different government department responds, then there can be a change in lead government department. So, for example, I think in your very own statement, or certainly that of Mr Hargreaves, you give the example or he gives the example of how, in relation to severe flooding, the lead government department might change from DEFRA, which obviously bears the prime responsibility for dealing with the environment, to DLUHC, the Department for Levelling Up, Housing and Communities, on recovery, getting through the aftermath of the emergency.
A. Normally that change reflects a change in the phase of the response, exactly as you say, moving from dealing with a live event into returning to normality, and it reflects, as you said before, what those departments' standing responsibilities are.
Q. Once the lead government department takes responsibility for managing the response to an emergency, to what 94
in my time in CCS, I can't really think of examples of departments saying, "You have no formal powers", and walking away on that basis.
Q. Is it possible to identify and was it possible to identify during Covid a single government department in charge, so that the world or this country or its citizens could understand that there was a particular body in charge?
A. I think in a crisis like Covid, which drew on the responsibility of a very large number of departments, COBR was the body in charge. It drew together those perspectives and made big decisions, including some of the moves into lockdown, for example. That went well beyond the responsibilities of any single department.
Q. But over time, the relative importance of COBR's role diminished and other power structures, the ministerial committees and so on and so forth, grew in strength, did they not?
A. They were certainly added to that decision-making landscape, yes.
MR KEITH: All right.
LADY HALLETT: Are you moving to a different topic,
Mr Keith?
MR KEITH: Yes, my Lady, that's a perfect moment.
LADY HALLETT: Right. We'll break now, and I shall return 96
at 1.45 , and I just need to warn everybody that we're finishing today, in case they wish to make arrangements, at 4.30 latest. Thank you.
( 12.47 pm )

## (The short adjournment)

( 1.45 pm )
MR KEITH: Ms Hammond, just before lunch, you were giving evidence about the lead government department. In March of 2004, did the Civil Contingencies Secretariat publish guidance called The Lead Government Department and its role - Guidance and Best Practice? You recall that? You obviously weren't in position then, but ...
A. I wasn't in position, but I'm aware of the document.
Q. Because it was in force, in fact, during your time as director?
A. The model, yes, that's still the model we were using.
Q. You mean it's the same document?
A. Yes.
Q. Right.
A. Well, to qualify that, there are parts of this document which had been superseded by the Resilience Capabilities Programme, but I think the section you're referring to was substantially in force, yes.
Q. So when you were in post between 2016 and 2020, the relevant parts of this guidance issued in 2004 were 97
incorporate assurance on contingency planning within the annual assurance and risk control mechanisms presently being developed within the Central Government corporate governance regime. Senior officials will need assurance that the processes used to develop contingency plans and to determine both the planning process and plan content are adequate and that some level of validation (testing) has been carried out. Assurances will necessarily be obtained from a variety sources within the LGD [lead government department], its stakeholders and other appropriate reviewers."

Would you be good enough to translate that for us? Is this the system whereby lead government departments were tested themselves?
A. I think this is describing how a lead government department would take its national risk responsibilities into its corporate risk process. So it's one of the ways in which you might assure yourself. There are others, including exercising, for example, including specific reviews of specific plans, and sometimes CCS would be asked to come in and assist with those.
Q. Was there any body, any other government department or inspectorate or any other entity that could look at the lead government department and say, in terms, "Your plans and procedures are up to date, your policy
still in force?
A. Yes.
Q. Was the guidance updated, in relation to this area, at any time during your time as director?
A. No, I don't believe so.
Q. So from 2004 to 2020, in fact, the Cabinet Office guidance relating to lead government department was substantially unaltered; that is correct, isn't it?
A. I think that's right. Obviously some names of departments changed over time.
Q. Yes. Presumably somebody in the Cabinet Office or somebody in the Civil Contingencies Secretariat would go through the old guidance and say, "Well, this has got to change, there has been changes in the department, changes in the structure, changes in parts of government, we'd better change the nomenclature". Did that ever happen?
A. I don't think we formally re-issued it with an update, no.
Q. All right.

So this particular document, INQ000022687, page 4, paragraph 5 , deals with what is called assurance, that is to say the testing or the supervision of the lead government department in the model to which you refer.
"[Lead government departments] will be required to 98
documentation is up to date, your emergency preparations are satisfactory and adequate, so that you can continue to fulfil your role of being the prime department responding to the emergency in the area for which you have responsibility"?
A. There is no inspectorate as such, no.
Q. So if a lead government department issued policy guidance that was plainly erroneous or failed to put into place its own proper, internal risk control mechanisms or failed to consider sufficiently whether or not it was ready to deal with a civil emergency, how would one know?
A. Well, I think there are several ways. So firstly, I can't think of an example of issuing erroneous guidance from my time in office. You've got evidence from senior permanent secretaries of how they ran that within their own departments, and it varies between them. Many will have their national risk as part of the consideration of the risk owned by the department, and will form part of those discussions by the departmental board, for example. There are different patterns for doing that, I think, in different departments.
Q. The lead government department wasn't the only department, of course, in this overall structure.
A. Correct.
Q. You've referred already in your evidence, and it's in your statement, that an important part was the Resilience and Emergencies Division of what is now the Department for Levelling Up, Housing and Communities.
A. Yes.
Q. Will you just explain for us how it is that in this overall system of emergency preparation there is a second government department responsible for one major part of the process, namely DLUHC?
A. So RED, the Resilience and Emergencies Division, is basically the link point between central government and local responders. That's its clear function.
Q. Did it replace, in fact, in 2011 the Government Office of the ... Regions?
A. Obviously before my time in office.
Q. Indeed.
A. But, yes, I think some elements of the government office function were incorporated into RED.
Q. Could we have, please, the organogram INQ000204014, please, on the screen, at page 17.

## (Pause)

This is 2009, the United Kingdom and England. On the left-hand side of the page, is it right, Ms Hammond, we can see Ministry of Housing -- because that's what the department was then called -- Communities \& Local 101
A. That's before my time in CCS, I'm afraid, so I don't know that I can give you much evidence about its impact on its work.
Q. All right, but the Government Offices for the ...

Regions, what was a Major government department, it was abolished and superseded by the Ministry of Housing,
Communities \& Local Government and other government departments, the functions were spread amongst a number of other areas; is that not generally right?
A. I'm afraid that --
Q. You don't know?
A. -- not my area of expertise, forgive me.
Q. All right.

In terms of providing guidance to local authorities, local resilience forums, category 1 and 2 responders and so on, did the Cabinet Office publish a very significant document called "Responding to Emergencies - The ... Concept of Operations"?
A. Yes.
Q. What was that?
A. That is, it's a document which sets out how the system is set up to work in a crisis, not a document that has to be, you know, adhered to in terms of every word, but it's a guide as to how the system operates.
Q. Is it -- would you agree that it's one of the primary

Government, and underneath it the Resilience and Emergencies Division, and that was the link from local resilience forums into central government?
A. Correct.
Q. Then if we go through, please, to page 3 and then 4 in rapid succession, we can see, on the left-hand side, August 2018 -- actually it still says the Ministry of Housing, Communities \& Local Government, and Resilience and Emergencies Division.

So in fact the Ministry of Housing, Communities \& Local Government was, in 2018, still known as that, rather than Department for Levelling Up, Housing and Communities, which it became thereafter.

So that switch from the Government Offices for the ... Regions to this division in the Ministry of Housing called the Resilience and Emergencies Division happened in 2011.

Do you know why there was that switch, why resilience was no longer managed or supervised through the Government Offices for the ... Regions?
A. I think it was part of a suite of changes made by the government at the time to reorganise regional structures in the UK.
Q. Was that of some import? Was of that importance or significance?

102
documents for all these moving parts in this system to understand how to respond to emergencies? It's the primary emergency manual, if you like, from the Cabinet Office, on responding to emergencies?
A. It's one of a set, and not the only source of that information. So people arriving in the system would do training courses, for example, which would help them to understand.
Q. If they didn't have training courses and they were looking to the Cabinet Office to see what the core operational document -- it's called "Concept of Operations" --
A. That's right.
Q. -- was, they would go to this document?
A. Yes, I expect so.
Q. All right. Can we have that document up, please, INQ000036475:
"Responding to Emergencies ... Concept of Operations."

It was originally published in March 2010.
You can see in the bottom right-hand corner of this page that chapter 6 was, however, updated in April 2013.

Could we please have page 16 of the document, and paragraph 2.18(i):
"In England, the role of the [lead government
104
department] for Recovery, in consultation with other government departments, and if appropriate the devolved administrations, will be to:
"(i) Act as the focal point for communication between central government and the multi-agency Recovery Co-ordinating Group(s) at local level involving relevant government offices in the English regions ..."

Is that a reference to the by then abolished Government Offices for the ... Regions?
A. I'm afraid I'm not sure. If it was, I would expect it to say "Government Offices for the ... Regions". I think this may be referring to other structures.
Q. What other structures, other than the former, but now abolished, Government Offices of the ... Regions, do you think that could be a reference to?
A. I'm afraid I don't know, I would have to go away and look into that a little.
Q. Ms Hammond, you more than anyone have expertise and a corporate understanding of the system concerning civil contingencies, that is a reference, isn't it, to what was, by then, the abolished Government Offices for the ... Regions?
A. I'm afraid I can't be sure.
Q. All right?
A. It's three years since I left this point, so you can 105
A. It appears to --
Q. Capital letters?
A. It appears to be, yes.
Q. All right. So in the primary CCS, Civil Continencies

Secretariat, Cabinet Office document for the whole of
England and Wales, the local authorities, the local resilience forums, and all the many moving parts, Concept of Operations, it was not only not updated for many years, 2010 to 2023, other than in small part, but it continued to refer to government departments that had actually been abolished?
A. I think that is a fair criticism of the document, Mr Keith. I will say that's not my experience of practice.
Q. No, but it is the reality, is it not?
A. Of the document.
Q. Of the document.
A. It is, it would appear to be, yes.
Q. And page 45, paragraph 4.2(v):
"Convening Regional Co-ordinating Groups or Regional Civil Contingencies Committees in England, will be considered by COBR and/or the Lead Government Department ..."

Then further down:
"The Government Offices in the English regions will
imagine on some points of detail I might need to go back and check.
Q. Page 24, please, paragraph 3.11:
"In order to ensure accurate and timely information is available in the CRIP ..."

I think that's a reference to a form of blackboard or whiteboard, a commonly recognised information picture?
A. Not normally a blackboard or whiteboard, but essentially where information is brought together on what the current situation is, often a deck of slides, for example.
Q. A Sit Rep? A situation report?
A. Exactly, exactly that.
Q. But called, in this documentation, a CRIP?
A. That's what it's called when you take it to COBR.
Q. "... the Cabinet Office will request situation reports (Sit Reps) from other Government Departments and agencies as appropriate providing a national summary of nationally managed or co-ordinated services. Government Offices in the English regions will be expected to provide a Common Regional Recognised Information Picture ..."

That is a clear reference, is it not, to the abolished Government Offices for the English Regions? 106
provide the default Government Liaison Officer ..."
So why did not somebody update the primary emergency
response documentation for the civil contingencies system?
A. Well, I don't think that lack of an update was affecting how things worked in practice. It was really well understood that that role would be carried out by the Resilience and Emergencies Division, and that's certainly what happened in all the responses I was involved in.

CCS owns a lot of guidance documentation, as you've identified. There is always a balance between spending time updating that and responding to incidents. Generally speaking, where there is an incident that meant you could reduce harm to people or communities, we would prioritise that.
Q. Another major part of the system was, as you've correctly identified, the Civil Contingencies Act 2004?
A. Yes.
Q. We've heard evidence that that Act had two parts in it. The first part set out the duties on the category 1 and category 2 responders, and the non-statutory bodies and so on and so forth, and provided the legal framework for civil contingencies response; is that correct?
A. Correct.
Q. Was the Civil Contingencies Act 2004 reviewed by the Cabinet Office to make sure it was still fit for purpose between 2004 and the onset of Covid in 2020?
A. Yes, we did, in my time, what's called a post implementation review. You do those every five years. I think there was a subsequent one in 2022, which you have in your bundle of evidence.
Q. Yes. Conducted, in fact, by Mr Mann, I think, you know?
A. I wasn't involved in that, I'm afraid.
Q. You didn't know. All right.

Could we have INQ000005260, please, and page 8.
This is a report of the post implementation review of the Act, CCA 2004. It's dated March 2017. Page 8, paragraph 20:
"CCS and the Department for Communities and Local Government's Resilience and Emergencies Division (... RED) [the division to which you referred] have a well-developed knowledge of the practice of local resilience through working with both local resilience forums, and with local responders planning for and responding to emergencies. This knowledge, which includes learning from emergencies and exercises, indicates that although there may be a need to consider the way in which the CCA, Regulations and guidance are being interpreted ... there is no clear case for 109
A. Exactly.
Q. Of the total of 79 transport companies, category 2 responders, and 57 utility companies who were invited to participate, responses were received from ten transport companies and 34 utility companies.

So there wasn't an overwhelming response to the survey?
A. That's a subset of the total respondents. The response rate from LRFs tended to be much higher than that. That's two particular category 2 responders.
Q. Was there any consideration of the fundamentals of the Act, that is to say whether or not the legal duties on category 2 responders be brought more in line with category 1 responders, which was an issue to which you'll know Mr Mann and Professor Alexander referred to in evidence? Was there any debate at any time over this period, from 2004 to 2020, of that essential issue?
A. I don't think -- so in collecting information for the PIR, we would have asked quite open questions, so asked people to raise the issues they thought were there.
I don't recall powers for category 2 -- or duties, rather, for category 2 responders being a major theme, but this is some time ago.
Q. You'll know from the evidence of Mr Mann in particular -- which I'm sure was brought to your 111
reviewing the regulatory framework ..."
Ms Hammond, do you happen to know what level of knowledge was brought to the attention of the authors of that report? I mean, to what extent was there evidence from local responders and the emergency services and so on and so forth to indicate that there might be a clear case for changing the regulatory framework?
A. I would have to return to the documents and refresh my memory to give you an exact list of who was consulted, but from recollection, you know, views were taken from some, if not all, LRFs, so the local responder community, and from government departments.
Q. If we could have, please, paragraph 21 on the page, it would appear that the post implementation review took data from something called the National Capabilities Survey 2004(sic).
A. Yes.
Q. What was the National Capabilities Survey?
A. It was a survey document provided or responded to by local responders, which was intended to assess the state of play in relation to key capabilities for civil emergency response. Does that make sense?
Q. It was the survey from -- it was a survey directed at and responded to by entities in the civil contingencies system?

110
attention -- that there has never been any time in which a legal duty under the Act or any other piece of legislation has been imposed on central government itself, whether it be --
A. Correct
Q. -- the RED division of DLUHC or the lead government departments. During your time in office as the director, was there any consideration at any time given to an expansion of the legal duties to central government? Did anybody say, "This is something worth thinking about and considering"?
A. I don't think it was a topic of major debate. We ... when we had thought about that, I think we'd reflected that secretaries of state already have very considerable levers to set the priorities for their departments, so I think there would have been a question what a legal duty would have added to those abilities.
Q. May I press you, please, Ms Hammond?
A. Of course.
Q. You say you don't know whether there was debate, but you go on to say that you think that that was an issue --
A. I said I --
Q. Do you recall it --
A. -- wasn't a major theme of debate.
Q. Was the issue of whether or not government departments 112
should have a legal duty imposed upon them ever the subject of debate at your level of seniority in the Cabinet Office?
A. I recall it as, you know, one part of a lot of, you know, much wider-ranging conversation. I don't think we ever did a serious and focused piece of work on that single issue.
LADY HALLETT: Your answer to Mr Keith's question was:
"... that secretaries of state already [had] very considerable levers to set the [parameters] for their departments ..."

I think the point is, if there was a legal duty then that would become one of their priorities, because they've got a legal duty. I think that's the point.
A. Yes, I understand. But I think if you think of it the other way round, if you have a secretary of state who doesn't consider this to be a priority, I am not entirely clear what difference the duty would make. Departments are having to make prioritisation calls all the time, and of course they're going to listen to their secretary of state.
LADY HALLETT: But wouldn't a legal duty make it a priority, inevitably?
A. One would hope so, but I think where there are different trades to be made, allocation of resources can vary over 113
safeguarding the UK's constitutional settlement."
Would you agree that the coronavirus pandemic, by virtue of not being an influenza pandemic, was an unexpected and most unwelcome development?
A. Unwelcome, of course. It had a horrible impact on the lives of so many people. In the national risk assessment the pandemic was judged to be the reasonable worst-case scenario -- sorry a flu pandemic was judged to be the reasonable worst-case scenario.
Q. Indeed.
A. There is consideration of other emerging infectious disease issues which included coronavirus, but the assessment was that the magnitude of the impacts would be lower than a flu pandemic, hence that was the focus for planning.
Q. By virtue of likelihood, and by virtue of impact, a pandemic influenza was regarded as being of the highest overall risk, it was therefore the expected development, was it not?
A. I think likelihood was judged to be the same, but impact was judged to be considerably higher for an influenza pandemic.
Q. Ms Hammond, you are aware, of course, that in the NSRA the overall risk rating for pandemic influenza was very high --
time. So I think the more effective route is for governments to make it a priority.
MR KEITH: Ms Hammond, if there is no point imposing a legal duty, because ultimately everything is about pragmatism and resources and making choices, as you would say, why did central government impose legal duties on category 1 and 2 responders?
A. I think you have slightly missummarised my answer, and I think I'm talking about the particular circumstances of departments and the decisions they have to make.
Q. One of the major functions of the Civil Contingencies Secretariat was to draft policy documents and draw up the strategy for dealing with the United Kingdom's ability to prepare for emergencies. Can we look back at that Concept of Operations, that important document, INQ000036475, and page 5. Paragraph 1.2, in the very first section, indeed the very first part of the first section of this core document, the Cabinet Office said this:
"History has taught us to expect the unexpected. Events can, and do, take place that by their nature can not be anticipated exactly. Response arrangements therefore need to be flexible in order to adapt to the circumstances at the time while applying good practice, including lessons from previous emergencies, and 114
A. Yes.
Q. -- and for new and emerging infectious disease, high?
A. Yes.
Q. So, of the two, pandemic influenza was the more expected, was it not?
A. I think the likelihood assessment was the same, the impact assessment was different. So when you ask me what was more expected, I think the answer is that there is not much difference. The difference is in the level of impact anticipated.
Q. In your own statement you acknowledge that the preparations made by this country for infectious disease did tend to focus upon influenza pandemic.
A. Correct.
Q. You go on to explain why there were areas that were not anticipated, why there were areas in which we didn't respond as well as we did in other areas and so on. That was because, was it not, coronavirus was more unexpected than a pandemic influenza?
A. It's because --
Q. Would you agree?
A. -- the impact was expected to be less severe.
Q. Would you agree with this proposition, on a general level we were blindsided by the appearance of coronavirus?
A. I don't think "blindsided" is the word that I would use. Certainly the pandemic that happened in 2020 was different from the reasonable worst-case scenario produced by experts which focused on a flu pandemic That, of course, is built on statistical analysis of the past. We have had a number of influenza pandemics before. Coronavirus events have tended to be much smaller in scale; SARS and MERS you'll be familiar with. So that is the basis, I think, for the analysis.
Q. That is why, due to the very statistical analysis to which you refer, coronavirus was more unexpected than an influenza pandemic?
A. The scale of the impacts was different.
Q. All right.

Could we look at INQ000055887, which was another major piece of guidance issued by the Cabinet Office called "Revision to Emergency Preparedness"; are you aware of that document?
A. Yes.
Q. This is a 591-page document. Do you recall when it was first issued?
A. Before my arrival in CCS. I'm afraid I do not have the document on the screen.
Q. No, it's just being brought up.
A. Thank you.

117
over a period of time. So --
Q. I thought you said there was a series of different emergencies which had impacted your ability to respond?
A. Yes. So the structure of CCS is based on having a fairly small standing response team, which is augmented by other parts of the organisation as needed. That means that when you have a large number of emergencies which last for some time, of necessity some of the work is set aside.
Q. Was one of the reasons why the Civil Contingencies

Secretariat and the Cabinet Office had to set aside valuable workstreams, put to another side or another time work that it understood that it ought to be doing, Operation Yellowhammer?
A. Yes. Yellowhammer was a really major consumer of resources in my time.
Q. That was not an emergency, and the answer to my first question was you said there were a number of -- a series of emergencies that you had to deal with.
LADY HALLETT: "Events" I think was the expression.
MR KEITH: If I've used the wrong word, I apologise.
A. And I think I was referring to the period before

Yellowhammer. So in my time as director of CCS, between 2016 and 2018 there were a series of quite substantial events, and then as you rightly say, we did a very
Q. INQ000055887, page 1. Revision to Emergency Preparedness, and the bottom left-hand corner, March 2012.

You must have come across this document whilst you were director?
A. Yes.
Q. Was it ever updated between March 2012 and 2020?
A. I don't think it was re-issued. There were certainly intentions to update it in my time; I think those were set aside by events.
Q. What events?
A. The series of emergencies that happened from 2016 onwards.
Q. Which emergencies were they, Ms Hammond?
A. Well, you have a list of some of them, I think, in Mr Hargreaves' statement. CCS was involved in responding to quite a number in that period, of quite substantial size.
Q. If you had to order in terms of the impact upon the ability of the CCS to bring its documentation up to speed and up to date, and in terms of your ability to respond, what were the three most significant events impacting on your abilities?
A. I don't think it's necessarily about individual ones, it's about the number and the sustained nature of them 118
intensive period of work on a no-deal exit from the EU.
Q. This document sets out for local resilience forums and other entities how to prepare for and respond to emergencies, does it not?
A. It does.
Q. Could we have, please, page 160.

An important part of the document sets out for those persons reading it what sort of risk categories they should have regard to, what sort of outcomes may result from those risks, and also who the lead government department is for that particular risk.

If we go down the page, please, I'm afraid, zoomed in, I've now lost the reference to it. If we go -- yes, that's the start of the chart. Could we then go, please, to page 164. "Risk categories" in the top left. Further down the page you will see:
"Human health
"Influenza-type disease (epidemic)
"Influenza type disease (pandemic)
"SARS-type disease."
So from the publication of this document in
March 2012, there appears to have been an equality of approach to both influenza-type disease and SARS-type disease. They're both identified there on the face of the document.
A. Well, I think the part of the document you were referring to, if I'm reading the top of the page correctly, is an "Illustration of Local Risk Assessment Guidance". So that would be based on the national risk assessment that was relevant at that time, which I would say is --
Q. Indeed.
A. -- the more important document.
Q. But the point from this page is, to the professional reader of the document, the chair perhaps of a local resilience forum, they would be alerted to the fact that one of the major risk categories was influenza-type disease as well as the possibility of a SARS-type disease?
A. Yes, although I would say, you implied there was parity between those scenarios here. There is no information to suggest that.
Q. Well, there is nothing given in terms of likelihood rating, that's blank. What is provided here is the lead government is the Department of Health, as the DHSC was then known?
A. Correct.
Q. So on the face of it there is a degree of parity, and what I wanted to ask you was: when you took over the directorship of the CCS, was there a general 121
A. I think an LRF would look at this annex as an example of a tool that one might use, but I am pretty confident they would have considered the risk assessment to be the more authoritative document.
Q. They would be looking at the National Risk Register, the public facing version of the national risk assessment, or the official sensitive National Security Risk Assessment?
A. LRFs had access to the classified version.
Q. So the NSRA, the National Security Risk Assessment, and before then the national risk assessment?
A. Yes.
Q. They would have had to have regard to this document, all 891 pages, the ConOps document to which --
LADY HALLETT: Just before you move to another document. MR KEITH: Yes.
LADY HALLETT: I'm just wondering, Ms Hammond, forgive me if I'm failing to spot something, what exactly anyone would get from this. You've got the identification of a number of risks, and you're told who the lead government department is, but everything else seems to be blank.
A. So I think this is a template for LRFs to use, essentially.
LADY HALLETT: Oh, they fill it in?
understanding then prevalent that an influenza pandemic was the more likely risk, the more expected risk, the one to guard against as opposed to a SARS-type disease?
A. The understanding was as set out in the risk assessment, which is that the combination of risk and -- of likelihood and impact was higher for a flu pandemic.
Q. Do you recall whether or not this description of the two risks reflected the National Security Risk Assessment or the national risk assessment at that time? We know later, from 2019, that, you're right, a different risk level is given to influenza pandemic than to a new and emerging disease. But do you recall what the position was further back in time?
A. So I think in 2016 -- and forgive me, I'd have to look again at the risk summary -- influenza was still considered to be the higher of the two risks in the risk assessment.
Q. All right.
A. But I do say, I don't think the way they're set out in this document implies parity.
Q. If you are a local resilience forum and you're wading your way through the paperwork in order to inform yourself, educate yourself as to how to prepare for an emergency, is this a document to which one would have had to have had regard?

122
A. That's been partially populated. So "Illustration of Local Risk Assessment Guidance". So if you were -- the way the system operates, if you were a local resilience forum, you take the national risk picture as your starting point and you look at how that might apply to your local area. So what you might do is work through the risk categories set out here, interpreting them for your area. So, you know, for example, you know, what might the economic impact be expected to be based on your knowledge of the particular make-up of your location
MR KEITH: It's a very considerable document.
A. Yes.
Q. What else would the LRFs have to grapple with? So the NSRA, the official sensitive risk assessment process to which you've referred and we'll come to in a moment; the ConOps, Concept of Operations document; this document, Revision to Emergency Preparedness. Was there another document called Emergency response and recovery?
A. Yes.
Q. Was there material relating to the Resilience Capabilities Programme?
A. Yes. There was also specific pieces of guidance on elements of response, humanitarian assistance, voluntary sector involvement, et cetera.
Q. Material from the DHSC's pandemic influenza preparedness programme?
A. Yes, and there's a published strategy.
Q. Engagement with and guidance material from the Pandemic Flu Readiness Board from 2017 onwards?
A. LRFs wouldn't have had all of the material from the PFRB. The Resilience and Emergencies Division again performed their link role in relation to that work. So they were describing to LRFs and consulting them on some of its work.
Q. Was some of the material from the Pandemic Flu Readiness Board provided to local resilience forums for their reading?
A. It would have been through that consultation mechanism I've just described.
Q. Yes. Was it provided to them?
A. Yes.
Q. Multiple successive editions of the National Resilience Standards. What are the National Resilience Standards?
A. So the National Resilience Standards set out for LRFs, in quite short form, what their statutory obligations are, what good practice looks like, and what leading practice looks like under a series of headings. Some of those are specific to preparing for particular risks. Others are about capabilities you would need in 125
Q. How many different standards were there? Because you've told us that standards related to different aspects of the performance of the local resilience forums.
A. So they grew over time. I think the first set was 12, and we added potentially another six. Forgive me, I can't remember what the final number was when I left.
Q. That might be 18 , but the point is that the local resilience forums would have had to then themselves gauge, under this process of self-assessment, their performance, their ability to respond to emergency, against no less than 18 separate standards?
A. Each standard is a page long, so I don't think that's an unduly arduous process. I will say from my experience in CCS there was a real desire to have those standards from LRFs, they found it useful to bring that information into one place, and lots of them used them.
Q. Would LRFs also have to consider local risk management guidance?
A. Yes, they'd be using that to write their local risk register.
Q. JESIP paperwork, that's to say the -- it's an acronym that is quite, quite beyond me. But anyway, will you tell us please, what JESIP is?
A. JESIP is essentially a set of rules which help emergency responders work together effectively in a crisis.
responding to any risk. They were a commitment made in the integrated review, I think, in 2015.
Q. They were documents, were they, against which the local resilience forums were obliged to assess their own conduct, their own standards?
A. Not obliged, but there was a really big appetite to have these standards from LRFs, and I know that quite a number of them put them to use.
Q. So they weren't obliged. Do you mean that this was a process of self-assessment?
A. Correct.
Q. So the LRFs would be told: these are standards against which you must measure your performance, they are standards to which you must adhere, you must meet them, but it's up to you how you grade your performance?
A. So some element of self-assessment through the resilience capabilities survey, as you've already described, but --
Q. Is that the survey that was abolished in 2017?
A. Correct.
Q. Right.
A. But there are different elements to these standards. So, as I said, some of it reflects statutory obligation, some of it reflects the best practice available so that LRFs are aware of what that looks like.

## 126

Q. An intra-operability framework?
A. Yes, based on learning from events where that join-up has not been effective.
Q. LRFs would also have to consider humanitarian aspects in emergency management guidance?
A. Yes, for those risks where that was relevant.
Q. UK Influenza Pandemic Preparedness Strategy material from the Department of Health?
A. Yes.
Q. Health and Social Care Influenza Pandemic Preparedness and Response?
A. Yes.
Q. Pandemic Influenza Strategic Framework from 2014 and the Pandemic Influenza Response Plan from Public Health England?
A. Those are all available documents for LRFs to use.
Q. Some of those documents have multiple references online to $30,40,50$ other documents?
A. Some of them do. It's a complicated business.
Q. Well, is it? From the viewpoint of local resilience forums and those who are tasked with the heavy obligation of responding outside central government, is there not an argument for culling this profusion of paperwork and for identifying a clear, objective standard against which they can be tested, perhaps

128
an inspectorate, and a single manual so that they know what, in the heat of an emergency, they are practically obligated to do? Get food to somebody in a particular building. Recreate local transport networks. Deal with householders who have been evicted from their homes because of flooding. The practical side of it.
A. So I think it's a completely fair point that there is a lot of documentation there. In my time in CCS, some of the things we did were to try to put that in the single place so it was easy to locate. Most of those pieces of guidance have been written based on demand for them, so particularly the humanitarian aspects one you referred to. If you're an LRF, what you want to do is learn from how other people do things, and it's really helpful to have that good practice described. There is always a case for rationalising paperwork, but there is also a huge amount of really useful expert material in there.
Q. How strong was that demand, Ms Hammond? I mean, 2014 and 2017, you conducted a National Capabilities Survey. This is the survey that was abolished in 2017, perhaps because it served little purpose. But the take-up rates by way of responses to the Cabinet Office surveys from local resilience forums would indicate that they weren't crying out for more tests, more paperwork, more surveys, 129
risk-specific ones, of which pandemic influenza was one of the first.
Q. Could we have up INQ000023122 and page 1 of 39.

This is called the National Resilience Standards for Local Resilience Forums. It's dated August 2020, so it's post-Covid.

If we have a look, please, at page 3 we will see its contents: local risk assessment, intra-operability, training, exercising, strategic co-ordination centre, cyber incident preparation.

Obviously a cyber incident is something to which local resilience forums must have regard and must be ready for, and that standard, "Are they ready?" must be checked; is that right?
A. So ... so I think, I'm just trying to be clear on the last part of your question, Mr Keith. These are standards for LRFs to use, and to assess their own performance against.
Q. Yes. So they need to be told, "You must test your systems, your approach, your policies, your risk assessments, all the work you do, against a standard that is suitable for dealing with a cyber incident or a pandemic influenza"?
A. It's intended to allow them to do that, yes.
Q. Yes. And for this one, which is post-Covid, standard 131
more guidance, more policy?
A. I think the take-up rates from LRFs were actually pretty good, more than $70 \%$, from recollection, although I would have to go and check that, and I'm happy to do so.
Q. I think there was a difference, was there not, between the 2014 and 2017 take-up, you may recall?
A. That may be right.
Q. Yes. You've referred to standards. The standards to which you referred, and I think you said there were 18 in all, presumably those standards told the local resilience forums what areas or things they needed to be ready for. So are you ready to prepare a local resilience plan? Are you ready to inform the public of what they might have to do? Are you ready to deal with other emergency services and responders and so on and so forth?
A. Yes, they covered elements of a response of that nature.
Q. Presumably, therefore, those standards had to check whether the local resilience forums were on top of their game in relation to particular risks, so a pandemic, or a flood, or something of that sort? Is that how the standards system worked or not?
A. So the first set that were produced dealt with those generic capabilities, how do you run a good strategic co-ordinating group, for example. We then began to add 130

15 , on page 36 , is pandemic influenza preparedness, local resilience forums need to be told, "The standard against which you must measure yourself in the context of pandemic influenza preparedness is this". And you referred earlier to different -- it's a single page, you're right, but there is a number of moving parts in it, because these bodies are told: well, on the one hand there is a desired outcome, on the other there's a summary of legal duties, but then you must also have regard to good practice.
A. Yes, that's what's in each standard, yes.
Q. Right. So page 36, please, yes, if you keep it on that page, thank you.

We can see that to achieve good practice in this area local resilience forum must set out roles and responsibilities for the full range of supporters -responders and supporting organisations, that there must be a pandemic influenza -- pan-flu -- that's based on scientific evidence, set out the arrangements for emergency services, expectations of local institutions, how to put multi-agency recovery arrangements into practice, have an antiviral distribution strategy, and so on and so forth.

There is a lot there for them to do to be properly ready for a pandemic influenza.

132
A. Yes.
Q. In July 2018, the first version of the National Resilience Standards was published by your department, by the Cabinet Office.

Could we have that, please, INQ000022975.
Could we have, please, we can see the date, July 2018, in the bottom right-hand corner.

Could we have page 2.
There's the list of contents. Where is the reference on this page or any other page in the National Resilience Standards to pandemic influenza?
A. So I think, as I said before, this is the first set of standards that we published, and we began with the capabilities that you would need for any risk, pandemic included. So, for example, you can see, you know, operating an SCG, as I referred to before, at number 11. That was the first set, with the intention then to add risk specific ones thereafter. And pandemic flu was one of the first we added, because it was the most serious risk.
Q. When did you add pandemic flu, Ms Hammond?
A. So from memory I think it was out for consultation with LRFs towards the end of 2018 and it was published towards the end of 2019 for the first time.
Q. It was published in December of 2019, was it not? 133
Q. Not in the primary document which told them whether they were ready or not?
A. Not at this point.
Q. Not until December 2019, on the very cusp of the pandemic?
A. But the risk assessment would have been in their possession throughout.
Q. How are government departments, central government departments, for example the Cabinet Office and the CCS, trained or supervised or made ready by reference to National Resilience Standards?
A. The resilience standards are for local responders, not for the centre of government.
Q. But central government responds in just the same way. Of course, in Covid, the primary response was on the part of central government, was it not?
A. Indeed, and that response is one of the, you know, responsibilities of CCS, to ensure it functions well. That's tested in a number of ways. You know, exercising being one of the really good ones.
Q. Including Operation Cygnus?
A. Exercise Cygnus.
Q. Exercise Cygnus. We'll come to that in a moment.

Was there any system of formal validation or assurance, to use the correct terminology, or standards 135
A. That sounds about right.
Q. Can I return, please, to my first question on this subject: the integrated review, the ConOps documents, the emergency preparedness documents, the various materials to which we've referred, including that chart at annex 2E of one of those two documents, referred to an influenza pandemic as being one of the risks that everyone had to be on guard for.

The sole, albeit self-assessed, system for standards and for checking that the moving parts of this system were up to scratch, when first published, made no reference to influenza pandemic at all.
A. The first set of standards didn't include the pandemic influenza one, that's true, but you would need to use all of the capabilities covered by the others in responding to an influenza pandemic.
Q. The local resilience forums pick up this document, and they say, "This is how we must get ready, we must check that we are ready by reference to this document for particular important risks", and we've seen after Covid two of them are pandemic influenza and cyber. Where were the references to the risks to which they had to have regard when checking whether they were satisfactorily prepared?
A. In the national risk assessment.

134
by which the Cabinet Office or government departments could assess either under self-assurance or be assessed to ensure that they were up to scratch?
A. We didn't produce standards for central government.
Q. All right.
A. But as you say, there are documents which describe the responsibilities in the system, including the ConOps.
Q. You've referred to the National Capabilities Survey and I've asked you about that in outline. Was this a voluntary online survey that was renamed in 2016 and then abolished in 2017?
A. Yes, and is it helpful for me to explain a little about that decision in 2017?
Q. Please.
A. So you will have seen from my evidence and from others that after the events in 2017 we reached a view that that survey wasn't quite serving the purpose it was intended for, and there was a piece of work through the summer of that year which resulted in a set of propositions about moving towards a more -- more of an assurance model, for which the resilience capabilities survey wouldn't have been the right tool. So that's the reason we decided not to run it again in that form. It was superseded by some other work on how you assess readiness for particular risks and particular 136
capabilities, and I think you have in the no doubt large amount of disclosure to this Inquiry some of the results of that.
Q. All right.

The National Capabilities Survey, which was abolished in 2017, was a self-assessment process, was it not?
A. Correct.
Q. The material in that process wasn't even in its granular form, that's to say the detail of the data, received by the Civil Contingencies Secretariat, it was, in your own words, in the Grenfell Inquiry, aggregated by a third party?
A. It was aggregated, I think, by a team in CCS, but forgive me if I've misremembered that.
Q. That survey was then abolished, and your department, when you were in post, proposed something called the local resilience assurance team, that is to say a team of civil servants in your own department, managed and supervised of course by your department, who would then go out and try to replicate the information that had once upon a time sought to be secured by the survey?
A. I wouldn't say replicate the survey, no.
Q. All right. What happened to the local resilience assurance team?

137
resilience forums between 2018 and 2019?
A. That's right.
Q. When you were in post?
A. Correct.
Q. What happened to that voluntary scheme, Ms Hammond?
A. I think it was impacted by Operation Yellowhammer, with the expectation that it would be picked back up once that work concluded.
Q. You mean nothing happened to the scheme thereafter because your attention and capacity and resources were diverted elsewhere?
A. I think it was set aside, yes.
Q. Was it -- nothing happened to the scheme, it wasn't just impacted, it ended?
A. Not -- so set aside. By set aside I mean not that it was an intention to permanently cease it, but that work was deprioritised for that period.
Q. Ms Hammond, would you agree with the following propositions, drawing upon your expertise as the former director of the Civil Contingencies Secretariat: in the field of civil contingencies, the Cabinet Office has no local or operational role? It doesn't deliver response activity on the ground, for example.
A. Yes, that's broadly correct. There is a very small number of exceptions to that, with the -- some of the
A. It was put forward as a proposal into the -- forgive me, I've forgotten the name of the process in 2017. Perhaps you'll remind me.
Q. The integrated review?
A. That sounds right. There are a lot of different processes, forgive me.
Q. There are.
A. But the funding for the creation of that team wasn't provided.
Q. So it wasn't set up?
A. It wasn't.
Q. So the survey was replaced by nothing?
A. At the time I left CCS, the survey had not been -didn't have a clear successor, that's correct.
Q. Ms Hammond, it didn't not just have a clear successor, it was replaced by nothing?
A. I don't think that's quite true. So the piece of work I'd just described on how you analyse -- created a tool for analysing readiness for risks was in existence. I think you have some of the reports that were produced having used that. What we hadn't been able to do was roll it out to the same extent we would have liked to.
Q. Is that a reference to what replaced the local resilience assurance team, which was never started, which was a voluntary scheme by a proportion of local 138
work that we did on capacity for managing excess deaths being an example, where we were slightly more operationally involved.
Q. But as a general rule that is a correct proposition, is it not?
A. Generally, yes.
Q. The Cabinet Office and the CCS monitored what everybody else did, it brokered policy solution, it liaised, it made the wheels of government turn?
A. It set the standards and it managed those relationships, yes.
Q. Yes. The standards which in the context of the local resilience forums we've just looked at, they're those three versions from 2017 onwards?
A. Those standards and the other -- sorry, standards small S rather than capital S, the other standards set out in the bits of guidance you've referred to.
Q. Day-to-day control of national emergencies was deferred to local government departments, other government departments, and local emergencies to local resilience forums and strategic co-ordinating groups?
A. The system is based on the idea that you manage an emergency at the lowest sensible level. So they would only be escalated to central government if that was necessary.

140
Q. Yes, which is why I repeat, day-to-day control of national emergencies would be in the hands of government departments, but the local side, if it was a local emergency, would be, under the principle of subsidiarity, deferred to local resilience forums and strategic co-ordinating groups?
A. I would add to the first part of your statement, departments and the centre of government, the Cabinet Office.
Q. The Cabinet Office has no inspectorate role, it didn't inspect local bodies, local resilience forums or category 1 or 2 responders?
A. Correct.
Q. It doesn't formally assess or assure local or departmental readiness. That's a quote from your colleague Mr Hargreaves.
A. Correct.
Q. It works to drive -- in again your own words --cross-cutting preparedness?
A. That's right, it's about making sure that the whole is coherent when you add it together.
Q. There was no formal process of inspection of local resilience forums, the process was self-assured, and the survey procedure ended, the National Resilience Standards against which their performances were rated 141
have a quick word?
MR KEITH: Would my Lady excuse me a moment.
(Pause)
INQ000097685.
LADY HALLETT: I think you were getting mixed messages there.
MR KEITH: I think I was, my Lady.
INQ000097685, please. Paragraph 25, page 19.
This is an extract from the Resilience Framework document published by the United Kingdom Government in
December 2022, after your time in office in the CCS, of course. But on the subject of the lead government department model, and that's how you described it earlier, the government itself says this in paragraph 25, thank you:
"The UK Government will continue to use the Lead Government Department model to guide risk ownership, but there will be further clarification of roles and responsibilities for complex risks."

My Lady, we'll come back to what that means in evidence next week:
"... NSRA risks are primarily owned and managed within Lead Government Departments ... although LGDs must work with a range of departments and regulators to make sure they are well understood, managed and invested
were rated by themselves, and in any event made no reference to pandemic influenza until December of 2019?
A. No, but the capabilities they described would all have been relevant for a pandemic influenza response.
Q. Local resilience forums were supervised along with strategic co-ordinating groups by the RED division of the Department for Levelling Up, Housing and Communities, so there was no direct link between the Cabinet Office and local resilience forums or a local government department and local resilience forums?
A. I don't think that is completely correct. So

Cabinet Office did have contact with LRFs. So, for example, we ran along with RED an annual set of chairs conferences, so there's some direct contact there. But the primary link is through RED.
Q. Could we have, please, N7685 [sic], please. I'm afraid I have only a paragraph 25 reference. I don't know the page number, if somebody could help. It's the Resilience Framework.

## (Pause)

My Lady, would that be a convenient point for a break? I'm hearing whispers that levels of exhaustion are increasing.
LADY HALLETT: Oh, right. We wouldn't normally take it now, but if that's a convenient moment. Do you want to just 142
in across the risk lifecycle."
Then, perhaps passing over the valuable role of the Cabinet Office in the next sentence:
"This model works well in principle, and in practice, in the vast majority of cases. But there are also limitations of the LGD model, particularly where risks become more complex, meaning that their impacts can cross departmental and sectoral boundaries. For example, the response to COVID-19 demonstrated the challenge for a single part of government leading on an emergency which reached deeply into all parts of the economy and society, and required leadership from all parts of government. Although there was an understanding of the risk of pandemic flu, treating it as a health emergency [that is to say therefore to be dealt with by the Department of Health and Social Care] meant that there was limited planning outside of the healthcare sector."

Do you believe that the lead government department model remains fit for purpose, Ms Hammond?
A. Can I give you an answer which is yes and no?
Q. Well, I think I'd be disappointed if you didn't, so why don't you.
A. So the yes is: I think lead government departments are important because they mean the people who are primarily 144
leading the work in relation to a risk are the people who understand it, and that application of expertise is extremely important, I think particularly in relation to health risks where the vast majority of other responders will not be health professionals. That seems to me to be really critical.

But I do think for the risks that are in the top right-hand corner of that matrix, in the red boxes --
Q. No one has seen the red box, but we'll come to that after the break.
A. You have, I hope, and assume.

There can be an issue of scale which kicks in as you get into the response, and I think that's what we saw in Covid-19 in particular. So that's my yes and my no.
Q. Quite, thank you.

One final question, perhaps, if my Lady will allow me just on these structural points, we've looked now at almost all the formal parts of the civil contingencies structure but another very important area are the links between the United Kingdom central government and the devolved administrations.
A. Yes.
Q. What formal structures or procedures were in place pre-Covid for liaison between the Cabinet Office, central government, lead government departments and the 145
come from them. So we were often invited to the Wales Resilience Forum, for example. It's a pretty regular pattern of contact.
Q. What formal structure obligated the regular, transparent and significant meetings -- meeting between the CCS, the Cabinet Office and the devolved administrations in this vital field of civil contingencies?
A. I don't think there is an obligatory structure, but

I can say from my time in post those were very positive working relationships.
Q. So positive that by the time Covid struck the lines of communication had atrophied?
A. I wouldn't agree with that statement.

MR KEITH: All right.
My Lady, is that a convenient point?
LADY HALLETT: You're determined, Mr Keith, aren't you?
MR KEITH: Yes.
LADY HALLETT: Right. I shall return at 3.10 , please.
( 2.55 pm )

## (A short break)

( 3.10 pm )
MR KEITH: So, Ms Hammond, may we then, please, look at the National Security Risk Assessment process in detail, and you've referred to the red boxes and we're going to look at that in detail now.
devolved administrations?
A. So in my time in CCS we tried to build those links, we thought it was really important. So just to give you some examples of formal points of contact, the devolved administrations were members of the Pandemic Flu Readiness Board, and part of that programme of work.
Q. And that was the board that was instituted in 2017 --
A. That's correct.
Q. -- by order of the National Security Council THRC committee chaired by the then Prime Minister?
A. Correct.
Q. But the Pandemic Flu Readiness Board's work was significantly interfered with by what?
A. By Operation Yellowhammer.
Q. All right. So that's one area of formal liaison. What other areas were there?
A. There were pretty regular meetings between CCS and devolved administrations.
Q. On a personal, individual level -- or not a personal but individual level you mean?
A. On an individual level, on a team level. So l'm just trying to give you some more examples --
Q. You would reach out to them and say, "We are the CCS, we should meet"?
A. Yes, in some cases. In some cases the invitation would 146

Could you help us, please, with a general description of the NSRA process. I call it NSRA although it had a different part before, I think, 2016, the national risk assessment, and then they came together in 2019 and there is a public-facing National Risk Register as well.
A. Correct.
Q. But essentially, the process started around about 2010, and you'll correct me if I'm wrong with that date, of the government providing a document that assessed the top risks facing the United Kingdom, in very broad terms, and that process, which involved the publication of these assessments, both at official sensitive level and a variant that was public facing?
A. Yes.
Q. That process has meant, I think, perhaps around about nine or ten different assessments or documents have been made available over time. Is that right?
A. I haven't counted, but --
Q. I haven't counted them either.
A. It's on a regular two-year cycle through that period, yes.
Q. All right. The National Security Risk Assessment, and we'll use that description because that's the one that it has been called collectively since 2019, it doesn't 148
seek to cover every possible risk, does it?
A. No. It groups risks together using the reasonable worst-case scenario for that set of risks.
Q. So it groups different risks together like, I don't know, two or three, or perhaps there is only one category of flooding or there might be one category of cyber attack or there might be some other form of risk in a generic sense, and in the field of disease, for a long time the National Security Risk Assessment identified pandemic influenza, of course, and it identified a new and emerging disease?
A. Yes.
Q. What is done then is that a reasonable worst-case scenario is assessed for each of those risks, and the government asks itself, on expert advice internally --
A. And externally.
Q. Are you referring there to the Royal Academy of Engineering external advice or to advice at the time?
A. I'm referring to external input into the process of assessing the risk.
Q. What sort of external input was done during your time?
A. So there are, I think, three points at which that takes place. So the first is at the start of the process, when departments are identifying their lead risk scenario, and they draw on all of the networks at their 149
Q. So perhaps I can return then to my original proposition.

The risk assessments were not externally validated or checked by anybody outside government, in the sense of the people who were looking at this process not being government employees or scientists?
A. No, I don't think that's right. Those first two steps definitely incorporate people who are not on any sort of government payroll.
Q. The first step was the risk assessment steering group, RASG. There was then a step under which the assessments were considered by expert challenge groups, and then also a review by the network of Government Chief Scientific Advisers, senior civil servants across Whitehall and economic behavioural science and CBRN specialists?
A. Yes, it's particularly those expert challenge groups that bring in external expertise.
Q. So are you saying that the government went outside itself and approached academics and scientists and experts in the private sector and said, "Will you come and review these documents for us"?
A. Yes, they formed groups of particular expertise. You have evidence, I think, of some of the members of those groups.
Q. So those risks would be identified, and then the
disposal, which will include external contacts, academia, experts they're in touch with. That's the first point.

The second then is, in the process of assessing that scenario, there was a structure called expert groups, which brought together experts in particular fields to look at assessing the risks, and challenging them, and in some cases making suggestions about methodology, as you can see from Dr Rubin's statement. Then, in the process of clearing the risk assessment, there is a degree of scrutiny from across the government chief scientific adviser community.

So I think those are the three things I'm referring to.
Q. We may be at cross-purposes.
A. Oh, forgive me.
Q. I meant external of government.
A. Indeed, I think I am including the chief scientific community in that bracket because so many of them bring external scientific expertise and networks.
Q. The Chief Scientific Advisers are Government Chief Scientific Advisers, are they not?
A. That's correct, whilst they're in that post. But many of them, like Sir Patrick Vallance, bring external expertise.

150
reasonable worst-case scenario for each risk would be identified, so that the emergency system would know what to plan for. So if the reasonable worst-case scenario for pandemic influenza is, for argument's sake, 800,000 deaths, then that is the basis upon which the rest of the country, but in particular government departments and local resilience forums, can prepare?
A. Yes. We produced a set of planning assumptions based on those risks which allow you to see what capabilities you need.
Q. The principle underpinning this risk assessment process was this, wasn't it: that because it's impossible to identify in advance every single risk, and you can't prepare and plan in any event for every single risk, the system is built on the idea of identifying a general risk, planning for the worst -- the reasonable worst-case scenario in relation to that risk, and then saying "That's what we need to be ready for"; is that a fair summary?
A. Yes, I think that's a reasonably fair summary.
Q. But it follows, does it not, Ms Hammond, that there was no planning for specific risks or, for example, a disease with particular characteristics?
A. So the idea of the reasonable worst-case scenario is that it would enable you to be prepared for a whole 152
variety of scenarios which were less severe than that, hence you pick something realistic but at the top end of the worst that you might expect.

Of course there are variants of risks that some departments look at specifically, and, you know, flooding is a good example of that, which can vary by location, but that's the doctrine of creating that risk picture.
Q. But this doctrine failed to pay any regard to the particular characteristics of the risk or, in this case, the disease which might in practice determine what the reasonable worst-case scenario really would be?
A. I don't think that's true. I think the reasonable worst-case scenario for a pandemic, for example, was based on modelling of what that particular scenario might look like, which is based on a set of assumptions about those characteristics.
Q. Well, let's have a look at disease, then, or perhaps coronavirus.

So the risk identified in advance of Covid was two-fold, there were two risks, pandemic influenza and a new and emerging disease, in broad terms?
A. Correct.
Q. Neither of those risks said anything at all, did they, about the particular characteristics of, on the one 153
Q. Precisely.
A. Because the planning then in part is about how you mitigate that impact. It is the reasonable worst-case scenario.
Q. But bluntly, if you focus everybody's attention on the reasonable worst-case scenario, 820,000 deaths, where is the consideration of whether or not, in practice, that number can be reduced when the disease strikes, that steps can be taken to make sure it never gets to that level of death?
A. I think that's part of the planning process, that the risk scenario is intended to be a tool that helps in that. So the work of the public health system, for example, wouldn't simply be focused on how you manage that number, it would be focused on how you prevent the disease in the first place.
Q. But, Ms Hammond, you know and you accept in your witness statement that, as a result of this reasonable worst-case scenario approach, there were aspects of coronavirus that weren't planned for, because the focus was too -- the focus was placed too closely on the number of excess deaths, so no one stopped to ask themselves: why are we assuming, why are we planning for an eventuality with so much death, when in reality there may be means open to us to prevent it ever getting as 155
hand, influenza or, the other hand, a new and emerging disease, like how long the incubation period might be of the disease, whether the disease was asymptomatic or symptomatic, whether it would have a fast or a slow transmission rate?
A. So I think for influenza those assumptions are built into the modelling which generates, for example, the number of expected fatalities, as you described.
Q. Yes.
A. And some of them are described in the risk assessment documents. So, for example, on influenza, there is a reference to case numbers likely to be being higher than the recorded numbers because there may be some asymptomatic individuals.
Q. The reasonable worst-case scenario for pandemic influenza was, I think, around about 820,000 deaths; is that right?
A. That's right.
Q. Right. So an assumption was made that an influenza pandemic would cause that number of deaths, and therefore that is what everyone had to plan for; correct?
A. Yes, the assumption is based -- doesn't build in the things that you might do that could bring that number down.

154
bad as that?
A. If I may, I don't quite agree with that assessment.

I don't think it's the use of that reasonable worst-case scenario doctrine that is the issue. I do think, though, one of the things we learned from coronavirus is there perhaps needs to be another stage, which is: having worked out plans that would allow you to deal with your reasonable worst-case scenario, thinking about what are the differences in how a risk could materialise that would render those plans less effective, and then looking at how likely those differences are. And for things like a pandemic, they can be relatively small clinical differences that can make a difference.
Q. Well, indeed, and we'll come to some of those clinical differences in a moment. But you accept in your statement that it's obvious that the Civil Contingencies Secretariat would have been better prepared if the reasonable worst-case scenario for a pandemic had been closer to the realities of Covid?
A. I think that has to be true.
Q. And the reason that the reasonable worst-case scenario was not as close as it should have been to the realities of Covid is that it paid no regard to the particular characteristics of any disease, whether it be a coronavirus or an influenza virus, that may -156
A. I don't think that's right.
Q. -- have affected the outcome and therefore the need for planning?
A. I don't think that's right. I think the reason is that the expert opinion on the most likely reasonable worst-case scenario didn't precisely match the scenario that we saw in 2020.
Q. Diseases have individual characteristics, do they not?
A. Indeed.
Q. A short or a longer incubation period?
A. Yes.
Q. There may or may not be an antiviral in existence?
A. That's right. I wouldn't say that's a characteristic of the disease, I'd say that's a characteristic of the medical ability to deal with it.
Q. All right, it's a facet of the countermeasures, maybe?
A. Correct.
Q. There may or may not be a vaccine?
A. Again, a countermeasure I think.
Q. The coronavirus or virus may or may not be asymptomatic?
A. Correct.
Q. It may have stuttering transmission or be very, very readily transmitted?
A. I don't think you could generate assumptions about the impact of a disease without having made some assumptions
asking you about is whether or not you would accept the proposition that, because the risks were identified at generically such a broad level, the plans and the assumptions and the reasonable worst-case scenarios which directed everybody as to how they should respond failed to have sufficient regard to the reality of the disease, which would necessarily affect the number of deaths, the number of excess deaths, the mortuary capacity, all the other clinical aspects that you've referred to?
A. Forgive me, Mr Keith, I do understand your question, I think I'm just disagreeing with your proposition that it's the breadth of the assessment that is the issue.
Q. In your witness statement -- could we have, please, INQ000145733, page 28 -- you say:
"Even though the scenario used in the [National Security Risk Assessment] was a pandemic generated by influenza not coronavirus, the NRPAs, [that's to say the planning assumptions] generated had identified many of the impacts seen in the Covid-19 pandemic."

So what you're saying is: broadly, the planning, the risk, the reasonable worst-case scenario and the planning assumptions that are drawn from it worked insofar as they identified many of the impacts. So the impacts were, to a large extent, foreseen.
Q. Well, I don't think anybody suggests there was a shortage of intelligence or expertise. What I'm 158
A. Yes, although I think the following sentence is an important qualification.
Q. Yes:
"Using the information generated by that process should have given ... the ability to be ready for many of the impacts seen (eg, workforce absence rates in most sectors stayed below $25 \%$ ). Those assumptions of course did not build in the impacts of policy decisions taken in relation to the Covid-19 pandemic."

So what you're saying is: in essence, the risk assessment and planning assumption process worked because it did correctly identify, to use your words, many of the impacts seen in the pandemic; is that what you're saying?
A. I think that is true. What I'm not suggesting is that the risk identified was exactly the one that we saw materialise. That's clearly not the case.
Q. When you say "the NRPAs generated had identified many of the impacts", and then you go on to give the example of workplace absence rates, what other many impacts can you identify for us, please?
A. So let me try to think of good examples.

So there were some -- there is some assessment of economic impact which doesn't fully match the coronavirus impact, for the reason set out in the 160
sentence below, that it doesn't build in the effects of lockdowns. There is impact of assessment on the workforce.

The mortality numbers were broadly in line with the estimates for an unmitigated Covid-19 pandemic, although happily the measures put in place brought those numbers down. The reasonable worst case of course assumes that hasn't taken place, because it's a reasonable worst case.
Q. So of the many impacts to which you referred to yourself in paragraph 4.2, the two which you can recall are that the assessment process correctly identified a real problem with workforce absence rates, and obviously, and terribly, the appalling number of excess deaths?
A. Those are two good examples, I think, yes.
Q. What other areas -- you used the words "many of the impacts were correctly identified". What other impacts did you identify?
A. I think I would need to go and look, refresh my memory of the impacts set out in the risk assessment in order to give you a fully answer, but I'm very happy to do that.
Q. Ms Hammond, you have long known and it is as wide(?) as in your own statement, that this would form a central part of examination today in this Inquiry. The impacts 161
A. By all means.
Q. Correctly identified was a certain amount, a stockpile, of personal protective equipment and associated equipment. Did that stockpile -- was that stockpile correctly envisaged to be inadequate in terms of the amount of time it would last for?
A. Erm --
Q. Did the NRPA correctly identify the need for protective equipment over such a long period and in such vast quantities?
A. No, I don't think so.
Q. A stockpile of antibiotics was available and planned for to deal with secondary bacterial infections, often associated with respiratory infections. But the fact that there was no antiviral for coronavirus was not anticipated or planned for, was it?
A. No, that's correct.
Q. The fact that there was no vaccine was not anticipated or planned for?
A. No, for flu there is a fairly established vaccination production route.
Q. Because the government had a stockpile of Tamiflu, antiviral for flu, it had a National Pandemic Flu Service, and there were vaccines which could be modified with some ease in order to cater for a new moderated flu
anticipated from the reasonable worst-case scenario risk assessment process lie at the very heart of your own acceptance that what transpired was a very long way from what was planned for, is it not?
A. I think there are some really -- there are obviously some really key differences between pandemic flu and coronavirus, and they lie in the characteristics of the disease, particularly in the ability to treat it. So there are treatments for flu. That was not the case for coronavirus. There is a fairly rapid accepted built route to a vaccine for novel flu. That wasn't the case for coronavirus and, as you've already referred to, there is a substantial amount of asymptomatic transmission for coronavirus, which doesn't exist at the same level for flu.

Those are characteristics. They give rise to a set of policy decisions which themselves had impacts that were not identified for that reason. I think that's the explanation I'm trying to give you. What I'm not attempting to say is that this risk assessment reflected exactly the reality that occurred in 2020.
Q. Ms Hammond, you make the positive assertion that this risk assessment process generated many of the impacts, so perhaps I may be permitted to put some suggestions to you.

162
virus?
A. I think those are the key differences between the different risks.
Q. They are not inconsequential differences, are they?
A. No, I am not suggesting they are.
Q. They are massive. Therefore to say that therefore many of the impacts seen in the Covid pandemic were correctly identified doesn't really pass muster, does it?
A. I think they're not impacts, is what I would say. So I probably used a term of art in a way that's been unhelpful in this statement.
Q. Mass contact tracing was not anticipated or planned for?
A. Again, in the way I'm using the word, that wouldn't be an impact, that is a tool for managing --
Q. A countermeasure. Was it anticipated and planned for?
A. No.
Q. Were lockdowns anticipated or planned for?
A. Not on the scale envisaged. There's certainly discussion of some social distancing measures, school closure, but not what you would call a lockdown.
Q. Ms Hammond, you know very well that in Pandemic Flu Preparedness Board documentation, to which you were party, there was discussion now and then of the possibility of social restrictions. Was there any consideration of full national lockdowns?

164
A. No, there wasn't, because --
Q. Right.
A. -- the pandemic flu scenario didn't make that an effective tool.
Q. Was there any discussion of schools being closed on a national basis?
A. Yes, there was, and for that reason a draft school closure power was included in the pandemic flu Bill which became the Covid-19 -- the coronavirus Bill -Coronavirus Act, forgive me.
Q. For such a length of time that consideration would have to be given to whether or not children and pupils could sit national exams?
A. I don't think the planning was that well developed.
Q. No.
A. But the potential for ministers wanting to take that decision had been identified.
Q. What was envisaged or planned for or foreseen was a temporary closure of schools, was it not?
A. Yes, driven in part by potential for absence rates in the teaching and support staff of schools, which might lead to the need to close them for safety.
Q. There was debate and consideration and planning for workforce absence rates, which is the only example that you provide in that paragraph.
Q. You know that process intimately, and you could not have not known that process coming here today.
A. Forgive me, could you just repeat that point.
Q. Yes. Are you suggesting to my Lady that you don't know enough about the reasonable worst-case scenario and the risk assessment process to be able to answer my question?
A. I'm suggesting that I'm not an expert, and your question was what debate was there amongst the experts about the possibilities of symptomatic versus asymptomatic transmission, to which I don't know the answer.
Q. No, my question was: what debate was there in the confines of the National Security Risk Assessment process, that page which we'll look at in a moment and in the assumptions, about asymptomatic or symptomatic transmission?
A. I think the point I'm making, perhaps badly, is that that debate would have occurred between the experts assessing the risk.
Q. Could we look, please, at INQ000147771, page 1. Ah. Would my Lady give me a moment? That's not the document I was expecting.

## (Pause)

I may have put an extra --
LADY HALLETT: Could we take that one down, please.

## (Pause)

MR KEITH: INQ000147771. That's what I said.
Page 1, the 2019 National Security Risk Assessment.
Was this the risk assessment in force in play at the time of the Covid pandemic?
A. Yes.
Q. Page 3, please. This is the foreword. In the third paragraph, could you zoom in, please:
"The analytical framework ensures that our capabilities, plans and priorities are driven by evidence and expert judgement, and that risks are assessed in a consistent way. Crucially, the NSRA recognises that a large number of risks that the UK faces can be planned for generically: taking a risk agnostic approach ..."

What does that mean?
A. So that refers to the process of generating the National Resilience Planning Assumptions. They are formed by looking at the range of impacts assessed throughout the NSRA, and identifying essentially the most severe form of each, with the theory --
Q. Each risk?
A. Of each impact. With the idea being that if you plan for the most severe impact that the risk assessment tells you you might see, you will be ready for lesser 168
manifestations of that impact. So crudely, if you plan for 50,000 casualties and 10,000 occur, you should be ready for that.
Q. Plan for the worst-case scenario and ignore the particular characteristics of the potential disease that may have a huge difference on its impact and therefore on the planning?
A. I think what you're describing is the fact that there are not multiple risk scenarios in here for each risk.
Q. All right.

Page 5, please, the contents. We can see there a number of areas of risk, and towards the bottom of the page on 134, human and animal disease.

Could we have page 6, please, the last paragraph:
"The [National Security Risk Assessment] does not present an exhaustive list of all national security risks, instead focussing on those perceived to be the most serious. This approach allows risk owners and planners to understand the common consequences of the most serious risks ... and the UK to take a common consequences approach to planning."

So by a common approach, a non-specific approach?
A. It's exactly what I've just described. Planning for the top end impact assumptions.
Q. Top of page 7, you can see there a "Note to readers": 169
A. No. I think the planning assumptions are the highest end impacts taken from across the matrix.
Q. Page 10, methodological challenges -- sorry, "Risks under review", "How to navigate the NSRA". So that tells us that:
"... risks ... are regularly reviewed to ensure they ... reflect the most plausible challenging scenario."

If you could zoom back out, please, you can see part A deals with the summaries and part B the national planning assumptions to which you referred.
A. Yes.
Q. Page 13 , there is a list of risks, and in the middle of the page or towards perhaps the second half of the page -- my Lady, so that it's absolutely clear, some of the risks which the United Kingdom faces, well, it's self-evident, are serious and threatening, and knowledge as to the fact that the United Kingdom understands what those risks are could be used against it and, therefore, they are wisely and properly redacted from this copy of the document as irrelevant and sensitive.

But four particular types of risk which are identified here are influenza-type pandemic, antimicrobial resistance, emerging infectious disease, major outbreak of animal disease.

Could we then go to page 135 , which is the one with
Q. But isn't that in reality what did happen?

170
which we're most centrally concerned, influenza-type pandemic:
"Human and Animal Disease ...
"Highlights
"Influenza-type pandemic remains the most severe non-malicious risk in the NSRA, with the potential to cause catastrophic impacts across a wide range of sectors, hundreds of thousands of fatalities and millions of casualties."

If you could scroll back out, please:
"Over the past 30 years, more than 30 new or newly recognised diseases have been identified."

Are those diseases that are just influenza or is that a general point, Ms Hammond?
A. I think that's more -- not just influenza, forgive me.
Q. "The emergence of new infectious diseases is unpredictable but evidence indicates it may become more frequent."

Then we can see this chart, "Likelihood" at the bottom, "Impact" on the left: "Influenza-type pandemic", a number 3 for likelihood and number 5 catastrophic for impact?
A. Correct
Q. 137, please. There are "Key uncertainties":
"There is significant uncertainty about the
172
frequency with which an emerging infection may develop the ability to transmit from person to person."

So that's an issue about transmissibility.
"Due to the nature of an emerging infectious disease [so not a pandemic influenza] there is some uncertainty as to whether a different emerging pathogen, including one which was airborne [respiratory] would lead to ..."

I'm afraid I've lost the place now because of the change in the page.
A. I think it said an outbreak which was similar.
Q. Thank you.
"... would lead to an outbreak similar to those seen previously.
"The influenza-type pandemic scenario is based on a 1918-like scenario, milder pandemics are more likely than the figure quoted and will have a lower impact, though ... with all risks, the NSRA focuses on the reasonable worst-case scenario."

The NSRA, Ms Hammond, focused attention, by virtue of impact and likelihood, on an influenza-type pandemic based on the 1918 scenario; is that correct?
A. Based on the best expert opinion of what was the most likely reasonable worst-case scenario, which included, of course, experience of the past and used the 1918 experience as part of that assessment.
from persistent but time-limited cause.
"Planning Assumption A
"... 32.8 [million] excess casualties.
"... 820,000 excess fatalities."
177 gives us the analogue for a new and emerging infectious disease:
"Planning Assumption:
"Up to 2,000 casualties."
Given, Ms Hammond, the fact that the chart for new and emerging infectious diseases had those arrows showing the range could be a great deal broader than what that box indicates, given the key uncertainties which the text refers to, to possible catastrophic impact of a new and emerging disease, why was the planning assumption made that if we were struck by a disease, the characteristics of which were not apparent at all, the numbers of deaths would only be up to 2,000 casualties?
A. Because that was the expert assessment based on understanding of previous outcomes, some of which you've referred to already, and the expert assessment of the reasonable worst-case scenario for an influenza pandemic was a much higher number, so that is what became the planning assumption.
Q. After Covid, the Cabinet Office commissioned the Royal 175
Q. Since when, of course, there had been MERS and SARS and two major coronaviral outbreaks?
A. Of a much smaller scale, of course --
Q. Of course.
A. -- than that influenza pandemic.
Q. Page 140, MERS and SARS -- so we are dealing here with then the other major risk, emerging infectious disease. We can see on the top right the box, and the box shows that the reasonable worst-case scenario is that star in the middle, with 3 for likelihood, 3 for impact, so it was middle of the range in terms of likelihood, middle of the range for impact, and that star is the reasonable worst-case scenario.

What do the arrows indicate, top left, top right and bottom left?
A. The arrows as described in the text represent uncertainty bounds, which I think essentially is, if you like, a measure of confidence that the experts have in making that judgement about the reasonable worst-case scenario, ie there could be variation in either direction.
Q. If you go to page 175 , we will see the planning assumptions for influenza pandemic, "Excess casualties, and Fatalities":
"Non-contaminated casualties and fatalities arising 174

Academy of Engineering to undertake an external review, so a full formal external rule of this process. Was that the first time there had been a formal review of this process externally since it was started in 2009/10?
A. Yes, I believe so
Q. Are you familiar with that review?
A. I've had an opportunity to see it as part of the documents you provided.
Q. Would you agree with this proposition, that that formal review of the process recommended in part that when identifying risks a range of scenarios must be considered and generated, to use their word, to reflect the particular characteristics of the next disease and the uncertainty that is always associated with disease planning?
A. I'm sorry, your question was --
Q. Do you agree that they recommended, in recommendation 4, that risk assessments should henceforth identify a range of more specific scenarios?
A. I believe that is what they recommended, yes.
Q. And that decision-making should be driven by impact as opposed to impact and likelihood because the risk of a disease which may be less likely to occur but which, if it does, could be catastrophic, cannot be ignored?
A. I think that is also their recommendation, if that's

176
your question.
Q. Do you agree, therefore, that the risk assessment process had those two strategic flaws in it?
A. I think they are excellent improvements to it, yes.
Q. Exercise Cygnus, to which you referred earlier, is at INQ000056232.

LADY HALLETT: Sorry, how long ago was the Royal Academy of Engineers' review?
MR KEITH: My Lady, the external review was commissioned in January 2021 and the date -- if we have up INQ000068403, please, again -- I think it's 1 September 2021.
LADY HALLETT: Thank you. That's fine, don't worry, don't get it up.
MR KEITH: Operation Cygnus.
Did Operation Cygnus in October 2016 take place when you were head of the CCS?
A. Just to correct that: Exercise Cygnus rather than Operation.
Q. Sorry, what did I call it?
A. Operation.
Q. I'm so sorry, that's the second time.
A. A temptation in this world.
Q. Exercise Cygnus.
A. Yes, l'd been in post about eight weeks when it happened.
"... strategic decision-making processes ..."
And so on.
One of the major conclusions is at page 6, please:
"Key Learning.
"The analysis of the evaluation reports and the organisations participating in the exercise indicate that the UK's command \& control and emergency response structures provide a sound basis for the response to pandemic influenza. However, the [United Kingdom's] preparedness and response, in terms of its plans, policies and capability, is currently not sufficient to cope with the extreme demands of a severe pandemic that will have a nationwide impact across all sectors."

So although the basis of Exercise Cygnus was a pandemic influenza scenario, the key learning was that the system was not sufficient to cope with extreme demands of a severe pandemic.
A. That's correct, and that's the basis on which the pandemic flu readiness programme was stood up.
Q. We'll come to that in a moment. Was this key learning published?
A. Forgive me, I don't recall. This is a Public Health England document rather than a CCS one. I think it was, but I'd have to check that.
Q. I think 18 months after this report you spoke at
Q. All right. This was what was called a Tier 1 command post exercise. What is a command post exercise?
A. It means that, rather than doing live play, if I can frame it that way, in the language of exercises, you're essentially role playing what might happen, but not with real people, not having real individuals being treated in a hospital, for example.
Q. But it is a command post exercise rather than a tabletop exercise, it's not just a paper exercise, people sit in a room and they do what they might have to do in the course of a real emergency?
A. Yes, they sit together round a table, they talk about the decisions that might be facing them.
Q. All right.

Page 3, please, sets out the scope of the exercise, the UK's preparedness and response to a pandemic influenza outbreak. Command post exercise, second paragraph:
"Designed to assess the UK's preparedness in response to a pandemic influenza outbreak."

The objectives are at page 36:
"To exercise organisational pandemic influenza plans at local and national levels ...
"... exercise co-ordination of messaging to the public.

178
a debate hosted by the Foundation for Science and
Technology. Do you recall that?
A. I do. I spoke after Professor Whitty, I think.
Q. You did. And you were asked: is the UK well prepared for a repeat of the 1918 influenza pandemic? Do you recall your answer?
A. No, I don't.
Q. You weren't entirely confident, were you, Ms Hammond, that we were well prepared?
A. So after this exercise, we recognised there was a programme of work to be done. 18 months later, that work wasn't complete. So I think it would be completely right to say I wasn't confident that that risk had been mitigated.
Q. I'm just going to ask you one by one what was done in relation to particular aspects of the recommendations. So at page 6 -- we're not going to go to them all, they recommended -- the exercise recommended an overarching pandemic Concept of Operations, a central repository of documentation. Was that done?
A. May I just read the recommendation for a moment?
Q. Yes, of course you may.

## (Pause)

A. So I think central repository of information was put into place on ResilienceDirect. The action that was 180
planned but had not been completed was the review of the pandemic influenza strategy, which is what I think would have brought together the Concept of Operations point made here. So elements of that, but not all of it.
Q. The report, the exercise referred to, on page 7, the fact that individual organisations were relying upon a corporate memory of the 2009 H1N1 swine flu response which is currently being lost. Was anything done about that loss of corporate memory?
A. Not specifically that I recollect.
Q. On page 9 at point 4, concerns were raised about whether social care homes would cope with reverse triage, that's to say the NHS sending patients into the care home sector as opposed to treating them in hospital.
A. Yes.
Q. What was done about the possibility of social care homes being overrun by patients from the NHS?
A. There was a specific workstream in the pandemic flu programme which looked at surge resourcing for the adult social care sector and how that would happen.
Q. Was that workstream affected in any way by Operation Yellowhammer, the no-deal EU exit planning operation?
A. I don't think so. The key product at the end of that initial phase of work at least was guidance on how to 181
struck?
A. Correct, and it generated a programme of work which, for reasons l've set out in my evidence, hadn't been completed by the time Covid arrived.
Q. In very general terms, why was that programme of work not completed?
A. Elements of it were paused in order to refocus effort on to Operation Yellowhammer.
Q. What was Operation Yellowhammer?
A. It was the cross-government planning effort for the impacts of a no-deal exit from the European Union.
Q. One major matter arising from Exercise Cygnus was that the National Security Council body to which you referred earlier, the THRC subcommittee, commissioned something called the pandemic flu readiness programme.
A. That's the programme of work I'm referring to.
Q. And that was under the auspices(?) of the Pandemic Flu Readiness Board?
A. Correct.
Q. That committee, however, the NSC(THRC), was abolished, was it not, in July 2019?
A. It was, and by that point, of course, this programme of work had already been paused.
Q. So the body that brought into effect the Pandemic Flu

Readiness Board and its programme of work was abolished, 183
and the work and the body itself -- the board and the work -- was itself interfered with because of Operation Yellowhammer?
A. That's right. Some of those workstreams had been completed, some of that work did continue through Yellowhammer, you'll have seen in my evidence that we prioritised completion of the draft Bill which became the Coronavirus Act or the basis for it, and we prioritised particularly the work on managing excess deaths which was also used in the coronavirus response. So some work did continue, but further work on the programme was paused for that reason.
Q. The work included work on surge and triage guidance, so healthcare capability?
A. That had been completed, I think.
Q. Excess deaths, working out how many, what number of excess deaths there would be under the risk assessment process and making sure there was enough mortuary capacity?
A. So the second half of your explanation but not the first. The numbers had been worked out through the risk assessment process.
Q. You're quite right. You were addressing the mortuary capacity to reflect the number of excess deaths identified in the risk assessment process?

184
A. Correct, and those plans were also used in the coronavirus response.
Q. The work absence in critical sectors? Workplace absence?
A. So we had completed to my reflection a first round of work on that, of assessing the resilience of particular sectors. I think had the programme continued there would certainly have been further actions under that heading.
Q. But a significant part of the board's work was paused or stopped altogether, and in any event for the reasons that you explained earlier the process had not even begun to identify the possible need for work on the long-term consequences of shutting schools, lockdowns, serious social restrictions, shielding, the collapse of the economy, the need for financial support, in any meaningful sense?
A. It hadn't, I don't think this programme would have resulted in a lockdown plan, because it was based on a flu scenario for which the lockdown -- a lockdown would not have been an effective measure.
Q. The Pandemic Flu Readiness Board promulgated by the then abolished National Security Council THRC committee, met regularly between 29 March 2017 and November 2018. How many times did it meet between November 2018 and the end 185
in case I misunderstood? I'm talking about --
LADY HALLETT: We're talking about a period of two months, November 2019 to January 2020.
A. Yes.

LADY HALLETT: With Christmas in between, is the point
Ms Hammond is making.
A. So it's a period of a few weeks.

MR KEITH: How many United Kingdom/devolved administration meetings were there on pandemic flu readiness following Exercise Cygnus, before Covid struck?
A. The devolved administrations came to the best of my recollection every single Pandemic Flu Readiness Board, I think that's 14 in that period, if I remember rightly. There would have been other meetings with health colleagues, I'm afraid you would need to ask for their evidence on the frequency of those.
Q. How many times did the Scottish Government or the Welsh Government or the Northern Ireland Executive Office attend meetings with the Civil Contingencies Secretariat to discuss pandemic preparedness?
A. Well, all of those boards plus a series of bilateral conversations where we travelled to each of the devolved administrations specifically to talk about pandemic flu planning.
Q. There was one meeting with the Scottish Government on 187
of November 2019?
A. I'm sorry, could you repeat the dates?
Q. Yes. Having met a number of times between March 2017 and November 2018, how many times did it meet between November 2018 and November 2019?
A. I don't think it met at all. The reason for the frequency of meetings in 2018 was that THRC was the body overseeing Yellowhammer, the EU exit preparations. There was then a change in the committee structure, and that work was overseen by a different committee, EU exit operations. So THRC stood down in that role at that point.
Q. And after November 2019, how many times did the board meet between then and the beginning of January 2020 and the arrival of Covid?
A. When you say the board, forgive me, do you mean the THRC or the pandemic flu board?
Q. Well, the THRC isn't a board, I meant the Pandemic Flu Readiness Board, PRFB.
A. It met in November 2019 and then in January 2020.
Q. So the answer to my question is: it met no times between November 2019 and the beginning of January 2020?
A. I think that's probably correct. There is a Christmas period, of course, in the middle there.

I'm really sorry, could you repeat those dates, just 186

27 March 2018, one meeting with the Welsh Government on 14 June 2018, and no meetings with the Northern Irish Executive Office?
A. With the pandemic flu boards of course happening on a regular basis.
Q. Were there any other meetings between those governments and the CCS, the formal part of government, to talk about pandemic preparedness?
A. Not that I can recollect.
Q. Right.

There was a body under the auspices of the Department of Health and Social Care called the Pandemic Influenza Preparedness Programme?
A. Correct
Q. And it had a board called the Pandemic Influenza Preparedness Board?
A. Yes.
Q. Do you know how many times it met between October 2018 and December 20?
A. I don't, I'm afraid. That would be a question for my DHSC colleagues.
Q. Would you be surprised to know that it was once?
A. I would be neither surprised nor unsurprised.
Q. In all this planning, in all the risk assessment procedures, in all the drawing up of the massive amount 188
of policies and guidance and documentary information, how much time is devoted to the issue of how planning for a pandemic would impact upon the vulnerable, the marginalised, those most affected potentially by a pandemic?
A. I think that's a really important question, if I may say. You can see in the risk assessments as drafted there's clear recognition that pandemics have different impacts on different groups. That's clearly recognised. It's also recognised that's not predictable in advance, even those different influenza strains have impacted different groups differently. There's also recognition in guidance that vulnerable groups need particular consideration, so particularly those with pre-existing health conditions.

What I think there isn't, if I may say, is the sort of wide assessment of socio-economic vulnerabilities, that I know your witnesses talked about this morning, and how they would interact with a pandemic. So I think specific vulnerabilities were considered, but not in that wider socio-economic sense.
Q. Ms Hammond, so that we may be absolutely clear about this, the only risk factors, the only elements considered in the risk assessment process was clinical risk, that is to say those persons who may clinically be 189
think we did a piece of work to look at the totality of socio-economic disadvantage.
Q. There was no consideration of socio-economic disadvantage beyond comorbidities and prisons, was there?
A. I think ... I don't think we did that piece of work. I think that is fair.
MR KEITH: Thank you. I've no further questions, thank you.
LADY HALLETT: Thank you very much, Mr Keith.
MR KEITH: My Lady, in relation to the request from core participants, may I ask you to give permission to confirm your provisional indication that Mr Weatherby, King's Counsel, may ask some questions of Ms Hammond?

And then the Cabinet Office have indicated kindly to those behind me by way of a pre-Rule 10.2, it must be, request that they wish the record to be correct and the numbers for the resilience capability survey and they would like me to put figures they say are accurate to you and ask you if you recall, which I'm very happy to do, that will avoid the need for the Cabinet Office to ask that question itself.

Regarding the take-up rate of the resilience capability surveys, these have not been uploaded into the Inquiry's Relativity system, but they are exhibited to Mr Hargreaves' third statement, and I'm afraid the 191
more affected by a pandemic, those who suffer from diabetes or heart disease, clinical features?
A. I think that's true of risk assessment but --
Q. You referred, with respect, to risk assessment then.
A. Indeed, sorry, and then I went more widely than that. So just to give an example, perhaps, in the pandemic flu programme there is a particular piece of work on the prison population in a pandemic, for example, which would fit within one of the definitions your experts have given around socially disadvantaged groups. I don't think there's a systemic look across the whole.
Q. So there was a consideration of those who, in a health sense, those people who may be impacted by a pandemic, who have comorbidities, and there was consideration of people in prison?
A. That's an example.
Q. What other consideration was there of those who are vulnerable or marginalised, or members of the ethnic communities or disabled, or who might in any way be affected by the impact of a pandemic on account of their societal or economic position?
A. I think some of the groups you've listed there would come within the definition of vulnerability that was considered, so those with existing health conditions or disabilities, but, as I say, at least in CCS I don't
screen doesn't allow me to -- it does now.
In 2014 the take-up rate for local resilience forums was $71 \%$ and in 2017 it was $74 \%$. Is that -- perhaps you would take it from your own office, the Cabinet Office: are those the correct figures for the national resilience capability surveys?
A. Yes, I think that's correct.

MR KEITH: So, my Lady, if you would like to hear from Mr Weatherby.
LADY HALLETT: Certainly. To the extent, Mr Weatherby, obviously they have not been covered by Mr Keith.

## Questions from MR WEATHERBY KC

MR WEATHERBY: Just two short areas: learning lessons, and then one short series of questions about the relationship with the devolved administrations.

You have been asked questions about Cygnus and the learning from Cygnus, and you've told us some of the work that was done from Cygnus. We've heard from Bruce Mann and Professor Alexander who say in January 2020, in their view, preparedness in the UK for pandemic flu was poor, their word, and for pandemic newly emerging diseases was wholly inadequate, their words.

Would you agree that whatever had been done from the learning in 2016 had not significantly affected the 192
preparedness of the UK for the pandemic that then struck?
A. I think a lot of the work that had been done since 2016 was indeed put to good use during the pandemic that struck, and we've talked about some examples around surge staffing, we've talked about work on managing excess deaths, we've talked about preparations for the Act. What is really clear is that that work didn't cover all of the things that were needed in coronavirus.
Q. Yes.
A. So it did make a difference, but not all of it.
Q. Yes, okay. So it made a difference, but wholly inadequate nevertheless?
A. I think wholly inadequate implies that the work that was done was not useful, and I think I'm suggesting to you that's not the case, but incomplete certainly.
Q. Now, the issue of learning lessons in the Cabinet Office or the CCS is something that pre-dated -- problems with it pre-dated your involvement with the CCS; is that right?
A. I'm not sure what issues you're referring to.
Q. Okay. Well, you obviously became director in 2016?
A. Yes.
Q. In 2013, there had been the Pollock review which no doubt would have been known to you when you took your 193

Professor Alexander put in their report is from the executive summary of the report, and I'm quoting:
"The consistency with which the same or similar issues have been raised by each of the Inquiries is a cause for concern. It suggests that lessons identified from the events are not being learned to the extent that there is sufficient change in both policy and practice to prevent their repetition."

That's from the summary, the executive summary of the Pollock review.

So is that not something that you were aware of when you became director of it?
A. I don't recollect that particular report. Of course that is three years before my arrival. I would say my experience in CCS, and with the wider resilience community, is that learning lessons is a very well embedded process and that, of course, learning a lesson implies you take some action in response to it.
Q. Okay. So moving forward to 2021, the crisis capabilities review, which I think you have been referred to already, you're familiar with that, that concluded at paragraph 61 that the Cabinet Office is failing to consistently identify, learn and improve on its response to crises in any systematic way. Okay? Now, before you answer, can I just --
position in 2016, because it was so significant?
A. Could you repeat the name? It's not one I'm familiar with.
Q. The Pollock review.
A. The Pollock review?
Q. Yes.
A. Could you refresh me?
Q. Yes. Dr Pollock produced a paper which was commissioned by the CCS and published by the Emergency Management College.
A. Right.
Q. About the fact that lessons identified in emergencies and major incidents from 1986 until his review, there had been a lack of following through on the learning. So the --
A. Is that -- forgive me, I'm not familiar with that report --
Q. You're not familiar with that?
A. -- or at least the passage of time, I'm not. Is that referring to central government lessons or lessons learned by local responses?
Q. I think it's overall in the civil contingencies framework.
A. So the whole system from national to local?
Q. That's my understanding. The section that Mr Mann and 194
A. Of course.
Q. -- be completely clear about this, it doesn't say that the Cabinet Office didn't learn or follow through, it was inconsistent in any systematic way. Is that something that you recognise? Is that conclusion something that you would agree with?
A. I wouldn't agree with it in relation to CCS, where I think that was a really well-embedded, consistent doctrine, I'm not entirely clear whether CCS is the body being referred to in that finding.
Q. Yes. Well, again, for completeness, the whole passage, I've not really got time to put it, but I'll give the reference, it's INQ000056240, page 26, paragraph 61. It indicates that CCS was better, because it was better resourced, but it was still inconsistent. Okay?
A. Sorry, is your question do I agree with that?
Q. Yes.
A. It's very difficult to give you an answer when I don't have the timeframe comparison. If you mean better in comparison to 2013, that's before my arrival. I'm really sorry, I'm struggling without the reference to give you a precise answer.
LADY HALLETT: I take it from "more resources" it means better than the rest of Cabinet Office?
A. I'm afraid I don't know.

| MR WEATHERBY: | 1 |
| :--- | :--- |
| what it does. | 2 |
| Okay, finally in this section, the 2022 CCA | 3 |
| review -- by, again, Bruce Mann but others -- indicated | 4 |
| that there was limited evidence in England of a learning | 5 |
| and continuous improvement culture in the resilience | 6 |
| community locally and nationally, and the reasons that | 7 |
| were given included a fundamental lack of desire to | 8 |
| disturb the status quo or to a perception that there was | 9 |
| nothing to learn from others. | 10 |
| $\quad$ Is that something that you would identify? Again, | 11 |
| it's a whole system, it's not CCS oriented, but is that | 12 |
| something you would identify with? | 13 |
| A. I really wouldn't. I really wouldn't. I mean, of | 14 |
| course there are going to be patches of better -- that | 15 |
| are better at that and patches that are going to be less | 16 |
| good, but my experience of that system is that it was | 17 |
| very invested in learning lessons and it did that very | 18 |
| rapidly after events occurred. | 19 |
| Q. Yes. $\quad 20$ |  |
| $\quad$ So, if I was to suggest that there was a cultural | 21 |
| barrier to change in this area, then what would you say | 22 |
| to that? | 23 |
| A. I wouldn't -- I wouldn't say I saw evidence of | 24 |
| a cultural barrier to change. |  |

$$
197
$$

A. If it was a pan UK issue.
Q. Yes, okay. I'm trying to work quickly, so I'm trying not to be unfair to you. But again, working from Bruce Mann and Professor Alexander at 191 of their report, they make this point, that ConOps doesn't set any specific arrangements for co-ordination between the UK Government and the devolved governments where there is a circumstance that affects all of them together.
A. I think that's because it's established practice that COBR brings them in as needed.
Q. And in terms of SAGE, your role within CCS and the Cabinet Office is one of liaison and co-ordination, and in practice am I right that the Cabinet Office is involved in activating SAGE?
A. That's right. SAGE is an advisory committee to COBR. So Cabinet Office, along with the lead government department and Number 10, would make the decision to activate COBR and then activate SAGE if their advice was needed.
Q. Yes. Again, there is no arrangements, or at least no formal arrangements, to involve the Chief Medical Officers or scientists from each of the devolved administrations in that process, is there?
A. Forgive me, I think that's because SAGE is convened in the same way as COBR, ie you bring together the people 199
Q. Yes.

A different topic and briefly, in ConOps, the Concept of Operations that you've already been shown, where an emergency arises in one of the devolved nations or jurisdictions, they are the lead?
A. Yes.
Q. Where there are arrangements in relation to a whole-system disaster or incident that affects the whole of the UK, is it right that ConOps doesn't include any arrangements for co-ordination between the UK Government and each of the devolved administrations?
A. No, I don't think that's right. That co-ordination would happen through the COBR committee.
Q. Yes.
A. Which would include the devolved administrations.
Q. Okay, I've not put the question very well. In terms of whether it might happen because you might think of it, that may well be the case. But in terms of the ConOps, the actual ConOps document, it doesn't cover that, does it?
A. I think, if I am remembering correctly, the ConOps says that you constitute COBR with the members that you need to deal with the emergency that you've got. That would include the devolved administrations.
Q. Yes.

## 198

you need based on the emergency that you've got, and that would include Chief Medical Officers from across the UK.
MR WEATHERBY: Thank you.
LADY HALLETT: Thank you very much indeed, Mr Weatherby.
MR KEITH: My Lady, the representatives for Covid-19
Bereaved Families for Justice Cymru have indicated that there are two broad areas of questions that they would very much like CTI to put, because they had understood that they would be covered in the course of my examination. May I have your permission to put those important questions in the two minutes remaining?
LADY HALLETT: You may.
Further questions from LEAD COUNSEL TO THE INQUIRY
MR KEITH: Ms Hammond, I would want you to concentrate, please, on the position from the devolved administrations' viewpoint concerning the risk assessment process. Did the National Security Risk Assessment process include or identify specific risks to devolved nations as part of their approach to the United Kingdom?
A. It didn't distinguish between, so it's a UK risk assessment. The -- forgive me, may I add one sentence?
Q. I wasn't stopping you.
A. Sorry. Which is to say that I know the devolved 200
administrations themselves then produce risk assessments specific to their geographical area using the national risk assessment as the starting point.
Q. We've seen on the organogram in fact, which you may or may not have seen, that there is a devolved risk assessment process --
A. Exactly.
Q. -- which sits under the Cabinet Office-driven UK risk assessment process?
A. I think "sits under" might be implying a hierarchy, but "works with".
Q. No hierarchy intended, that's how it appears on the schematic design.

Were concerns ever brought to your attention by the Welsh devolved administration that the United Kingdom approach to risk assessment simply did not contain information of sufficient detail and relevance to the risk in Wales?
A. I have no recollection of that issue being raised.
Q. In relation to the national risk assessment which was refreshed in 2016, and whether or not experts were consulted for that purpose, were the respective experts -- were experts in the devolved nations consulted in any shape or form, either individually or as part of the expert challenge group to which you 201
that away and answer it more precisely, if you'd like.
MR KEITH: Perhaps if you would, and then perhaps you could inform us in due course, we'd be grateful.

My Lady, that concludes the evidence today.
LADY HALLETT: Excellent time on everyone's behalf, just.
Thank you, everybody. Thank you very much,
Ms Hammond, for your help today. I'm sorry it's been such a long stint for you, but I'm grateful to you.
(The witness withdrew)
LADY HALLETT: Just so that everybody knows, we're sitting at 11 o'clock on Monday but we may have a slightly later day as a result.

Thank you.
( 4.31 pm )

## (The hearing adjourned until 11.00 am

 on Monday, 19 June 2023)referred, as being one of the bodies looking at the risk assessment process?
A. I'm afraid I would have to go back to the papers to answer that question. I can't remember who all the experts would have been.
Q. All right. Was the Welsh Government consulted or involved before the national risk assessment process was refreshed in 2016?
A. In 2016?
Q. Yes.
A. Just to make sure I understand your question, do you mean in the production of the version of the risk assessment produced in that year?
Q. Well, you have me there, Ms Hammond, because I'm reading out a question from somebody else. I think the question is designed to ask you: what degree the Welsh Government had in terms of being consulted or involved in the drawing up of risk assessments and in the publication, at least internally at official sensitive level, of the national risk assessment and then, after it, the National Security Risk Assessment?
A. Okay. So I think I would have to check with the papers exactly who attended which meetings, but I think officials from the devolved administrations were very much part of that process, but I'm really happy to take 202

INDEX
PROFESSOR SIR MICHAEL MARMOT (affirmed)

Questions from
COUNSEL TO THE INQUIRY

Questions from MS MUNROE KC

MS KATHARINE HAMMOND (affirmed)

Questions from
LEAD COUNSEL TO THE INQUIRY

Questions from MR WEATHERBY KC ..........

Further questions from 200
LEAD COUNSEL TO THE INQUIRY

LADY HALLETT:
[44] $1 / 32 / 531 / 22$ 32/3 32/5 32/21 33/1 33/4 33/7 41/22 44/3 62/8 65/19 66/3 72/12 73/19 74/13 79/19 82/23 83/1 96/22 96/25 113/8 113/22 119/20 123/15 123/17 123/25 142/24 143/5 147/16 147/18 167/25 177/7 177/12 187/2 187/5 191/9 192/10 196/23 200/5 200/13 203/5 203/10
MR KEITH: [28] 74/9 74/16 79/21 82/21 82/25 83/2 96/21
96/24 97/7 114/3 119/21 123/16 124/12 143/2 143/7 147/14 147/17 147/22 168/2 177/9 177/14 187/8 191/8 191/10 192/8 200/6 200/15 203/2
MR WEATHERBY:
[3] 192/13 197/1 200/4

## MS BLACKWELL:

[101] 1/4 1/12 2/6 5/7 5/18 5/25 6/11 6/20 7/7 7/16 8/2 8/16 10/3 10/11 11/11 11/17 11/21 11/24 13/20 14/6 14/23 15/5 15/14 15/18 17/15 18/10 18/23 18/25 19/23 21/11 21/23 23/13 24/25 25/20 26/4 26/10 26/23 27/20 28/1 28/7 28/9 28/12 28/14 30/8 31/2 31/4 31/20 32/2 32/4 33/3 35/1 35/8 35/21 36/11 36/23 37/18 37/22 38/8 40/1 41/18 42/1 43/1 43/8 43/25 44/4 44/19 45/6 46/18 46/24 47/6 47/20 48/10 48/25 49/14 49/24 50/2 50/8 50/16 0 51/1 51/8 51/14 52/3 53/5 53/21 54/8 54/25 55/11 57/4 57/22 59/22 60/15 62/13 63/3 63/7 63/14 63/16 65/6 65/14 65/17 65/20 74/2
MS MUNROE: [11] 66/6 68/5 68/22 69/18 70/2 70/18 71/9 71/25 72/9 72/14 73/12
?

1

PROFESSOR
BAMBRA: [54] 10/2 10/10 13/19 14/3 14/10 15/2 15/6 15/16 17/14 17/16 18/14 21/9 21/14 27/16 34/19 36/9 41/16 42/19 43/5 43/16 44/15 45/5 46/7 46/23 47/2 47/7 48/1 48/12 49/13 49/19 49/25 50/5 50/10 50/22 51/2 51/13 51/24 52/25 53/18 53/25 54/22 55/6 55/16 57/21 60/4 64/20 65/10 66/23 68/10 69/3 69/22 70/7 71/18 72/5
PROFESSOR
MARMOT: [60] 4/24 5/8 5/19 6/3 6/12 7/5 7/8 7/18 8/3 10/1 10/14 11/12 11/18 11/23 18/24 19/1 23/12 23/21 25/10 25/25 26/6 26/11 27/1 27/25 28/4 28/8 28/10 28/13 28/15 30/9 31/3 31/5 32/1 32/20 32/25 33/6 33/15 35/4 35/14 36/3 36/10 36/13 36/24 37/20 37/23 38/15 41/17 54/24 58/4 61/15 62/25 63/4 63/8 63/15 65/16 69/11 70/24 73/4 73/18 74/1
THE WITNESS: [1] 74/15
'even [1] 9/6
'Good' [2] 12/13 12/24
inclusion [1] 4/13
'more [1] 16/15
people [1] 20/9 the [1] 44/9 'universal [1] 64/12
'who [1] 20/6
'Workers [1] 16/21
0.03 [1] 30/11
0.07 [1] 30/11

1 September 2021 [1] 177/11
1.2 [1] 114/16
1.34 [1] 182/3
1.45 [1] 97/1
1.45 pm [1] 97/6

10 [16] 3/13 12/7

12/9 12/18 12/20 13/3 1918 [4] 60/6 173/21 13/5 13/15 24/18 26/16 37/12 37/15 95/9 171/3 176/4 199/17
10 Years [1] 7/19
10,000 [1] 169/2
10.00 am [1] 1/2
10.2 [1] 191/15

11 [3] 5/9 22/25 133/16
11 o'clock [1] 203/11 11.00 am [1] 203/15
11.06 am [1] 41/23
11.20 [1] 41/22
11.20 am [1] 41/25

12 [3] 11/25 127/4 182/3
12.1 [2] 12/4 12/6
12.2 [1] 12/17
12.3 [1] 13/2
12.4 [1] 13/10
12.47 pm [1] 97/4

13 [2] 10/4 171/12
13.5 [1] 13/12

134 [1] 169/13
135 [1] 171/25
137 [2] 51/17 172/24 14 [1] 187/13
14 June 2018 [1] 188/2
140 [1] 174/6
149 [1] 54/9
15 [4] 22/21 52/5
52/11 132/1
15.4 [1] 13/12

150,000 [1] 31/6
16 [2] 39/3 104/23
16 June 2023 [1] 1/1
16.9 years [1] 13/5

160 [3] 44/25 45/7 120/6
164 [1] 120/15
17 [3] 18/22 38/21
101/20
174 [1] 49/2
175 [1] 174/22
176 [1] 49/2
177 [1] 175/5
18 [2] 127/7 127/11
18 in [1] 130/10
18 months [2]
179/25 180/11
18.2 years [1] 13/9
18.4 years [1] 12/11

19 [13] 2/15 3/14 13/3 55/3 65/24 143/8
144/9 145/14 159/20
160/9 161/5 165/9
200/6
19 June 2023 [1]
203/16
19.8 years [1] 12/15

191 [1] 199/4

173/24 180/5
1979 [1] 30/5
1986 [1] 194/13
199 [1] 60/18
199.1 [1] 60/23
199.3 [1] 63/17
199.6 [1] 72/16

1997 [3] 30/5 30/9 30/22

## 2

2,000 [2] 175/8 175/18
2.18 [1] 104/24
2.3 times [1] 30/22
2.55 pm [1] 147/19

20 [12] 13/11 13/14
18/21 25/24 38/17
38/21 39/3 39/5 49/4
49/6 109/14 188/19
2000 [3] 3/6 40/11
40/14
2002 [1] 94/1
2004 [12] 43/10
76/14 94/2 97/9 97/25
98/6 108/18 109/1
109/3 109/13 110/16
111/17
2005 [1] 6/21
2007 [1] 49/20
2008 [2] 3/8 7/1
2009 [9] 30/9 30/20
30/23 30/24 30/25
47/23 76/15 101/22
181/7
2009/10 [1] 176/4
2010 [28] 3/12 22/22
23/7 23/24 24/6 25/8
26/12 27/11 28/15
30/10 30/14 30/19
31/14 35/11 36/24 40/8 40/11 40/12 40/15 40/18 40/25 41/8 47/22 48/22 61/9
104/20 107/9 148/8
2010/11 [1] 22/25
2010s [1] 31/10
2011 [5] 49/16 50/22 53/3 101/13 102/17
2012 [5] 25/8 36/24
118/3 118/7 120/22
2013 [4] 2/15 104/22 193/24 196/20
2014 [4] 128/13
129/19 130/6 192/2
2015 [2] 126/2 170/2
2015-2017 [1] 32/23
2016 [23] 25/9 35/12
36/25 50/23 51/16
76/10 97/24 118/12 119/24 122/14 136/10 148/3 170/2 177/15 182/23 182/25 192/25 29 [2] 17/5 40/6
28.5 [1] 17/2

193/3 193/22 194/1 201/21 202/8 202/9 2017 [18] 32/23
83/12 109/13 125/5 126/19 129/20 129/21 130/6 136/11 136/13 136/16 137/6 138/2 140/14 146/7 185/24 186/3 192/3
2017-19 [1] 13/3
2017-2019 [2] 12/8 12/19
2018 [18] 25/9 35/12
36/25 102/7 102/11
119/24 133/2 133/7
133/23 139/1 185/24
185/25 186/4 186/5
186/7 188/1 188/2 188/18
2019 [23] 12/8 12/19
28/13 30/23 31/6 31/19 84/19 122/10 133/24 133/25 135/4 139/1 142/2 148/5 148/25 168/3 183/21 186/1 186/5 186/13 186/20 186/22 187/3 2020 [27] 3/13 7/18 7/22 15/21 37/25 38/6 61/9 69/11 76/19 76/20 76/21 90/8 93/21 97/24 98/6 109/3 111/17 117/2 118/7 131/5 157/7 162/21 186/14 186/20 186/22 187/3 192/20
2021 [3] 177/10
177/11 195/19
2022 [4] 2/17 109/6 143/11 197/3
2023 [5] 1/1 3/6 75/3
107/9 203/16
20th [2] 22/24 24/5
20th century [1] 34/21
21 [2] 27/21 110/13
21.5 years [1] 13/1

22 [2] 28/3 32/9
24 [4] 16/23 17/8 35/9 106/3
25 [4] 142/17 143/8
143/15 160/7
25.1 years [1] 12/21

26 [1] 196/13
27 March 2018 [1]
188/1
28 [4] 15/22 16/2
18/11 159/15
28.1 [1] 16/3
28.2 [1] 16/9
28.3 [1] 16/14
28.4 [1] 16/21

| 2 | 74 | 11 | 95 | 199/23 201/1 202/24 |
| :---: | :---: | :---: | :---: | :---: |
| 29 March 2017 | 78 [2] 32/18 32/21 | 136/9 136/12 136/21 |  | administrations' [1] |
| 29 March 201 | 79 [5] 32/21 33/2 | 141/20 148/8 148/16 | 151/13 171/2 172/7 | 200/17 |
| 2E [1] 134/6 | 33/13 34/5 111/2 | 150/8 153/17 153/25 | 179/13 190/11 200/2 | administrat |
|  | 79.5 [2] 32/24 33/13 | 154/16 155/2 156/8 | act [18] 7/24 43/9 | 75 |
| 3 | 8 | 157/24 158/1 158 | 43/11 43/18 44/8 45/3 | adult [3] 39/12 39/23 |
| 1] $75 / 3$ |  |  | 47/4 50/7 105/4 |  |
| 3.10 [1] 147/18 | 80 [3] 32/21 32/2 | 167/5 167/9 167/15 | 108/18 108/20 109/1 | advance |
| 3.10 pm [1] 147/21 | 34/5 | 172/25 173/3 174 | 109/13 111/12 112/2 | 152/13 15 |
| 3.11 [1] 106/3 | 800,00 | 177/24 178/12 181/8 | /8 1 | me |
| 30 [2] 128/18 172/11 | 81 [2] 32/18 32/21 | 18 | acted [1] 55/6 |  |
| 30 years [1] 172/11 | 82 [1] 60/17 | 187/2 187/23 188/8 | action [4] 61/11 63/8 | dv |
| 300 [1] 20/17 | 820,000 [3] 154/16 | 189/18 189/22 192/14 | 180/25 195/18 | advantaged [1] 33/8 |
| 32 [1] 39/6 | /6 175/4 | 192/16 193/5 193/6 | actions [4] 61/1 61/7 | advantages [1] 21/18 |
| 32.8 [1] 175/3 | 83 [1] 72/11 | 193/7 194/12 196/2 | 64/3 185/8 | dverse [8] 20/25 |
| 33 [2] 20/2 20/3 | 84 years [1] | above [1] 9/8 | activate [3] | 9/10 40/8 41/7 |
| 34 [2] 21/25 111/5 | 891 pages [1] | absence [10] 13/2 | 9/18 199/18 | 56/22 61/25 |
| 35 [1] 7 | 9 | 14/23 71/12 160/6 | activating [1] 199/14 | dvice [4] 14 |
| 36 [4] 22/21 13 | 97 [1] 43/25 | 160/20 161/13 165/20 | activity [1] 139/23 | 149/18 149/18 |
| 132/12 178/21 |  |  |  |  |
| 39 [2] 25/3 131/3 | A | absolute [1] 77/10 | [1] 77/ | 81 |
| 4 | abilities [2] 112/17 | absolutely [7] 72/5 | [1] 198 | 83/16 85/13 1 |
|  |  |  |  |  |
| 2 [2] 107/19 | ability [10] |  |  |  |
| 4.30 [1] 97/3 | 114/14 118/20 118/21 | abuse [1] 22/11 <br> academia [1] 150 | 33/22 34/13 35/19 | advisory [3] 2/22 <br> 7/21 199/15 |
| 4.31 pm [1] 203/14 40 [7] $25 / 22 ~ 26 / 15$ | 119/3 127/10 157/15 | academia [1] 150/2 academic [2] 2/19 | 56/14 61/17 66/25 73/15 102/7 107/1 | 7/21 199/15 <br> affect [4] 18/13 21 |
| $40 \text { [7] 25/22 26/15 }$ | 160/5 162/8 173/2 | $\begin{aligned} & \text { academic [2] } 2 / 19 \\ & 2 / 20 \end{aligned}$ | $\begin{aligned} & 73 / 15102 / 7107 / 1 \\ & 130 / 2 \end{aligned}$ | $70 / 11159 / 7$ |
| $128 / 18$ | able [12] 10/12 23/14 | ac | adapt [1] | affected [12] |
| 40 or [1] | 42 | 151/19 | add [11] 18/24 33/25 | 47/14 50/14 51/6 59 |
| 41 [2] 25/4 25/22 |  | Academy [6] 2/16 3/2 | 34/19 69/11 78/3 | 60/2 157/2 181/2 |
| 42 [1] 16/24 |  | 3/3 149/17 176/1 | 130/25 133/17 133/21 | 189/4 190/1 190/20 |
| 43 [1] 44/24 |  | 177 | 141/7 141/21 200/23 | 192/25 |
| 45 [1] 107/19 |  |  | added [6] 63/24 | affecting [1] 108/5 |
| 47.0 years [1] 12/19 |  | 156/15 159/1 | 64/24 96/19 112/1 | ffects [3] 62/17 |
|  |  | acceptance [1] 162/3 | 127/5 133/19 | 198/8 199/8 |
| 5 |  | accepted [1] 162/10 | additional [2] 50/2 | rmation [1] 74 |
| 5.7 [1] 3 |  | access [13] 4/18 | 63/23 | affirmed [5] |
| 5.8 [1] 30/10 |  | 5/11 5/14 | address [1] 5 | 74/11 204/2 204/1 |
| 50 [2] 18/20 128/18 |  | 21 5/24 29/8 | addressed [3] 64/11 | affluent [1] 56/2 |
| 50 years [1] 10/21 |  | 5 56/25 63/25 | /2 81/21 | afraid [20] 44/1 67/24 |
| 50,000 [1] 169/2 |  | 123 | addresses [1] 86/14 | 83/19 91/4 103/1 |
| 50.1 [1] 12/24 |  | according [2] 20/5 | addressing [1] | 103/10 105/10 105/16 |
| 50.2 years [1] 13/7 |  | 64/6 | 184/23 | 105/23 109/9 117/2 |
| 51.4 years [1] 12/13 |  | ac | Ade [1] 71/9 | 120/12 142/16 166/19 |
| 51.8 [1] 13/4 |  | 33/11 42/3 45/1 | adequate [2] 99/7 | 173/8 187/15 188/20 |
| 52.3 years [1] 12/8 |  | 52/15 52/23 55 | 100/2 | 191/25 196/25 202/3 |
| 57 [2] 40/5 111/3 |  | 62/13 64/16 69/8 | Adeyemi | African [1] 59/9 |
| 6 | 50/11 50/13 50/15 | 84 | ere [1] | after [22] 19/17 23 |
|  |  |  |  |  |
|  | 5 | 85/20 95/13 9 | adherence [1] 46/1 | 30/15 50/23 59/1 |
| 60 years [1] 10/21 |  | accurate [3] 67/11 | adjourned [1] 203/15 | 59/13 87/21 88/5 |
| 61 [2] 195/22 196/13 | 54/7 55/16 55/24 56/9 | 106/4 191/18 | adjournment [1] 97 | 134/20 136/16 143/11 |
| 68.4 years [1] 13/8 |  | accurately [1] 41/14 | adjust [1] 30/6 | 145/10 175/25 179/25 |
| 68.6 years [1] 13/5 | 56 | achieve [2] 62/12 | adjusting [3] 29/22 | 180/3 180/10 186/13 |
| 7 |  |  |  | 2/20 |
| 70 [1] 130/3 | 68/19 69/18 69/19 |  | /8 201/15 | afternoon [1] |
| 70 years [1] 10/22 | 12 70/16 70/19 | acrony | administrations [18] | afterwards [1] 19/13 |
| 70.7 years [1] 12/8 | 70/25 71/19 71/25 | 83/18 87/23 127/21 | 42/5 54/16 105/3 | again [27] 40/12 48/2 |
| 71 [1] 192/3 | 77/25 84/5 86/24 | acronyms [1] 87/17 | 145/21 146/1 146/5 | 49/20 50/10 50/23 |
| 71.2 years [1] 12/14 | /8 | across [21] 9/1 17/22 | 146/18 147/6 182/9 | 56/6 56/21 61/6 68/7 |
| 71.6 [1] 12/25 | /2/2 112/11 112/13 | 26/7 43/23 56/17 | 187/11 187/23 192/15 | 68/13 70/7 74/22 |
| 72.1 years [1] 12/19 | 114/4 114/9 118/24 | 60/24 63/22 70/1 71/8 | 198/11 198/15 198/24 | 75/12 85/7 85/8 |

(53) 29 March 2017 - again

A
again... [12] 122/15
125/7 136/23 141/18 157/19 164/13 177/11 196/11 197/4 197/11 199/3 199/20
against [12] 19/6
73/2 122/3 126/3
126/12 127/11 128/25
131/18 131/21 132/3
141/25 171/18
age [15] $8 / 19$ 9/4
9/23 10/17 10/19
10/20 20/16 21/6
32/19 32/23 41/7
42/21 48/3 49/21
63/24
age-specific [5] 9/4 9/23 10/17 10/19 10/20
ageing [3] 29/23 30/7 30/13
agencies [2] 45/10 106/19
agency [3] 17/1
105/5 132/21
ages [1] 33/12
aggregated [2]
137/12 137/14
agnostic [1] 168/15
ago [5] 27/19 31/20
87/21 111/23 177/7
agree [19] 72/2 85/14 89/6 89/14 95/24
103/25 115/2 116/21
116/23 139/18 147/13
156/2 176/9 176/17
177/2 192/24 196/6
196/7 196/16
agreeing [1] 1/14
agreement [1] 19/19
Ah [2] 75/10 167/20
ahead [1] 37/21
AIDS [1] 3/17
aim [1] 62/10
airborne [1] 173/7
alarm [3] 79/15 79/19 82/20
albeit [1] 134/9
alcohol [2] 20/10 22/10
alerted [1] 121/11
Alex [1] 76/1
Alex Chisholm [1] 76/1
Alexander [4] 111/15 192/19 195/1 199/4
Alice [1] 51/10
all [98] 8/12 10/23
15/24 22/24 25/18
27/9 32/4 33/17 34/11
35/2 35/4 37/22 39/13
40/2 40/5 42/17 43/16

44/19 47/4 51/23 54/7 60/24 61/22 63/22
64/16 65/6 71/2 71/5 71/8 72/7 73/25 75/17 78/24 81/7 84/2 84/14 90/20 91/5 92/19 94/4 96/21 98/20 103/4 103/13 104/1 104/16 105/24 107/4 107/7 108/9 109/10 110/11 113/19 117/14 122/18 123/13 125/6 128/16 130/10 131/21 134/12 134/15 136/5 137/4 137/24 142/3 144/11 144/12 145/18 146/15 147/14 148/23 149/25 153/24 157/16 159/9 163/1 166/5 166/22 169/10 169/16 173/17 175/17 178/1 178/14 179/13 180/17 181/4 186/6 187/21 188/24 188/24 188/25 193/9 193/11 199/8 202/4 202/6
All right [24] 15/24 44/19 78/24 81/7 91/5 92/19 96/21 98/20 103/4 103/13 104/16 105/24 117/14 122/18 136/5 137/4 137/24 146/15 147/14 148/23 157/16 169/10 178/14 202/6
Allison [1] 66/8 Allison Munroe [1] 66/8
allocation [1] 113/25 allow [7] 53/10 89/4 131/24 145/16 152/9 156/7 192/1
allows [1] 169/18 alluded [1] 67/8 almost [5] 12/22 14/16 19/17 36/8 145/18
alone [1] 77/3
along [7] 3/22 7/22 33/1 37/1 142/5 142/13 199/16 alongside [1] 94/5 already [13] 31/1 31/7 61/13 78/21 101/1 112/14 113/9 126/17 162/12 175/21 183/23 195/21 198/3 also [43] 4/12 17/21 21/17 21/17 22/2 22/10 23/17 34/22 40/9 43/9 47/21 48/19 49/15 50/2 51/14 55/9 60/13 64/17 67/4 67/12 71/23 72/2 73/1

74/18 75/18 76/1 76/5 $\quad 156 / 6$
77/4 84/6 93/5 120/10 answer [23] 23/5
124/23 127/17 128/4 $27 / 7$ 42/6 66/14 67/24
129/17 132/9 144/6
151/12 176/25 184/10
185/1 189/10 189/12
although [14] 7/8
18/1 75/11 76/22 84/4
109/23 121/15 130/3
143/23 144/13 148/3
160/1 161/5 179/14
altogether [3] 84/17
86/3 185/11
always [8] 5/11 34/12 84/22 87/17 108/12 129/16 158/18 176/14
am [12] $1 / 232 / 16$ 41/23 41/25 42/14 113/17 123/2 150/18 164/5 198/21 199/13 203/15
amenable [1] 40/16
amenities [1] 39/13
America [3] 18/2 18/5 60/9
American [2] 59/6 59/9
among [4] 12/8 16/11 41/12 57/7
amongst [16] 12/7
12/18 12/20 18/9
20/21 20/23 21/7 22/6 22/8 22/11 27/3 46/19
56/7 60/10 103/8 167/9
amount [7] 85/13
129/17 137/2 162/13
163/2 163/6 188/25
amplified [1] 18/18
amplifies [1] 58/2
amplify [2] 55/8
59/16
analogous [1] 83/3
analogue [1] 175/5
analyse [1] 138/18
analysed [1] 43/2
analyses [1] 40/9
analysing [1] 138/19
analysis [8] 21/4
46/5 50/3 60/21 117/5
117/9 117/10 179/5
analytical [1] 168/9
animal [4] 169/13
170/6 171/24 172/3
annex [2] 123/1 134/6
annex 2E [1] 134/6
announced [1] 3/16
annual [2] 99/2 142/13

88/10 113/8 114/8
116/8 119/17 144/21
161/21 166/6 167/6
167/11 180/6 182/14
186/21 195/25 196/18
antibiotics [1] 163/12 124/5
anticipated [9]

79/21
anticipation [1] 51/3 antimicrobial [1]
171/23
antiviral [5] 64/1
132/22 157/12 163/15
163/23
antivirals [1] 56/25
anxiety [1] 22/9
any [57] 1/20 7/16 14/20 23/7 24/8 34/10
39/9 42/17 48/11
49/17 50/8 50/20
50/24 51/11 52/14
53/13 53/14 53/19
66/17 72/4 79/2 88/14
95/12 96/14 98/4
99/22 99/22 99/23
111/11 111/16 111/16
112/1 112/2 112/8
112/8 126/1 133/10
133/14 135/24 142/1
151/7 152/14 153/9
156/24 164/24 165/5
166/1 181/21 185/11
185/16 188/6 190/19
195/24 196/4 198/10
199/6 201/24
anybody [3] 112/10
151/3 158/24
anymore [1] 5/10
anyone [2] 105/18 123/18
anything [5] 29/5
79/17 81/6 153/24
181/8
anyway [2] 73/24
127/22
apologise [3] 62/8
87/16 119/21
appalling [1] 161/14
apparent [2] 94/7
175/17
Apparently [1] 82/23
another [12] 6/5 34/5 93/4 108/17 117/15 119/12 119/12 123/15
124/18 127/5 145/19

196/22 202/4 203/1 applies [2] 7/9 18/17
answering [1] 28/11 apply [3] 7/14 43/23

114/22 116/10 116/16 applying [1] 114/24
16/16 appreciate [1] 62/19
162/1 163/16 163/18 approach [13] 29/1
164/12 164/15 164/17 $93 / 3$ 93/3 120/23
anticipating [1] $\quad 131 / 20 \quad 155 / 19$ 168/15
appear [3] 52/22
107/18 110/14
appearance [1]
116/24

169/18 169/21 169/22
169/22 200/20 201/16
approached [1] 151/19
approaches [1]

## 52/13

appropriate [4] 34/14
99/11 105/2 106/19
April [2] 75/3 104/22
April 2013 [1] 104/22
arduous [1] 127/13
are [224]
area [26] 4/11 14/11
29/12 35/8 36/1 38/19
40/21 41/15 51/20
56/1 78/2 91/7 91/7
93/1 98/3 100/4
103/12 124/6 124/8
132/15 145/19 146/15
158/2 158/17 197/22
201/2
area-level [4] 4/11
14/11 40/21 51/20
areas [37] 2/9 10/8
12/7 12/9 12/12 12/14
12/18 12/20 12/23
12/25 13/4 13/5 13/7
13/8 13/12 27/17
27/18 56/7 57/11
60/13 61/10 70/11
77/6 86/14 86/18 88/8
90/18 103/9 116/15
116/16 116/17 130/11
146/16 161/16 169/12
192/13 200/8
aren't [2] 87/17
147/16
arguably [1] 38/22
argument [1] 128/23
argument's [1] 152/4
arise [1] $92 / 25$
arises [1] 198/4
arising [4] 13/22
44/11 174/25 183/12
around [9] 14/4
40/11 74/6 80/19
148/8 148/16 154/16
190/10 193/5
(54) again... - around

## A

arrangements [9]
97/2 114/22 132/19 132/21 198/7 198/10 199/6 199/20 199/21
arrival [4] 117/22
186/15 195/14 196/20 arrived [2] 83/9 183/4
arriving [1] 104/6 arrows [3] 174/14
174/16 175/10
art [1] 164/10
artefact [1] 10/15
as [181] $2 / 163 / 12$
3/12 4/13 4/17 4/17 4/21 5/2 6/15 7/10 7/10 11/3 11/3 11/9 11/9 14/10 14/14 15/4 15/11 17/3 17/4 19/2 19/17 19/25 20/8 21/9 22/19 23/21 24/1 24/22 24/23 26/19 26/20 27/17 30/21 30/25 30/25 32/12 34/8 35/1 35/4 36/16 40/3 40/13 43/20 44/9 44/16 45/8 45/22 45/25 46/3 47/4 47/10 47/22 48/6 49/20 50/4 52/9 53/4 53/16 54/3 55/3 56/14 56/22 59/2 59/17 62/10 62/10 64/24 65/12 65/22 67/22 68/8 68/10 71/13 72/5 72/8 72/21 73/16 74/24 76/24 77/8 77/17 77/22 77/23 78/11 78/15 78/15 78/19 80/1 80/11 80/11 80/17 80/21 80/22 80/25 81/1 82/5 83/4 83/20 87/11 87/20 87/22 89/25 90/2 90/7 91/12 91/22 94/20 94/22 97/14 98/4 100/6 100/18 102/11 103/24 105/4 106/19 108/11 108/17 112/7 113/4 114/5 115/17 116/17 116/17 119/6 119/23 119/25 121/13 121/13 121/20 122/3 122/4 122/23 123/1 124/4 126/17 126/23 133/12 133/16 134/7 136/6 138/1 139/19 140/4 144/15 145/12 148/6 150/8 154/8 155/18 155/25 156/1 156/22 156/22 158/18 159/5 159/24 161/23 161/23

162/12 166/21 171/17 171/20 173/6 173/25 174/16 176/7 176/21 181/14 182/5 189/7 190/25 199/10 199/25 200/20 201/3 201/25 202/1 203/12
ascertain [1] 47/16 Asian [1] 48/21 aside [6] 118/10 119/9 119/11 139/12 139/15 139/15 ask [25] 1/18 1/19 17/11 22/17 38/11 52/3 57/24 65/25 66/1 66/10 72/13 74/21 74/22 79/7 80/9 116/7 121/24 155/22 180/15 187/15 191/11 191/13 associated [3] 163/3 191/19 191/21 202/16 163/14 176/14 asked [9] 28/10 53/7 68/12 99/21 111/19 111/19 136/9 180/4 192/16
asking [4] 11/14 33/10 95/15 159/1 asks [2] 3/18 149/15 aspects [8] 21/15 63/22 127/2 128/4 129/12 155/19 159/9 180/16
assertion [1] 162/22 assess [10] 54/18 73/2 110/20 126/4 131/17 136/2 136/25 141/14 158/21 178/19 assessed [9] 52/15
52/23 53/4 134/9 136/2 148/10 149/14 168/12 168/19
assessing [6] 149/20 150/4 150/7 158/22 167/19 185/6 assessment [84] 50/6 53/1 54/21 80/20 85/4 89/1 115/7 115/13 116/6 116/7 121/3 121/5 122/4 122/8 122/9 122/17 123/3 123/6 123/8 123/10 123/11 124/2 124/15 126/10 126/16 127/9 131/8 134/25 135/6 137/6 147/23 148/4 148/23 149/9 150/10 151/9 152/11 154/10 156/2 158/8 159/13 159/17 160/11 attempting [1] 160/23 161/2 161/12 162/20 161/20 162/2 162/20 attend [2] 82/11 162/23 166/15 166/19 187/19 166/24 167/6 167/13 attended [2] 83/2 168/3 168/4 168/24 202/23
169/15 173/25 175/19 attention [7] 87/10

Association [2]
44/23 45/24
assume [1] 145/11 assumed [1] 93/13 assumes [1] 161/7 assuming [1] 155/23 assumption [8] 39/8 154/19 154/23 160/11 175/2 175/7 175/15 175/24
assumptions [18] 152/8 153/16 154/6 157/24 157/25 158/5 159/4 159/19 159/23 160/7 166/16 167/15 168/18 169/24 170/15 171/1 171/10 174/23
assurance [10] 98/22 99/1 99/2 99/4 135/25 136/2 136/21 137/18 137/25 138/24
Assurances [1] 99/8 assure [2] 99/18 141/14
assured [2] 93/4 141/23
asymptomatic [8]
154/3 154/14 157/20 162/13 166/10 166/17 167/10 167/15
at [211]
at-risk [1] 64/4
atrophied [1] 147/12
attack [4] 81/3 81/3
81/4 149/7
attainment [1] 16/3
attempted [1] 22/8

187/19

110/3 112/1 139/10 155/5 173/19 201/14 attributable [2] 5/23 23/22
attributed [1] 5/5 augmented [1] 119/6 August [6] 76/10 76/20 90/8 90/23 102/7 131/5
August 2018 [1] 102/7
August 2020 [3] 76/20 90/8 131/5
auspices [2] 183/17 188/11
austerity [3] 38/1
40/7 53/17
Australia [1] 20/18
authoritative [1] 123/4
authorities [6] 38/18
39/2 45/11 64/9
103/14 107/6
authority [4] 38/16
38/17 39/22 92/6
authors [2] 88/17
110/3
available [12] 11/1
11/4 15/17 67/21 73/5 $73 / 8106 / 5126 / 24$ be [233]
128/16 148/18 163/12 bears [1] 94/14 170/18
average [5] 9/12 9/18
20/16 21/6 70/9
avoid [1] 191/20
avoidable [6] 4/6 6/8
6/9 6/9 6/16 6/17
awarded [2] 2/17 3/6
aware [6] 90/25
97/13 115/23 117/18 126/25 195/11
away [4] 19/24 96/3
105/16 203/1
axes [1] 14/8
axis [1] $32 / 18$
B
babies [1] 24/3
back [19] 3/14 31/25
32/8 32/11 37/10
59/10 59/23 61/4
62/23 65/17 72/9
106/1 114/14 122/13 139/7 143/20 171/8
172/10 202/3
backgrounds [2] 2/9 57/11
bacterial [1] 163/13
bad [2] 24/23 156/1
badly [1] 167/17
balance [2] 46/9 108/12
Bambra [14] 1/5 1/10
1/25 2/10 6/15 25/6

42/5 55/3 59/25 66/7
66/16 73/13 73/22
204/4
bands [2] 13/14 13/15
Bangladeshi [4]
16/11 17/2 18/20 19/10
Bangladeshi/Pakista ni [1] 16/11
barrier [2] 197/22 197/25
based [27] 7/12 24/2 39/19 52/20 60/21 61/2 61/8 61/10 63/24 68/25 119/4 121/4 124/9 128/2 129/11 132/18 140/22 152/8
153/15 153/16 154/23
173/14 173/21 173/22
175/19 185/19 200/1
basic [1] 79/7
basically [2] 86/7
101/11
basis [11] 15/7 82/17
96/3 117/9 152/5
165/6 179/8 179/14
179/18 184/8 188/5
bears [1] $94 / 14$
beasts [1] $80 / 1$
became [7] 76/10
102/13 165/9 175/23
184/7 193/22 195/12
because [70] 5/16
5/20 5/21 6/17 7/5
7/14 8/10 10/23 10/24
11/3 25/12 25/16
29/13 29/13 30/16
34/2 34/10 35/21 36/4
46/9 47/3 52/1 55/6
55/21 56/4 59/4 61/23
61/24 63/18 67/20
68/2 69/7 69/22 89/9
97/14 101/24 113/13
114/4 116/18 116/20
127/1 129/6 129/22
132/7 133/19 139/10
144/25 148/24 150/19
152/12 154/13 155/2
155/20 159/2 160/12
161/8 163/22 165/1
173/8 175/19 176/22 184/2 185/19 194/1
196/14 198/17 199/9 199/24 200/9 202/14
become [4] 18/7
113/13 144/7 172/17
becomes [1] 94/7
been [90] 1/24 5/2
7/24 8/13 9/2 12/3
13/23 17/18 17/18
17/25 22/22 30/25
been... [78] 31/10 33/19 42/10 42/16 43/5 50/18 52/22 53/22 66/21 68/12 69/2 69/8 70/2 70/5 70/25 73/7 73/7 73/22 73/23 75/25 79/12 82/24 85/21 86/2 97/21 98/14 99/8 107/11 112/1 112/3 112/16 120/22 124/1 125/14 128/3 129/5 129/11 135/6 136/22 138/13 138/21 142/4 148/17 148/25 156/17 156/18 156/22 158/5 164/10 165/17 172/12 174/1 176/3 177/24 180/13 181/1 182/1 183/3 183/23 184/4 184/15 184/21 185/8 185/21 187/14 191/23 192/11 192/16 192/24 193/3 193/24 193/25 194/14 195/4 195/20 198/3 202/5 203/7
before [36] 1/22
31/13 31/19 31/22 35/8 35/25 36/10 41/9 45/19 48/15 57/23 72/22 73/14 73/14 73/20 85/9 85/9 94/22 97/7 101/15 103/1 117/7 117/22 119/22 123/11 123/15 133/12 133/16 148/3 182/2 182/25 187/10 195/14 195/25 196/20 202/7
began [4] 40/12 91/3 130/25 133/13
begin [8] 1/5 1/12 2/8 4/4 22/18 43/3 60/18 60/19
beginning [4] 61/5
61/22 186/14 186/22
begun [1] 185/13 behalf [2] 75/19 203/5
behavioural [2] 46/15 151/14
behest [1] 92/16
behind [3] 62/20
170/14 191/15
being [35] 21/19 36/5
40/25 47/16 49/11
56/5 56/19 71/13
71/20 80/15 84/20
93/5 95/14 99/3 100/3 109/25 111/22 115/3 115/17 117/24 134/7 135/20 140/2 151/4 154/12 165/5 168/23

178/6 181/8 181/17 195/6 196/10 201/19 202/1 202/17
believe [5] 75/2 98/5 144/19 176/5 176/20 belonging [2] 19/16 20/14
below [2] 160/7 161/1
benchmark [1] 30/21 Beneath [1] 83/14 Bereaved [3] 65/24 66/9 200/7
Bereaved Families UK [1] 66/9 best [12] 28/20 61/15 77/10 77/23 79/22 97/11 126/24 158/20 158/22 173/22 182/5 187/11
better [26] 9/14 9/15 9/18 15/2 19/11 24/3 26/21 27/7 47/15 60/24 63/11 65/11 67/22 68/1 72/24 73/6 98/16 156/17 182/14 196/14 196/14 196/19 196/24 197/1 197/15 197/16
between [57] 4/7 4/8 5/3 8/8 8/24 11/5 13/11 25/8 32/21 33/8 35/11 36/1 40/14 40/25 64/8 76/14 77/14 77/20 79/25 80/13 80/19 81/22 85/24 95/8 97/24 100/17 101/11 105/5 108/12 109/3 118/7 119/23 121/16 130/5 139/1 142/8 145/20 145/24 146/17 147/5 162/6 164/2 167/18 170/4 182/8 185/24 185/25 186/3 186/4 186/14 186/21 187/5 188/6 188/18 198/10 199/6 200/22
beyond [5] 62/11
70/22 96/14 127/22 191/4
big [7] 58/15 58/20 59/14 59/17 59/20 96/12 126/6
bigger [9] 24/14 24/20 26/15 27/4 27/6 35/5 36/18 37/15 38/2
biggest [2] 71/14 84/9
bilateral [1] 187/21 Bill [3] 165/8 165/9 184/7
biological [1] 81/4 birth [7] 12/6 12/18

13/2 13/6 25/7 35/10 box [7] 1/7 74/6 35/23 $\quad 145 / 9$ 166/23 174/8
bisexual [1] 22/1
bit [7] 26/11 37/13
59/1 68/19 74/13
93/24 182/25
bits [1] 140/17
black [3] 16/11 17/2 49/12
blackboard [2] 106/6 106/9
Blackwell [3] 1/3 32/3 66/12
blank [2] 121/19 123/22
blanket [1] 30/2
blessed [2] 11/6 11/7 blindness [2] 32/7 33/17
blindsided [2] 116/24 117/1
block [2] 33/24 34/4
bluntly [1] 155/5
board [19] 7/21
100/21 125/5 125/12
146/6 146/7 164/22
183/18 183/25 184/1
British [6] 3/3 9/10
186/17 186/18 186/19 67/16
187/12 188/15 188/16 British-born [1]
board's [2] 146/12 185/10
boards [2] 187/21 188/4
bodies [7] 43/13
54/17 92/9 108/22 132/7 141/11 202/1
body [15] 53/2 79/2
79/8 79/11 90/9 92/5 96/8 96/11 99/22 183/13 183/24 184/1 186/7 188/11 196/9 border [1] 8/14 borders [1] 8/11 born [4] 8/18 10/18 41/6 67/16
both [28] 1/12 1/13 4/16 9/25 16/6 17/11 27/13 28/7 28/15 32/17 36/13 43/10 54/11 62/6 64/3 68/24 80/5 80/14 81/21 89/5 90/21 93/17 99/6 109/19 120/23 120/24 148/13 195/7
bottom [18] 9/6
24/18 26/4 26/15
26/16 26/16 26/24 28/5 32/16 37/4 37/6 37/18 104/21 118/2 133/7 169/12 172/20 174/15
boundaries [1] 144/8 bounds [1] 174/17

67/16
broad [11] 45/15
46/8 47/8 51/10 78/7
79/24 88/21 148/11
153/22 159/3 200/8
Broad Street [1] 51/10
broadening [1] 43/6 broader [2] 48/5 175/11
broadly [5] 78/10
93/11 139/24 159/21 161/4
broken [1] 69/20
broker [1] 77/23
brokered [1] 140/8
brought [12] 47/22
106/10 110/3 111/13 111/25 117/24 150/6 158/11 161/6 181/3 183/24 201/14
Bruce [4] 76/12
192/19 197/4 199/4
Bruce Mann [4]
76/12 192/19 197/4 199/4
build [5] 3/14 146/2 154/23 160/8 161/1 building [2] 58/4 129/4
built [4] 117/5 152/15 154/6 162/10
bundle [1] 109/7
burden [2] 29/15

38/1
business [2] 84/9 128/19
businesses [1] 166/4
busy [1] 87/12
but [208]
buy [1] 59/12

## c

Cabinet [71] 75/20
76/3 76/12 77/13
77/15 77/19 78/5
78/22 79/3 81/9 81/18
86/1 86/5 86/9 87/5
87/8 87/11 87/24 88/8
89/15 89/19 90/4 91/1
91/22 92/16 92/17
94/5 95/1 95/5 95/9
95/11 95/19 95/21
98/6 98/11 103/16
104/4 104/10 106/17 107/5 109/2 113/3
114/18 117/16 119/11
129/23 133/4 135/9
136/1 139/21 140/7
141/9 141/10 142/9
142/12 144/3 145/24
147/6 158/8 175/25
191/14 191/20 192/4
193/17 195/22 196/3
196/24 199/12 199/13
199/16 201/8
Cabinet Office [62]
75/20 76/3 76/12
77/13 77/19 78/5 79/3
81/9 81/18 86/1 86/5
86/9 87/5 87/11 87/24
88/8 89/15 90/4 91/1
92/16 92/17 94/5 95/1
95/5 95/9 95/11 98/6
98/11 103/16 104/4
104/10 106/17 109/2
113/3 114/18 117/16
119/11 129/23 133/4
135/9 136/1 139/21
140/7 141/9 141/10
142/9 142/12 144/3
145/24 147/6 158/8
175/25 191/14 191/20
192/4 193/17 195/22
196/3 196/24 199/12
199/13 199/16
Cabinet Office's [3]
77/15 78/22 91/22
Cabinet Office-driven
[1] 201/8
calculating [2] 14/4 66/24
calculation [2] 11/16
67/20
calculations [1]
31/16
calculator [1] 12/10
call [6] 6/3 6/14

## c

call... [4] 67/19 148/2 164/20 177/19
called [25] 75/8 81/9 82/2 87/25 93/12 97/10 98/22 101/25 102/16 103/17 104/11 106/15 106/16 109/4 110/15 117/17 124/19 131/4 137/17 148/25 150/5 178/1 183/15 188/12 188/15
calling [1] $1 / 5$
calls [1] 113/19
came [5] 17/6 17/9
84/2 148/4 187/11
can [96] $1 / 182 / 12 / 7$ 4/20 5/5 6/2 8/21 9/24 10/6 10/24 11/12 13/20 15/6 16/7 17/12 18/4 20/2 21/12 25/1 25/6 26/7 26/12 26/21 27/8 27/21 28/2 28/5 31/25 32/13 32/13 37/19 38/9 39/9 44/24 46/16 52/11 53/6 55/4 56/17 57/2 60/7 60/17 62/9 62/16 65/16 72/9 74/19 77/23 83/22 87/7 88/5 92/13 92/20 94/9 95/1 100/2 101/24 102/6 103/2 104/16 104/21 105/25 113/25 114/14 114/21 114/21 128/25 132/14 133/6 133/15 134/2 144/8 144/21 145/12 147/9 150/9 151/1 152/7 153/6 155/8 155/9 156/12 156/13
160/20 161/11 166/20 168/14 169/11 169/25 171/8 172/19 174/8 178/3 188/9 189/7 195/25
can't [13] 26/18 31/5 37/23 73/19 88/14 91/4 95/16 96/1 100/14 105/23 127/6 152/13 202/4
Canada [1] 20/19
candle [1] 34/2
cannot [1] 176/24
capabilities [22]
80/14 88/12 89/6 97/21 110/15 110/18 110/21 124/22 125/25 126/17 129/20 130/24 133/14 134/15 136/8 136/22 137/1 137/5 142/3 152/9 168/10 195/20
capability [7] 89/16

179/11 182/18 184/14 cater [1] 163/25 191/17 191/23 192/6 capacity [7] 64/10 64/10 139/10 140/1 159/9 184/19 184/24 capital [2] 107/2 140/16
capture [6] 66/11 66/25 68/25 69/9 69/19 71/13
care [22] 2/18 5/6 5/24 31/21 38/12 38/12 38/15 38/18 38/20 39/12 39/23 52/9 52/13 93/10 128/10 144/16 158/4 181/12 181/13 181/16 181/20 188/12
cares [1] 34/2 caries [2] 58/12 59/17
carried [3] 50/9 99/8 108/7
Carry [1] 83/1 case [53] 26/21 54/1 57/1 59/25 61/1 61/8 72/3 97/2 109/25 110/7 115/8 115/9 117/3 129/16 149/3 149/13 152/1 152/3 152/17 152/24 153/10 CDL [3] 86/9 86/11 153/12 153/14 154/12 154/15 155/3 155/6 155/19 156/3 156/8 156/18 156/21 157/6 158/9 159/4 159/22 160/17 161/7 161/9 162/1 162/9 162/11 167/5 169/4 173/18 173/23 174/9 174/13 174/19 175/22 187/1 193/16 198/18 cases [6] 27/17 42/21 144/5 146/25 146/25 150/8 casualties [7] 169/2 172/9 174/23 174/25 175/3 175/8 175/18 catastrophic [7] 58/1 58/2 90/1 172/7 172/21 175/13 176/24 categories [4] 120/8 120/15 121/12 124/7 category [13] 103/15 108/21 108/22 111/2 111/10 111/13 111/14 111/21 111/22 114/6 141/12 149/6 149/6 category 1 [5] 103/15 108/21 111/14 114/6 141/12
category 2 [6] 108/22
111/2 111/10 111/13 111/21 111/22
cause [7] 80/4 80/5 81/1 154/20 172/7 175/1 195/5
caused [1] 58/11
causes [6] 20/24
41/4 53/15 53/20
68/20 80/22
caveats [1] 69/4
CBRN [1] 151/14
CBRNE [1] 81/3
CCA [3] 109/13
109/24 197/3
CCS [50] 79/2 79/13
85/8 87/8 89/10 90/22 91/16 92/3 92/11 96/1 99/20 103/1 107/4 108/11 109/15 117/22 118/16 118/20 119/4 119/23 121/25 127/14 129/8 135/9 135/18 137/14 138/13 140/7 143/11 146/2 146/17 146/23 147/5 158/4 158/14 166/21 177/16 179/23 182/11 188/7 190/25 193/18 193/19 194/9 195/15 196/7 196/9 196/14 197/12 199/11 87/13
CDLs [1] 87/10
cease [1] 139/16
census [4] 11/15
66/23 66/25 68/12
central [21] 92/6 93/6
99/3 101/11 102/3
105/5 112/3 112/9 114/6 128/22 135/8 135/14 135/16 136/4 140/24 145/20 145/25 161/24 180/19 180/24 194/20
centrally [1] 172/1
centre [6] 85/15 87/6 95/15 131/9 135/13 141/8
century [2] 22/24 34/21
Cerberus [1] 51/10 certain [6] 15/9 15/12 18/6 21/18 66/15 163/2
certainly [20] 15/11 41/22 42/22 46/19 53/19 66/3 68/17 69/4 71/23 92/12 94/11 96/19 108/9 117/2 118/8 164/18 182/12 185/8 192/10 193/16 cetera [1] 124/25 chair [2] 3/17 121/10 chaired [5] 3/8 28/17

83/15 83/20 146/10 chairs [1] 142/14 challenge [4] 144/10 151/11 151/16 201/25 challenges [1] 171/3 challenging [2] 150/7 171/7
Chancellor [4] 86/1 86/11 87/13 87/19 change [13] 74/6 86/7 94/9 94/14 94/19 94/19 98/14 98/16 173/9 186/9 195/7 197/22 197/25
changed [4] 18/7
72/15 98/10 170/1 changes [5] 86/6 98/14 98/15 98/15 102/21
changing [1] 110/7
chapter [1] 104/22
chapter 6 [1] 104/22 characteristic [2] 157/13 157/14
characteristics [17]
14/7 45/14 51/21 72/20 152/23 153/10 153/17 153/25 156/24 157/8 158/1 158/6 162/7 162/16 169/5 175/16 176/13
charge [8] 79/8 79/10 79/10 79/14 95/1 96/6 96/8 96/11
charged [1] 79/3 chart [6] 33/3 33/4 120/14 134/5 172/19 175/9
charts [3] 24/25 28/1 36/11
check [7] 83/22
106/2 130/4 130/18
134/18 179/24 202/22
checked [2] 131/14 151/3
checking [2] 134/10 134/23
chemical [1] 81/3
chief [11] 44/22 76/3 76/4 150/11 150/18 150/21 150/21 151/12 166/13 199/21 200/2 child [7] 17/4 28/20 61/15 61/17 61/24 62/4 62/21
childcare [1] 39/13
childhood [6] 19/9
58/8 58/9 58/10 62/1 62/6
children [6] 45/16 46/11 58/12 61/18 61/23 165/12
Chinese [2] 16/4
17/2

Chisholm [1] 76/1 choices [1] 114/5 Christmas [2] 186/23 187/5
Christopher [1] 52/7 chronic [1] 56/16 circumstance [1] 199/8
circumstances [2] 114/9 114/24
citizens [1] 96/7 civil [59] 9/10 43/9
43/17 44/7 45/3 47/4 53/9 54/13 58/16 71/22 76/4 76/11 76/24 77/9 77/16 78/6 78/9 79/5 79/11 79/22 81/8 83/20 84/15
85/22 86/12 86/19 87/3 87/9 87/20 88/6
91/8 91/18 91/23 92/6 92/23 97/9 98/12
100/11 105/19 107/4
107/21 108/3 108/18
108/24 109/1 110/21
110/24 114/11 119/10
137/11 137/19 139/20
139/21 145/18 147/7
151/13 156/16 187/19
194/22
civil service [1]
86/19
Clare [13] $1 / 51 / 10$
6/14 6/15 6/16 19/2
19/3 19/7 27/7 36/10
39/11 58/4 204/4
clarification [1] 143/18
clarity [1] 86/4
classified [1] 123/9
clear [21] 1/19 67/3 74/21 85/2 86/3
101/12 106/24 109/25 110/6 113/18 128/24 131/15 138/14 138/15 158/23 171/14 189/8 189/22 193/8 196/2 196/9
clearance [1] 85/3
clearing [1] 150/10 clearly [14] 7/9 7/14 31/17 37/3 37/8 37/9 37/19 45/14 65/5 67/25 74/19 158/16 160/17 189/9
climbing [2] 31/1 31/5
clinical [10] 42/21
48/3 49/21 63/25
156/13 156/14 159/9
166/13 189/24 190/2
clinically [2] 166/7
189/25
clinicians [1] 31/2
(57) call... - clinicians

C
clinics [1] 59/11
close [6] 23/25 87/7
87/10 95/6 156/22
165/22
closed [1] 165/5
closely [1] 155/21
closer [1] 156/19
closing [1] 166/3
closure [3] 164/20
165/8 165/19
clout [3] 87/2 87/5 87/9
clustered [1] 34/11
CMO [1] 182/12
CMOs [2] 182/4 182/9
co [22] 2/20 3/17
77/20 78/12 78/23
91/24 94/4 95/12
95/22 105/6 106/20
107/20 130/25 131/9
140/21 141/6 142/6
178/24 198/10 198/12
199/6 199/12
co-chair [1] 3/17
co-director [1] 2/20
co-ordinated [1]
106/20
co-ordinating [7]
78/12 105/6 107/20
130/25 140/21 141/6 142/6
co-ordination [11]
77/20 78/23 94/4
95/12 95/22 131/9
178/24 198/10 198/12
199/6 199/12
COBR [18] 76/23
87/23 88/18 89/2
89/19 90/4 90/15
90/25 95/10 96/11
106/16 107/22 198/13
198/22 199/10 199/15
199/18 199/25
COBR's [1] 96/15
coded [1] 67/6
coherent [1] 141/21
cohort [1] 14/18
collaboration [4] 8/8
8/10 8/12 8/15
collapse [2] 166/2 185/15
colleague [4] 6/15
59/3 75/24 141/16
colleagues [5] 25/10
32/6 182/11 187/15 188/21
collecting [1] 111/18
collection [2] 14/7 70/14
collectively [1]
148/25
college [6] 2/19 2/25 91/25 92/1 92/3 194/10
Collins [1] 76/6
colour [1] 170/20 combination [2] 80/6 122/5
come [16] 1/14 11/15 14/17 67/13 87/4 99/21 118/4 124/16 135/23 143/20 145/9 147/1 151/20 156/14 179/20 190/23
comes [7] 14/13 15/3 33/1 33/2 39/19 79/13 86/4
comfortably [1] 9/7 coming [4] 38/11 59/10 74/13 167/2 command [5] 178/1 178/2 178/8 178/17 179/7
commence [1] 74/25 comment [2] 33/15 44/13
comments [2] 23/23 44/17
commercial [1]
86/21
commission [4] 3/9
6/22 6/24 28/16
commissioned [5]
3/11 175/25 177/9
183/14 194/8
commissioning [1] 7/1
commitment [1]
126/1
committee [22] 82/2
82/3 82/11 82/15 83/2 83/3 83/5 83/24 84/11 84/13 84/17 84/18 84/24 84/25 95/10 146/10 183/20 185/23 186/9 186/10 198/13 199/15
committees [7]
81/19 83/14 90/12
90/12 91/2 96/17
107/21
common [7] 21/7
46/20 46/25 106/22
169/19 169/20 169/22
commonality [1]
80/13
commonly [2] 4/24
106/7
Commonwealth [1]
5/8
communication [3]
64/2 105/4 147/12
communications [1]
65/3
communities [21]

20/12 45/17 46/13 concerned [6] 53/9
54/13 68/23 77/18 81/23 172/1
concerning [3]
105/19 166/16 200/17
concerns [3] 50/8
181/11 201/14
concise [1] 67/3
conclude [2] 54/11 57/5
concluded [2] 139/8
195/22
concludes [2] 74/2 203/4
conclusion [7] 18/12 41/14 88/18 89/7 89/13 182/16 196/5 conclusions [3] 7/14 72/10 179/3
concur [1] 71/17
condition [1] 56/11
conditions [9] 8/18
15/9 16/17 28/22
31/18 41/6 56/9
189/15 190/24
conduct [2] 7/1 126/5
conducted [8] 7/3
14/18 17/18 20/17
60/21 64/7 109/8 129/20
conducting [1] 62/9 conferences [1] 142/14
confess [1] 32/5
confidence [1]
174/18
confident [3] 123/2
180/8 180/13
confines [1] 167/13
confirm [2] 26/23
191/12
confirming [1] 2/3
confronted [1] 86/2
connected [1] 50/3
$\begin{array}{lll}\text { complexion [1] } & 23 / 19 & \text { con } \\ \text { complexities [3] } & 14 / 4 & \text { ConOps [10] 123/14 }\end{array}$ 67/18 67/20
complicated [4] 15/7
29/9 67/8 128/19
component [1] 62/5 composition [1]
51/22
comprehensively [1] 54/18
comprised [1] 82/5
conceives [1] 50/13
concentrate [1]
200/15
Concept [9] 103/18
104/11 104/18 107/8
114/15 124/17 180/19
181/3 198/3
conceptual [1] 80/12
concern [4] 31/11
31/12 51/2 195/5

124/17 134/3 136/7
198/2 198/9 198/18
198/19 198/21 199/5
consequence [1]

## 24/22

consequences [14]

## 3/25 21/7 21/21 36/17

 39/10 $42 / 1742 / 17$ 55/1 58/19 59/6 61/24 140/12 169/19 169/21 185/14 Continencies [1] consider [12] 42/2 107/442/8 43/3 54/14 62/23 contingencies [43] 63/20 63/23 100/10 43/9 44/8 45/3 47/4 109/23 113/17 127/17 $71 / 22$ 76/11 76/24 128/4
considerable [3]
112/14 113/10 124/12
considerably [1]
115/21
content [1] 99/6
contents [2] 133/9 169/11
contents: [1] 131/8 contents: local [1] 131/8
context [6] 45/1 46/15 78/6 93/8 132/3

77/9 77/17 78/6 78/9
81/8 81/25 83/5 83/21
84/13 84/16 85/22
87/9 87/20 88/6 91/8
91/24 92/23 97/9
consideration [18]
47/25 50/20 53/10
57/15 100/19 111/11
112/8 115/11 155/7
164/25 165/11 165/23
166/1 189/14 190/12 190/14 190/17 191/3
considerations [1] 53/15
considered [17] 43/2
46/20 51/14 52/21
59/25 65/7 71/20
75/23 107/22 122/16
123/3 151/11 176/12
182/5 189/20 189/24
190/24
considering [3] 63/2
86/7 112/11
consistency [1]
195/3
consistent [3] 27/2
168/12 196/8
consistently [4] 5/9 5/10 9/2 195/23
consolidation [1]
88/21
constituent [1] 69/20
constitute [1] 198/22
constitutional [1]
115/1
consultation [3]
105/1 125/14 133/22
consulted [5] 110/9
201/22 201/24 202/6 202/17
consulting [1] 125/9
consumer [1] 119/15
contact [7] 20/12
95/4 142/12 142/14 146/4 147/3 164/12
contacts [1] 150/1
contain [1] 201/16
contained [1] 57/24
contaminated [1]
174/25
contingencies... [18]
98/12 105/20 107/21 108/3 108/18 108/24 109/1 110/24 114/11 119/10 137/11 139/20 139/21 145/18 147/7 156/16 187/19 194/22 contingency [2] 99/1 99/5
continue [6] 69/24
90/9 100/2 143/16 184/5 184/11
continued [3] 22/24 107/10 185/7
continuous [1] 197/6 contract [2] 16/24 92/2
contracts [2] 16/22 17/1
contrast [2] 14/16 40/17
contribute [1] 39/25
contribution [1]
91/17
control [6] 5/19 99/2
100/9 140/18 141/1 179/7
convene [1] 84/14
convened [3] 7/20
84/2 199/24
convenient [3]
142/21 142/25 147/15
convening [3] 90/3
95/17 107/20
conversation [1]
113/5
conversations [2] 182/11 187/22
cope [4] 179/12
179/16 181/12 182/18
copy [1] 171/19
core [3] 104/10 114/18 191/11
core participants [1] 191/11
corner [4] 104/21 118/2 133/7 145/8 coronaviral [1] 174/2 coronavirus [24] 115/2 115/12 116/18 116/25 117/7 117/11 153/19 155/20 156/5 156/25 157/20 159/18 160/25 162/7 162/10 162/12 162/14 163/15 165/9 165/10 184/8 184/10 185/2 193/9
Coronavirus Act [2] 165/10 184/8
corporate [9] 75/18 76/18 77/4 77/24 99/3 99/17 105/19 181/7

181/9
correct [54] 10/7
15/16 23/12 32/20 49/13 54/22 67/10 68/22 81/10 81/11 88/13 90/24 98/8 100/25 102/4 108/24 108/25 112/5 116/14 121/22 126/11 126/20 135/25 137/8 138/14 139/4 139/24 140/4 141/13 141/17 142/11 146/8 146/11 148/7 148/9 150/23 153/23 154/22 157/17 157/21 163/17 172/23 173/21 177/17 179/18 182/20 183/2 183/19 185/1 186/23 188/14 191/16 192/5 192/7
correctly [12] 32/17 87/21 108/18 121/3 160/12 161/12 161/17 163/2 163/5 163/8 164/7 198/21 corresponding [1] 34/22
cost [1] 31/13
could [78] 11/24 12/1 12/12 12/23 15/22 16/7 18/24 20/3 21/24 22/21 25/3 32/8 34/13 34/19 43/17 46/2 47/13 51/5 53/3 55/15 56/5 63/25 68/10 69/11 70/15 72/10 72/16 74/9 74/16 75/4 79/24 82/10 85/2 85/23 88/24 96/7 99/23 101/19 104/23 105/15 108/15 109/11 110/13 117/15 120/6 120/14 131/3 133/5 133/6 133/8 136/2 142/16 142/18 148/1 154/24 156/9 157/24 159/14 163/24 165/12 167/1 167/3 167/20 167/25 168/8 169/14 171/8 171/18 171/25 172/10 174/20 175/11 176/24 186/2 186/25 194/2 194/7 203/2 couldn't [2] 59/13 86/23
council [7] 3/17 81/18 82/15 84/12 146/9 183/13 185/23 councils [2] 45/23 46/1
COUNSEL [9] 1/11 66/1 66/12 74/12 191/13 200/14 204/7 204/14 204/19
counted [2] 148/19 148/20
countermeasure [2] 157/19 164/15
countermeasures [1] 157/16
countries [12] 5/9 11/5 13/16 20/18 23/5 24/10 25/8 25/19 25/21 27/3 60/8 73/6 country [19] 5/19 23/8 23/9 24/2 24/8 24/19 35/6 35/17 36/1 51/5 69/24 73/6 77/4 89/22 89/23 96/6 116/12 152/6 158/12
counts [1] 10/23 couple [1] 57/24 course [46] 17/23 32/2 38/13 40/4 42/10 cross-government 47/13 52/9 53/23 57/1 58/16 64/25 65/19 71/11 74/23 75/22 77/2 90/22 94/6 100/24 112/19 113/20 115/5 115/23 117/5 135/15 137/20 143/12 149/10 153/4 160/7 161/7 173/24 174/1 174/3 174/4 178/11 180/22 183/22 186/24 188/4 195/13 195/17 196/1 197/15 200/10 203/3
courses [2] 104/7 104/9
cover [3] 149/1 193/9
198/19
covered [4] 130/17 134/15 192/11 200/10 covering [1] 3/23
Covid [39] 2/15 3/14 42/24 45/19 55/3 55/6 58/7 65/24 89/9 90/6 90/7 90/10 90/12 96/5 96/9 109/3 131/6 131/25 134/20 135/15 144/9 145/14 145/24 147/11 153/20 156/19 156/23 159/20 160/9 161/5 164/7 165/9 168/5 175/25 182/25 183/4 186/15 187/10 200/6
Covid-19 [11] 2/15

## 3/14 55/3 65/24 144/9

 145/14 159/20 160/9 161/5 165/9 200/6created [1] 138/18 creating [2] 62/21 153/7
creation [1] 138/8 credible [2] 38/5 38/7 crime [1] $81 / 2$

CRIP [2] 106/5 106/15
crises [2] 89/18 195/24
crisis [10] 31/13 88/2 88/12 89/6 89/16 89/20 96/9 103/22
127/25 195/19
criteria [1] 32/15
critical [3] 145/6
170/13 185/3
criticism [1] 107/12
cross [8] 8/14 13/16 45/19 86/18 141/19 144/8 150/15 183/10 cross-border [1] 8/14
cross-cutting [1] 141/19
[2] 86/18 183/10
cross-national [1] 13/16
cross-purposes [1] 150/15
crosses [1] 8/11 crucial [4] 61/18 61/19 73/1 73/9 crucially [2] 36/20 168/12
crudely [1] 169/1 crying [1] 129/25 CTI [1] 200/9
culling [1] 128/23
culminated [1] 6/25
cultural [4] 18/4
45/16 197/21 197/25
culture [1] 197/6
current [3] 10/17 63/2 106/11
currently [5] 2/1 24/5
69/22 179/11 181/8
curve [1] 23/1
cusp [1] 135/4 cut [2] 39/9 39/15 cuts [2] 38/2 38/20
cutting [1] 141/19 cyber [7] 81/2 81/3 131/10 131/11 131/22 134/21 149/7
cyber attack [1] 149/7
cyber crime [1] 81/2
cycle [2] 16/18
148/21
Cygnus [18] 50/23
51/15 51/16 135/21
135/22 135/23 177/5
177/14 177/15 177/17
177/23 179/14 182/16
183/12 187/10 192/16
192/17 192/18
Cymru [1] 200/7

167/18 180/1
decade [2] 23/6 41/9
December [5] 133/25

December... [4]
135/4 142/2 143/11 188/19
December 20 [1] 188/19
December 2019 [1] 135/4
December 2022 [1] 143/11
decided [1] 136/23
decile [4] 13/15
35/15 37/5 37/6
deciles [3] 35/11
35/24 37/6
decision [12] 52/16
52/19 77/22 78/4
90/16 95/8 96/19
136/13 165/17 176/21 179/1 199/17
decision-maker [1] 52/19
decision-making [7]
52/16 77/22 78/4
90/16 96/19 176/21 179/1
decisions [7] 70/12 89/20 96/12 114/10 160/8 162/17 178/13 deck [1] 106/11 decline [7] 24/15 24/16 24/17 26/2 28/4 41/13 57/8
declines [1] 27/17
declining [2] 26/12 26/13
decrease [2] 33/11 33/14
deep [1] 158/2
deeply [1] 144/11
default [1] 108/1
defence [1] 90/10
deferred [2] 140/18 141/5
define [1] 44/16
defined [4] 44/9
45/15 45/21 48/3
definitely [1] 151/7
definition [8] 10/12
43/19 44/14 46/20
46/25 47/8 48/5
190/23
definitions [1] 190/9
DEFRA [1] 94/14
degree [4] 16/3
121/23 150/11 202/16
Deirdre [1] 47/21
deliver [1] 139/22
delivered [2] 29/7 64/14
delivery [1] 86/18
demand [2] 129/11 129/19
demands [3] 179/12 179/17 182/19
demonstrate [2] 25/1 46/18
demonstrated [2] 9/9 144/9
demonstrates [1] 60/1
dental [2] 58/11 59/17
department [60] 52/8
52/10 52/12 52/13 78/20 92/24 93/1 93/9 93/25 94/3 94/8 94/10 94/13 94/16 94/24 95/8 95/14 95/17 96/5 96/14 97/8 97/10 98/7 98/14 98/24 99/10 99/16 99/22 99/24 100/3 100/7 100/19 100/23 100/24 101/4 101/8 101/25 102/12 103/5 105/1 107/23 109/15 120/11 121/20 describe [5] 32/6 123/21 128/8 133/3 55/3 78/19 88/14 137/16 137/19 137/20 136/6 142/7 142/10 143/13 described [18] 5/5 143/17 144/16 144/19 $19 / 2$ 19/25 22/19 158/3 158/19 188/12 199/17
departmental [6]
80/15 100/20 141/15 144/8 158/17 158/20
departments [44]
77/15 77/17 77/20
80/17 85/16 92/21
92/22 93/12 93/16
93/18 95/13 95/22
96/2 96/10 98/10
98/25 99/13 100/17
100/22 103/8 105/2
106/18 107/10 110/12 designed [2] 178/19 112/7 112/15 112/25 113/11 113/19 114/10 desire [2] 127/14 135/8 135/9 136/1 140/19 140/20 141/3 141/8 143/23 143/24 144/24 145/25 149/24 152/6 153/5
departments' [1] 94/22
depend [1] 32/14 dependence [1] 20/10
depending [1] 95/7
depleted [1] 41/11 deployment [1] 70/16
depressing [1] 73/24
depression [1] 22/9
deprioritised [1] 139/17
deprivation [20] 4/11
18/15 24/18 24/22

24/12 71/12 86/8 90/17 125/15 126/18 129/15 138/18 142/3 143/13 154/8 154/10 169/23 174/16
describes [1] 93/17
describing [7] 19/4
36/10 36/17 91/15 99/15 125/9 169/8 description [6] 21/3 44/13 93/15 122/7 148/2 148/24
design [1] 201/13 202/16 197/8
desired [1] 132/8
despite [1] 14/23 detail [6] 14/5 106/1 137/10 147/23 147/25 201/17
detailed [1] 90/18 determinants [17] 3/9 6/3 6/18 6/22 8/17 15/20 15/25 18/13 28/17 29/1 41/5 41/8 53/16 55/13 71/1 71/3 71/7
determine [2] 99/6 153/11
determined [1]
147/16
determines [1] 59/20
develop [2] 99/5 173/1

26/7 35/24 36/5 36/14 developed [3] 99/3 38/19 38/22 39/4 109/18 165/14
development [6]
61/17 61/24 62/4
91/18 115/4 115/19
deviations [1] 22/25
devolved [30] 7/5
7/15 14/12 42/5 54/16 69/23 105/2 145/21 146/1 146/4 146/18 147/6 182/9 187/8
187/11 187/22 192/15 198/4 198/11 198/15 198/24 199/7 199/22 200/16 200/20 200/25 201/5 201/15 201/23 202/24
devoted [2] 85/14 189/2
DHSC [3] 121/20
182/10 188/21
DHSC's [1] 125/1
diabetes [2] 56/10 190/2
dictated [1] 170/20
did [69] 43/13 44/16 47/24 48/10 49/16 50/4 50/24 53/8 53/12 54/11 54/14 54/17 57/5 73/18 82/14 83/3 84/5 85/7 86/17 87/3 87/9 89/17 90/6 90/9 90/15 90/17 96/17 97/9 98/16 101/13 103/16 108/2 109/4 112/10 113/6 114/6 116/13 116/17 119/25 129/9 133/21 140/1 140/8 142/12 153/24 158/10 160/8 160/12 161/18 163/4 163/8 170/25 177/15 177/19 directed [2] 110/23 180/4 182/12 182/20 184/5 184/11 185/25 186/4 186/13 187/17 191/1 191/6 193/11 197/18 200/18 201/16 didn't [22] 29/5 37/6 38/4 48/15 48/22 82/10 85/8 104/9 109/10 116/16 134/13 136/4 138/14 138/15 141/10 144/22 157/6 165/3 166/21 193/8 196/3 200/22
die [2] 24/3 24/4
differ [1] 47/14
difference [23] 12/11 12/15 12/21 13/1 13/5 13/9 13/15 33/8 34/10 34/18 36/1 79/1 79/25 80/12 85/24 113/18 116/9 116/9 130/5
156/13 169/6 193/11

193/12
differences [22] 4/7 6/8 6/19 8/24 13/17 23/22 32/15 34/13 35/15 37/13 37/15 37/24 71/2 71/6 71/6 156/9 156/11 156/13 156/15 162/6 164/2 164/4
different [58] 4/7 4/9
14/1 14/22 15/8 17/14
21/15 21/21 43/17
44/17 44/20 45/20
46/9 47/4 50/14 51/4
51/4 51/5 54/20 60/8
60/25 61/7 64/22
66/19 67/14 80/1
80/16 86/14 86/16 88/8 89/22 90/14 94/8
96/22 100/21 100/22
113/24 116/7 117/3 117/13 119/2 122/10 126/22 127/1 127/2 132/5 138/5 148/3 148/17 149/4 164/3 173/6 186/10 189/8 189/9 189/11 189/12 198/2
differently [6] 44/16
50/14 65/11 80/3
80/10 189/12
difficult [2] 54/5 196/18
difficulties [2] 43/21 67/5
digital [1] 86/20
diminish [1] 29/4 diminished [1] 96/16
direct [6] 19/4 19/21 88/1 142/8 142/14 166/12

159/5
direction [3] 45/25
170/19 174/21
directly [1] 5/13
director [19] 2/20 6/6 76/10 77/8 78/7 78/11 79/10 81/17 83/20 87/22 97/15 98/4
112/8 118/5 119/23
139/20 166/21 193/22 195/12
Directorate [2] 88/3 88/25
directorship [3]
84/15 90/22 121/25
disabilities [6] 4/15
45/18 46/12 57/13
60/11 190/25
disability [1] 11/14
disabled [3] 68/9
70/20 190/19
disadvantage [6]
disadvantage... [6]
14/11 19/3 19/16
19/21 191/2 191/4
disadvantaged [2]
8/25 190/10
disadvantages [1] 21/19
disaggregated [1] 14/9
disagree [1] 46/7 disagreeing [1] 159/12
disappointed [1] 144/22
disaster [1] 198/8
disclosure [1] 137/2 discover [1] 47/24 discriminated [1] 19/5
discrimination [4] 17/19 19/12 21/2 22/15
discriminatory [1]
22/12
discuss [2] 82/8 187/20
discussed [2] 51/23 53/2
discussing [3] 69/2 73/8 170/9
discussion [5] 8/15 164/19 164/23 165/5 166/22
discussions [2] 88/14 100/20
disease [51] 58/5
70/5 72/2 72/8 80/23 93/8 115/12 116/2 116/12 120/18 120/19 120/20 120/23 120/24 121/13 121/14 122/3 122/12 149/8 149/11
152/23 153/11 153/18 153/22 154/2 154/3 154/3 155/8 155/16 156/24 157/14 157/25 159/7 162/8 166/9 166/17 169/5 169/13 170/6 171/23 171/24 172/3 173/4 174/7 175/6 175/14 175/16 176/13 176/14 176/23 190/2
diseases [6] 157/8 172/12 172/13 172/16 175/10 192/22
disobeyed [1] 34/12
disorder [1] 20/22
disparities [1] 68/4
display [7] 15/22
20/2 22/21 24/25 43/25 54/10 60/17
displayed [1] 52/4 disposal [1] 150/1 disproportionate [1] 57/18

## disproportionately

[1] 55/19
distancing [1] 164/19
distinction [1] 78/24
distinguish [1]
200/22
distributed [1] 64/6
distribution [1]
132/22
disturb [1] 197/9 divert [2] 6/4 17/11 diverted [1] 139/11 division [13] 81/22 101/3 101/10 102/2 102/9 102/15 102/16 108/8 109/16 109/17 112/6 125/7 142/6 DLUHC [3] 94/16 101/9 112/6
do [86] 2/5 3/18 4/22
7/12 7/16 15/6 18/1 19/10 19/11 25/5 27/7 29/19 35/6 35/13 36/11 43/2 44/13 50/6 50/18 58/1 62/9 63/18 65/10 65/11 67/20 68/1 69/16 69/25 70/13 71/5 77/10 77/16 87/13 87/15 89/12 89/12 90/10 91/13 93/13 95/16 102/18 104/6 105/14 109/5 110/2 112/23 114/21 117/20 117/22 122/7 122/12 122/19 124/6 126/9 128/19 129/3 129/13 129/14 130/4 130/14 130/24 131/21 131/24 132/24 138/21 142/25 144/19 145/7 154/24 156/4 157/8 159/11 161/21 174/14 176/17 177/2 178/10 178/10 180/2 180/3 180/5 186/16 188/18 191/20 196/16 202/11
doctors [3] 31/3 31/7 31/11
doctors' [3] 31/10 31/16 31/17
doctrine [8] 80/18 91/9 91/12 91/23 153/7 153/9 156/4 196/9
document [56] 44/21 49/18 50/2 50/16 50/19 50/22 52/4 54/3 97/13 97/17 97/20 98/21 103/17 103/21

103/22 104/11 104/14 $73 / 17$ 74/6 78/22 104/16 104/23 107/5 79/18 79/21 87/16 107/12 107/16 107/17 $\quad 98 / 5$ 98/18 103/1 110/19 114/15 114/18 $103 / 11$ 105/16 108/5 117/18 117/20 117/23 118/4 120/2 120/7 120/21 120/25 121/1 121/8 121/10 122/20 122/24 123/4 123/13 123/14 123/15 124/12 124/17 124/17 124/19 134/17 134/19 135/1 143/10 148/10 167/21 171/20 179/23 198/19 documentary [1] 189/1
documentation [9] 42/9 100/1 106/15 108/3 108/11 118/20 129/8 164/22 180/20 documented [1] 19/15
documents [30] 42/15 43/2 43/16 43/19 46/10 49/21 52/21 52/25 53/14 53/16 53/23 64/21 65/7 69/7 78/14 104/1 110/8 114/12 126/3 128/16 128/17 128/18 134/3 134/4 134/6 136/6 148/17 151/21 154/11 176/8
does [32] 34/15 39/8 39/12 39/14 41/14 46/5 46/18 51/16 51/18 52/21 65/2 65/10 69/20 77/16 84/25 86/24 89/17 95/2 95/11 110/22 120/4 120/5 149/1 152/21 164/8 168/16 169/15 170/22 176/24 192/1 197/2 198/19
doesn't [19] 30/3 33/18 33/21 43/23 66/25 113/17 139/22 141/14 148/25 154/23 160/24 161/1 162/14 164/8 192/1 196/2 198/9 198/19 199/5 doing [6] 11/13 11/16 dramatically [2] 23/1 70/25 100/22 119/13 178/3
doing live [1] 178/3 domains [3] 28/19 29/2 71/8
don't [80] 6/4 10/5 11/7 11/21 14/20 14/21 25/11 27/8 32/7 33/17 44/1 49/1 53/3 54/9 58/10 59/17 66/17 66/18 67/3 67/22 67/24 68/3 68/3

111/18 111/21 112/12 112/20 113/5 117/1 118/8 118/24 122/19 127/12 138/17 142/11 142/17 144/23 147/8 149/4 151/6 153/13 156/2 156/3 157/1 157/4 157/24 158/4 158/24 163/11 165/14 166/19 167/4 167/11 177/12 177/12 179/22 180/7 181/24 185/18 186/6 188/20 190/11 190/25 191/6 195/13 196/18 196/25 198/12 done [20] 5/20 7/23 8/1 8/5 17/18 17/25 73/25 95/5 149/13 149/21 180/11 180/15 180/20 181/8 181/16 182/7 192/18 192/24 193/3 193/15
dotted [4] 36/20
36/21 36/22 36/24
doubled [1] 30/23
doubt [3] 75/24 137/1 193/25
down [25] 2/7 10/6 12/1 12/16 13/20
31/14 31/17 33/1 33/2 37/16 38/9 38/18 38/21 39/3 39/5 53/6 69/20 73/14 107/24 120/12 120/16 154/25 161/7 167/25 186/11
downward [1] 35/1
Dr [3] 72/22 150/9
194/8
Dr Marmot [1] 72/22
Dr Pollock [1] 194/8
Dr Rubin's [1] 150/9
draft [3] 114/12
165/7 184/7
drafted [1] 189/7
dramatic [7] 24/9
28/4 33/10 33/14
33/18 34/17 62/1 24/7
draw [6] 40/2 62/17
62/22 63/18 114/12 149/25
drawing [5] 28/15
77/2 139/19 188/25 202/18
drawn [1] 159/23
drew [3] 30/3 96/9 96/11
drive [2] $3 / 19$ 141/18
driven [4] 165/20

168/10 176/21 201/8 driving [1] 170/13 drop [2] 8/7 34/17 drug [1] 20/10 Duchy [4] 86/1 86/11 87/14 87/19
due [7] 20/24 71/11 117/10 170/3 170/7 173/4 203/3
during [21] 1/16 11/10 23/6 30/4 40/23 41/3 42/10 49/10 52/15 53/22 54/20 56/5 68/22 75/22 84/15 96/5 97/14 98/4 112/7 149/21 193/4 duties [7] 52/14 108/21 111/12 111/21 112/9 114/6 132/9 duty [8] 112/2 112/17 113/1 113/12 113/14 113/18 113/22 114/4

## E

each [25] 2/2 2/2
8/11 25/20 26/4 35/11
61/1 61/1 61/7 61/8
69/23 69/24 127/12
132/11 149/14 152/1
158/17 168/21 168/22
168/23 169/9 187/22
195/4 198/11 199/22
earlier [17] 19/4
23/21 26/15 29/6 35/5
36/23 44/17 47/11
66/13 73/4 74/13
132/5 143/14 170/10
177/5 183/14 185/12
early [7] 19/9 19/18
61/17 61/24 62/4
70/16 83/12
ease [1] 163/25
East [1] 35/24
easy [1] 129/10
economic [33] 4/9
4/10 5/25 8/23 9/3
9/22 10/3 19/21 40/21
47/17 48/7 49/25
54/14 54/19 55/7
57/10 57/19 58/13
58/18 58/23 58/24
58/25 60/7 71/6 124/9
151/14 160/24 166/2
189/17 189/21 190/21
191/2 191/3
economists [1]
39/16
economy [3] 144/12
166/4 185/16
editions [2] 42/16 125/18
educate [1] 122/23
education [5] 4/11
9/18 19/13 19/18
education... [1] 28/21
educational [2] 9/20 16/3
effect [6] 19/4 38/13 40/8 50/20 166/4 183/24
effective [6] 78/3 114/1 128/3 156/10 165/4 185/21
effectively [1] 127/25
effects [5] 19/22 25/17 50/12 70/9 161/1
efficient [1] 78/1
effort [2] 183/7
183/10
efforts [1] 81/25
eg [4] 4/16 51/21
64/9 160/6
egregious [1] 71/14
eight [2] 83/22
177/24
eight weeks [1]
177/24
either [8] 47/7 67/10 82/10 136/2 148/20 166/8 174/20 201/24 elaborate [1] 88/24
elderly [1] 45/17
elected [2] 2/16 3/1 element [1] 126/16 elements [7] 101/17 124/24 126/22 130/17 181/4 183/7 189/23
else [5] 73/17 123/21 124/14 140/8 202/15 elsewhere [1] 139/11 embedded [4] 18/3 70/14 195/17 196/8 emergence [1] 172/16
emergencies [33]
79/5 79/11 79/23
86/12 87/3 89/22
89/24 101/3 101/10 102/2 102/9 102/16 103/17 104/2 104/4 104/18 108/8 109/16 109/21 109/22 114/14 114/25 118/12 118/14 119/3 119/8 119/19 120/4 125/7 140/18 140/20 141/2 194/12 emergency [53] 43/17 43/22 44/12
45/3 45/10 46/17 47/5 47/10 53/9 54/13
71/15 71/22 89/25 90/1 92/1 93/7 94/4 94/7 94/18 94/25 95/11 100/1 100/4 100/11 101/7 104/3

108/2 110/5 110/22 entirely [4] 58/17 117/17 118/1 119/17 $113 / 18$ 180/8 196/9 122/24 124/18 124/19 entities [2] 110/24 127/10 127/24 128/5 120/3 129/2 130/15 132/20 entitled [2] 50/3 134/4 140/23 141/4 144/11 144/15 152/2 178/11 179/7 194/9 198/4 198/23 200/1 emerging [18] 19/7 19/8 115/11 116/2 122/12 149/11 153/22 154/1 166/9 171/23 173/1 173/4 173/6 174/7 175/5 175/10 175/14 192/22
employees [1] 151/5 employment [7] 9/11 16/10 19/14 19/16 28/21 55/20 62/21 enable [1] 152/25 end [8] $4 / 2$ 133/23 133/24 153/2 169/24 171/2 181/24 185/25 ended [2] 139/14 141/24
Engagement [1] 125/4
engages [1] 93/7 Engineering [2] 149/18 176/1
Engineers' [1] 177/8 England [34] 3/13 7/4 7/9 7/11 7/11 7/15 7/19 12/6 14/12 15/1 15/18 20/5 25/11 25/13 25/14 25/16 26/1 26/2 31/21 35/5 40/9 40/17 48/8 49/7 59/24 60/12 60/14 101/22 104/25 107/6 107/21 128/15 179/23 197/5
England's [1] 49/4 English [5] 7/13 105/7 106/21 106/25 107/25
enhanced [2] 64/7 64/15 enhancing [1] 64/18 enormous [1] 5/15 enough [6] 24/21 30/3 42/8 99/12 167/5 184/18
ensues [1] 95/11
ensure [6] 95/12
95/21 106/4 135/18 136/3 171/6
ensures [1] 168/9 ensuring [2] 78/15 95/3
entered [2] 41/10 57/6
entire [1] 9/1

65/24
entity [1] 99/23
environment [1] 94/15
environmental [1] 6/1
envisaged [3] 163/5 164/18 165/18
epidemic [1] 120/18 epidemiological [2] 72/3 158/2
epidemiologists [1] 158/22
epidemiology [1] 2/24
EPRR [2] 77/3 77/7
equal [1] 39/24
equalities [1] 52/14 equality [7] 2/22 50/4 50/5 50/7 52/22 53/1 120/22
Equality Act [1] 50/7 equipment [4] 64/5 163/3 163/4 163/9
equity [11] $2 / 20$ 2/25 3/12 5/11 5/20 6/6 6/13 7/19 29/7 63/19 63/22
Erm [1] 163/7
erroneous [2] 100/8 100/14
error [1] 86/19
escalated [1] 140/24
essence [1] 160/10 essential [2] 80/14 111/17
essentially [10] 79/3
89/17 89/18 106/9 123/24 127/24 148/8 168/20 174/17 178/5 established [3] 78/20 163/20 199/9
estimates [2] 67/12 161/5
et [1] 124/25
et cetera [1] 124/25 etc [1] 4/17
ethnic [47] 14/1
14/14 14/24 15/3 15/8 15/12 15/18 16/1 16/5 16/9 16/14 16/21 16/23 16/25 17/7 17/9 18/7 18/14 18/19 19/10 19/17 42/23 45/17 46/13 48/8 49/6 49/8 49/12 50/1 51/22 55/19 56/7 57/13
57/16 57/19 65/4 67/2
67/15 67/23 69/12

| $69 / 17$ | $70 / 19$ | $71 / 2$ |
| :---: | :---: | :---: |
| $71 / 6$ | $168 / 11$ | $172 / 17$ |
| $183 / 3$ |  |  |

71/10 73/9 190/18 184/6 187/16 197/5
ethnicity [11] 4/12 197/24 203/4
13/22 13/24 14/5 40/21 49/11 64/23 61/10
66/22 67/6 69/1 71/13 evident [3] 89/21
EU [4] 120/1 181/22 91/11 171/16
186/8 186/10
Europe's [1] 2/22
European [2] 60/8 183/11
European Union [1] 183/11
evaluation [1] 179/5
even [12] 11/20
15/16 18/18 30/15
46/2 60/1 69/9 75/17 137/9 159/16 185/12 189/11
event [8] 43/21 56/22 72/4 79/2 94/21 142/1
152/14 185/11
events [11] 114/21
117/7 118/10 118/11
118/22 119/20 119/25
128/2 136/16 195/6 197/19
eventuality [1]
155/24
ever [7] 85/7 98/17 113/1 113/6 118/7 155/25 201/14
every [19] 22/23 24/3
24/19 28/20 33/20 33/23 34/16 37/1 37/11 37/17 61/15 62/20 103/23 109/5 149/1 152/13 152/14 158/16 187/12
everybody [6] 10/23 97/1 140/7 159/5 203/6 203/10
everybody's [1]
155/5
everyone [4] 28/22
67/1 134/8 154/21
everyone's [1] 203/5
everything [4] 18/16
39/8 114/4 123/21
evicted [1] 129/5
evidence [54] 1/4
1/14 1/22 3/22 6/16
14/24 19/8 21/10 22/5 22/10 24/2 25/2 28/19 35/8 40/13 41/2 48/7 52/20 61/10 62/2 63/1 71/11 74/3 74/16 75/1
78/21 83/11 85/9
85/19 91/4 91/21
92/21 95/20 97/8
100/15 101/1 103/2
108/20 109/7 110/4
111/16 111/24 132/19 22/15
136/15 143/21 151/23 exclusively [1] 84/5
(62) education... - exclusively

| E | $35 /$ |  | 66/9 200/7 | finished [1] 28/10 |
| :---: | :---: | :---: | :---: | :---: |
| excuse [2] 65/17 | 37/13 |  | fa | ng |
| 143/2 | 40/15 | ex | fa | fire [1] 79/19 |
| executive [5] 44/22 | 67/1 |  |  | first [40] 2/10 9/8 |
| 18 | expectation [2] 45/9 | 32/14 34/11 38/2 42/2 | fatalities [5] 154/8 | 23/25 31/10 34/9 |
|  | 13 | 58/1 78/17 95/1 110/4 | 172/8 174/24 174/2 | 35/14 40/5 55/16 7 |
| Ex | expectations [1] | 138/22 159/25 192/10 | 175/4 | 75/3 83/8 86/8 90/23 |
|  | 132/20 |  | fault [1] 59/6 | 91/19 108/21 114/17 |
|  | expected [9] | external [16] 20/2 | fault lines [1] 59/6 | 114/17 114/17 117/21 |
| 50/15 50/23 51/15 | 106/21 115/18 116/5 | 58/15 58/20 59/14 | features [1] 190/2 | 119/17 127/4 130/23 |
| 135/22 135/23 177/5 | 116/8 116/22 122/2 | 59/18 149/18 149/19 | February [1] 93/21 | 131/2 133/2 133/12 |
| 177/17 177/23 178/2 | 124/9 154/8 | 149/21 150/1 150/17 | February 2020 [1] | 133/17 133/19 133/2 |
| 178/2 178/8 178/9 | expecting [1] | 150/20 150/24 15 |  | 134/2 134 |
| 178/9 178/15 178/17 | expenditure [1] | 176/1 176/2 177/9 | Federation [1] 71/9 | 141/7 149/23 150/3 |
| 178/22 178/24 179/6 | 40/ | externally [3] 149/16 | feed [1] 70/15 | 151/6 151/9 155/16 |
| 179/14 180/10 180/18 | exp |  | feeling [1] 73/20 | 176/3 184/21 185 |
| 181/5 182/16 182/22 |  | [1] |  | firstly [2] 66/21 |
| 182/24 183/12 187/10 | 15/19 20/7 20/10 | extract [1] 143/9 | fell [3] 37/4 37/5 | 100/13 |
| Exercise Cygnus [10] | 21/20 22/2 62/6 82/16 | extreme [3] 179/1 | fellow [3] 2/16 3/1 | fiscal [1] 39/19 |
| 50/23 51/15 135/22 | 127/14 173/21 | 179/16 182/19 | 3/2 | fit [4] 32/22 109/2 |
| 135/23 177/5 177/17 | 173/25 195/15 197/17 | extremely [3] 73/22 | female [3] 33/3 33/4 | 144/20 190/9 |
| 179/14 182/16 183/12 | experienced [4] 4/12 | 78/1 145/3 |  | five [4] 28/24 30/1 |
|  |  | F |  |  |
| exercises [4] 51/9 <br> 51/12 109/22 178/4 | 20/15 20/25 62/1 | face [3] 89/23 120/24 | few [7] 16/16 48/13 | 109/5 |
| exercising [3] 99/1 | experiencing |  | 66/10 71/18 76/13 | fixed [1] 86/6 |
| 131/9 135/19 | 17 | fa | /21 187/7 | flaws [2] 71/18 177/3 |
|  | ex |  | fewer [2] | exible [1] |
| 142/ |  | facet [1] 157/16 |  | [3] |
| exh | expert [16] | facing [6] 123/6 | 16 78/8 91/ | 130/21 |
| 169/16 | 40/3 54/22 | 148/5 148/11 | 21 147/7 149 | ooded [1] |
| [1] | 149/15 150/5 151/11 | 170/13 178/13 | 158/9 | ing [5] 80/22 |
| exhibits [1] 75/16 | 151/16 157/5 158/16 | fact [23] 27/11 29 | fields [1] 150/6 | 94/13 129/6 149/6 |
|  | 167/8 168/11 173/22 | 50/19 54/9 76/14 | figure [16] 25/7 | 53/6 |
| $162 / 14182 / 12$ | 175/19 175/21 201/25 | 76/17 84/17 86/4 | /24 26/23 26/24 | floor [1] 82/24 |
| existed [1] 40/23 | expertise [12] 2/9 | 91/24 97/14 98/6 | 27/21 28/3 30/2 31/16 | flow [1] 166/5 |
| existed [1] $40 / 23$ | 103/12 105/18 139/19 | 102 | 35/9 35/10 35/19 | flu [49] 47/23 48/8 |
| $157 / 12$ | 145/2 150/20 150/25 | 121/11 163/14 163/18 | 35/21 36/11 37/10 | 48/17 48/19 49/5 49/7 |
|  | 151/17 151/22 158/2 | 169/8 171/17 175/9 | 37/18 173/16 | 49/20 50/11 59/23 |
| 54/15 54/18 55/7 55/9 | 158/11 158/25 | 181/6 194/12 201/4 | Figure 3 [1] 25/24 | 60/6 115/8 115/14 |
| 55/12 56/9 57/15 58/2 | experts [14] 117/4 | factors [11] 6/1 6/23 | figure 4 [1] 27/21 | 117/4 122/6 125/5 |
|  | 150/2 150/6 151/20 | 20/7 21/3 42/21 42/24 | figure 5 [1] 28/3 | 125/11 132/18 133/1 |
|  | 166/13 166/20 167/9 | 48/3 49/21 56/1 | figure 6 [2] 35/9 | 133/21 144/14 146/5 |
|  | 167/18 174/18 190/9 | 64/24 189/23 | 37/10 | 146/12 162/6 162/9 |
| ex | 201/21 201/23 201/23 | Faculty [2] | figure 7 [2] 35/19 | 62/11 162/15 163/20 |
|  | 202/5 | failed [5] 84/14 100/8 | 35/21 | 163/23 163/23 163 |
|  | explain | 100/10 153/9 159/6 | figures [15] | 64/21 165/3 165/8 |
|  | 13/23 21/12 37/23 | failing [4] 3/25 55/2 | 12/2 26/5 27/13 27/22 | 179/19 181/7 181/18 |
|  | 55/4 62/17 66/20 | 123/18 195/23 | 30/4 31/5 31/6 31/20 | 183/15 183/17 183/2 |
| 114/20 153/3 | 101/6 116/15 136/12 | failures [1] 71/15 | 37/25 39/16 39/18 | 185/20 185/22 186/17 |
|  | explained [1] 185/12 | fair [10] 3/11 62/21 | 39/20 191/18 192/5 | 186/18 187/9 187/12 |
| expectanc | explaining [5] 4/5 | /25 82/13 107/12 | fill [1] 123/25 | 87/23 188/4 190/6 |
|  | 12/3 13/25 62/16 | 129/7 152/19 152/20 | final [4] 56/24 72/17 | 192/21 |
|  | 85/24 | 158/4 191/7 | 127/6 145/16 | focal [1] 105/4 |
| $10$ | explanation [3] 38/7 | Fairer [1] 3/ | finally [5] 21/24 28/2 | cus [11] 81/25 |
| 11/13 11/19 11/20 | 162/19 184/20 | fairly [3] 119/5 | 52/3 72/9 197/3 | 84/21 85/11 85/16 |
| 12/6 12/17 12/22 13/2 | explicit [1] 69/15 | 10 163/20 | financial [1] 185/16 | 8/1 89/5 115/14 |
| 13/6 13/11 22/4 22/22 | explore [1] 10/3 | fa | financially [1] 166/3 | 16/13 155/5 155/20 |
| 23/3 23/6 23/10 24/11 | explosive [1] 81/4 | fall [2] 34/22 35/5 | find [6] 17/20 43/13 | 55/21 |
| 24/16 24/17 25/7 26/3 | expose [2] 58/2 | falls [1] 42/6 | 53/12 60 | cused [6] 80/ |
| 26/8 26/15 27/4 27 | 59/15 | iliar [7] 75/1 | 67/14 | 13/6 117/4 155/14 |
| 7/16 31/24 33/11 | exposed [4] 55/1 | 117/8 176/6 194/2 | finding [3] 9/2 9/21 | 155/15 173/19 |
| 33/25 34/20 35/10 | $\begin{aligned} & 55 / 2159 / 671 / 15 \\ & \text { expressing [1] } 62 / 15 \end{aligned}$ | $\begin{array}{\|l\|} \text { 194/16 194/18 195/21 } \\ \text { Families [3] } 65 / 24 \end{array}$ | $\begin{aligned} & 196 / 10 \\ & \text { fine [1] } 177 / 12 \end{aligned}$ | focuses [1] 173/17 <br> focussing [1] 169/17 |

(63) excuse - focussing

F
fold [1] 153/21
follow [4] 29/2 32/8 62/7 196/3
following [9] 52/4 53/8 60/22 61/10 86/18 139/18 160/1 187/9 194/14
follows [4] 29/11 45/8 152/21 166/6
food [1] 129/3
foot [1] 2/2
fora [1] 91/20
force [4] 97/14 97/23
98/1 168/4
foreign [1] $3 / 4$
foreseen [2] 159/25 165/18
foresight [1] 166/1
foreword [1] 168/7
forgive [23] 6/14 32/3 32/7 33/15 80/7 83/17 103/12 122/14 123/17 127/5 137/15 138/1 138/6 150/16 159/11 165/10 167/3 172/15 179/22 186/16 194/16 199/24 200/23
forgotten [2] 80/8 138/2
form [9] 100/20
106/6 125/21 136/24 137/10 149/7 161/24 168/20 201/24
formal [18] 92/14 95/2 95/12 95/21 96/2 135/24 141/22 145/18 145/23 146/4 146/15 147/4 176/2 176/3 176/9 182/7 188/7 199/21
formally [2] 98/18 141/14
formation [2] 52/16 52/23
formed [2] 151/22 168/18
former [4] 89/8 95/19 105/13 139/19
formulating [1] 45/9
forth [5] 96/17
108/23 110/6 130/16 132/23
fortunate [1] 11/8
forum [8] 45/22
121/11 122/21 124/4 132/15 147/2 182/12 182/13
forums [29] 46/2
102/3 103/15 107/7 109/20 120/2 125/12 126/4 127/3 127/8
128/21 129/24 130/11

130/19 131/5 131/12 132/2 134/17 139/1 140/13 140/21 141/5 141/11 141/23 142/5 142/9 142/10 152/7 192/2
forward [4] 26/21
138/1 182/10 195/19
found [8] 20/20 22/7 22/10 23/19 40/14 46/5 49/7 127/15
Foundation [2] 7/20 180/1
four [16] 12/4 22/23 25/7 25/18 28/22 33/20 33/23 34/16 35/3 35/4 61/1 61/7 90/16 171/21 182/4 182/12
four nations [3] 12/4 35/3 35/4
four years [4] 22/23 33/20 33/23 34/16
four-nation [1] 90/16 fourth [1] 56/13
frame [2] 84/10 178/4 framed [1] 45/12 framework [9] 108/23 110/1 110/7 128/1 128/13 142/19 143/9 168/9 194/23 fraud [1] 86/19 frequency [3] 173/1 186/7 187/16 frequent [2] 83/13 172/18
Friday [1] 1/1
fulfil [1] 100/3
full [4] 23/19 132/16 164/25 176/2
fully [2] 160/24 161/21
function [5] 78/5 78/8 86/21 101/12 101/18
functions [9] 77/8
89/3 89/8 90/10 90/14
91/8 103/8 114/11 135/18
Fund [1] 5/8
fundamental [1] 197/8
fundamentals [1] 111/11
funding [10] 29/21
30/18 31/21 31/24
32/10 38/11 38/12 38/13 38/15 138/8
furlough [1] 166/2
further [13] 9/12 19/13 67/9 83/18 107/24 120/16 122/13 143/18 184/11 185/8 191/8 200/14 204/18
future [4] 7/24 60/25 63/23 64/13

## G

G7 [1] 23/9
game [1] 130/20
game's [1] 34/1
gap [1] 13/11
gaps [1] 18/6
gathering [2] 70/18 70/21
gauge [1] 127/9
gave [1] 31/20
gay [1] 22/1
GCSE [1] 16/3
genders [1] 27/13
general [23] 17/22
20/23 31/13 38/25 39/22 62/25 63/15 80/2 80/10 82/8 85/22 86/12 87/4 88/17
89/10 116/23 121/25 140/4 148/1 152/15
172/14 182/16 183/5 generally [5] 52/17 73/3 103/9 108/14 140/6
generate [1] 157/24
generated [8] 51/8 159/17 159/19 160/4 160/18 162/23 176/12 183/2
generates [1] 154/7
generating [2] 158/6 168/17
Generations [1] 7/24
generic [3] 89/10 130/24 149/8
generically [2] 159/3 168/14
genesis [1] 93/25
gently [1] 87/16
geographical [4]
10/3 40/15 60/1 201/2
get [26] 10/24 21/17
21/19 24/3 29/5 29/20
30/1 31/15 32/11
32/13 33/7 34/4 37/7
46/13 51/25 51/25
56/11 58/15 59/13
59/14 69/16 123/19
129/3 134/18 145/13 177/13
gets [1] 155/9
getting [8] $5 / 20$ 26/14
26/16 26/22 33/9
94/17 143/5 155/25
give [30] 1/14 6/2
10/12 23/14 23/19
28/20 31/5 32/14
53/21 61/15 74/16
80/6 91/4 94/11 103/2
110/9 144/21 146/3
146/22 160/19 161/21

162/16 162/19 167/21 182/14 190/6 191/11
196/12 196/18 196/22
given [12] 1/13 25/2 65/22 112/8 121/18 122/11 160/5 165/12 175/9 175/12 190/10 197/8
gives [2] 94/12 175/5 giving [3] 62/20 71/11 97/7
global [2] 3/17 6/22
globally [1] 27/2
glossary [1] 44/7
go [37] 14/5 19/13
27/21 28/2 31/22 31/25 32/8 37/10 44/24 67/8 67/13 71/4 72/9 74/4 75/17 77/7 78/14 92/13 98/12 102/5 104/14 105/16 106/1 112/21 116/15 120/12 120/13 120/14 130/4 137/21 158/12 160/19 161/19 171/25 174/22 180/17 202/3
goes [4] 17/10 29/9 29/18 33/1
going [31] 2/8 11/22 22/17 23/10 24/25 26/11 27/12 27/14 31/15 32/13 32/13 33/2 33/13 38/7 42/2 47/7 47/12 55/22 58/14 59/23 65/18 70/10 72/12 87/23 93/9 113/20 147/24 180/15 180/17 197/15 197/16
gone [3] 31/14 31/17 61/3
good [30] $1 / 45 / 20$
8/8 8/10 8/12 10/24 11/14 39/13 42/8 62/4 62/22 65/6 66/7 66/7 91/15 93/15 99/12
114/24 125/22 129/15 130/3 130/24 132/10 132/14 135/20 153/6 160/22 161/15 193/4 197/17
got [22] 11/7 19/7
19/8 24/13 24/14
24/20 29/23 29/25
$32 / 2132 / 2333 / 17$
34/16 39/18 63/11 67/10 98/13 100/15 113/14 123/19 196/12 198/23 200/1
governance [1] 99/4 government [173]
3/11 7/1 7/12 8/4 30/5 30/9 38/25 39/7 39/8 39/11 39/14 39/18

39/20 40/7 42/4 44/22
45/13 45/23 45/25
48/14 48/15 52/10 52/17 54/16 59/4 63/10 77/5 77/15 77/17 77/22 77/24 78/1 78/12 78/15 78/16 78/20 79/9 80/2 80/10 81/16 85/10 85/15 86/7 86/18 86/19 86/20 86/20 86/21 88/2 92/6 92/15 92/21 92/22 92/24 93/1 93/6 93/12 93/25 94/2 94/3 94/8 94/9 94/13 94/24 95/8 95/15 96/5 97/8 97/10 98/7 98/16 98/24
98/25 99/3 99/10
99/13 99/15 99/22
99/24 100/7 100/23
101/8 101/11 101/13
101/17 102/1 102/3
102/8 102/11 102/14
102/20 102/22 103/4 103/5 103/7 103/7 104/25 105/2 105/5 105/7 105/9 105/11 105/14 105/21 106/18 106/20 106/25 107/10 107/22 107/25 108/1
110/12 112/3 112/6 112/10 112/25 114/6 120/10 121/20 123/21 128/22 135/8 135/8 135/13 135/14 135/16 136/1 136/4 140/9 140/19 140/19 140/24 141/2 141/8 142/10 143/10 143/12 143/14 143/16 143/17 143/23 144/10 144/13 144/19 144/24 145/20 145/25 145/25 148/10 149/15 150/11 150/17 150/21 151/3 151/5 151/8 151/12 151/18 152/6 158/19 163/22 183/10 187/17 187/18 187/25 188/1 188/7 194/20 198/11 199/7 199/16 202/6 202/16
Government's [1] 109/16
governmental [1] 89/10
governments [3]
114/2 188/6 199/7
grade [2] 9/11 126/15
gradient [11] 9/1 9/5
9/9 11/19 11/20 24/12
24/13 29/11 36/15
37/1 62/7
granular [1] 137/9

## G

graph [13] 32/7 32/8
32/16 32/18 32/22 33/16 33/17 37/4 39/18 58/6 58/7 58/7 58/11
graphs [5] 31/23
31/25 32/5 32/12 33/7
grapple [1] 124/14
grateful [3] 74/14 203/3 203/8
great [4] 29/7 31/8 34/7 175/11
greater [20] 29/12
35/22 36/13 36/14
38/1 38/19 38/22
38/23 38/23 38/23
39/4 39/4 39/20 39/21
39/21 39/21 58/9
58/19 58/19 62/7
Grenfell [1] 137/12
Grenfell Inquiry [1] 137/12
grew [2] 96/17 127/4
groceries [1] 59/12
ground [1] 139/23
group [12] 2/22 15/9
17/7 17/9 19/17 26/3
49/12 86/20 105/6
130/25 151/9 201/25
groups [81] 4/8 4/9
5/4 8/25 9/13 9/16
14/2 14/13 14/15 15/3 15/3 15/10 15/13 15/18 16/1 16/5 16/9 16/15 16/21 17/3 18/9 18/14 18/19 19/10 20/1 20/6 20/9 20/14 21/1 21/8 22/1 28/18 28/18 40/22 40/23 42/18 42/23 46/9 47/12 47/17 47/25 48/21 49/8 50/1 50/14 51/4 54/4 54/20 55/20
56/7 57/13 63/24
66/15 67/2 67/15
67/23 69/1 69/13
70/11 70/19 70/20
71/20 72/21 73/9
90/17 107/20 140/21
141/6 142/6 149/2
149/4 150/5 151/11
151/16 151/22 151/24
189/9 189/12 189/13
190/10 190/22
groups' [1] 4/13
grow [2] 8/18 41/6
growth [2] 23/6
30/16
guard [2] 122/3 134/8
guess [2] 33/2 71/18 guidance [34] 43/11

45/2 45/4 45/13 46/6 46/19 47/19 78/14 94/1 97/10 97/11 97/25 98/3 98/7 98/13 100/8 100/15 103/14 108/11 109/24 117/16 121/4 124/2 124/23 125/4 127/18 128/5 129/11 130/1 140/17 181/25 184/13 189/1 189/13
guide [2] 103/24 143/17
Gypsy [2] 16/5 20/11 H
H1N1 [3] 47/23 48/2 181/7
had [98] 7/11 7/23 12/10 22/22 22/24 27/17 30/23 30/25 31/10 31/14 31/17 31/23 32/6 33/19 34/8 38/2 38/5 40/8 42/20 48/23 50/18 50/19 59/2 69/3 69/3 69/5 69/9 69/9 70/13 73/16 73/19 73/23 76/7 78/17 81/23 86/15 87/10 88/8 89/11 90/14 95/21 95/23 97/21 107/10 108/20 112/13 113/9 115/5 117/6 118/19 119/3 119/11 119/19 122/25 122/25 123/9 123/13 125/6 127/8 130/18 134/8 134/22 137/21 138/13 147/12 148/3 154/21 156/18 158/5 159/19 160/18 162/17 163/22 163/23 165/17 174/1 175/10 176/3 176/7 177/3 180/13 181/1 182/1 183/23 184/4 184/15 184/21 185/5 185/7 185/12 188/15 192/24 192/25 193/3 193/24 194/14 200/9 202/17
hadn't [7] 28/10 38/6 83/10 84/1 138/21 183/3 185/18 half [8] 33/18 33/20 34/6 34/15 34/17 59/13 171/13 184/20
Hammond [45] 74/5 74/11 74/14 74/16 76/10 77/1 79/2 79/18 84/24 88/16 89/21 97/7 101/23 105/18 110/2 112/18 114/3 115/23 118/14 123/17 129/19 133/21 138/15 have [230] 204/11
hand [10] 73/16 hands [1] 141/2 happen [8] 19/12 198/17 188/4 61/19 61/25
happily [1] 161/6
happy [5] 68/16 202/25
harassment [1] 17/19
hardly [1] 34/4 141/16
Hargreaves' [2]
118/16 191/25 108/15
harmful [1] 16/17
has [55] 1/24 5/8 42/10 42/16 43/5 161/8

139/5 139/18 144/20 haven't [6] 7/25 8/5 147/22 152/21 155/17 $67 / 10$ 79/17 148/19 161/23 162/22 164/21 148/20
166/23 170/10 172/14 having [12] 53/25 173/19 175/9 180/8 65/1 65/3 65/6 113/19 187/6 189/22 191/13 $119 / 4$ 138/21 156/7 200/15 202/14 203/7 101/23 102/6 104/21 118/2 132/7 133/7 145/8 154/1 154/1 98/17 110/2 170/25 178/5 181/20 198/13
happened [14] 27/11 38/12 48/23 60/6 89/3 102/17 108/9 117/2 118/12 137/24 139/5 139/9 139/13 177/25 happening [2] 59/19
happens [6] 19/17
58/18 61/18 61/19

130/4 161/21 191/19
hard [2] 23/25 32/24 Hargreaves [5] 75/25 76/17 76/23 94/11
harm [3] 22/9 44/11
harmonise [1] 70/1
7/24 8/13 9/2 13/23 14/17 17/18 17/25 19/2 23/4 27/17 40/14 56/15 58/4 61/3 62/4 62/23 64/25 66/20 67/18 68/12 70/2 70/5 71/12 73/7 73/23 76/19 76/22 78/21 80/4 80/5 89/2 93/1 93/25 95/14 95/18 95/19 98/13 98/14 99/8 103/22 112/1 112/3 114/20 128/3 139/21 141/10 145/9 148/16 148/25 156/20 hasn't [3] 7/23 8/3

115/14 153/2 henceforth [1] 176/18
her [5] 62/23 63/20 66/1 66/14 85/13 her Ladyship [1] 62/23
here [20] 12/2 13/14 19/15 25/5 35/13 35/23 37/19 38/7 44/6 63/18 64/23 67/8 121/16 121/19 124/7 167/2 169/9 171/22 174/6 181/4
hidden [1] 68/11 hierarchy [3] 56/20 201/10 201/12
high [7] 20/18 27/3 30/25 40/11 58/24 115/25 116/2
high-income [1] 20/18
higher [22] 9/3 9/10 9/17 9/23 20/21 22/5 22/7 22/10 48/21 49/5 55/13 56/6 57/12 60/10 60/12 60/13 111/9 115/21 122/6 122/16 154/12 175/23 highest [9] 9/13 13/4 16/4 16/11 47/13 49/10 58/22 115/18 171/1
highlight [5] 4/4 8/21 20/3 21/24 52/11
2 Highlights [1] 172/4 hindrance [1] 71/24 Hine [3] 47/21 48/1 49/19
Hine review [2] 48/1 49/19
his [6] 71/17 73/16 85/13 93/18 95/20 194/13
historical [2] 34/20 60/8
historically [3] 13/23
34/24 66/20
history [5] 20/21 24/5
33/19 93/24 114/20
hit [4] 23/16 58/21
59/4 59/24
hits [1] 65/9
home [3] 55/23 93/20 181/13
Home Office [1] 93/20
homelessness [2]
20/10 20/21
homes [3] 129/5
181/12 181/16
honorary [1] 3/2
honour [1] 3/7
hope [3] 25/1 113/24

| H | 1 |  | I spoke [1] 180/3 |  |
| :---: | :---: | :---: | :---: | :---: |
| hope... [1] 145/11 | 1 | $11$ | $20$ | $12$ |
| horrible [1] 115/5 | I add [1] 200/23 |  |  |  |
| hospital [2] 178/7 <br> 181/14 | I affirmed [1] 11/6 | I have [6] 73/19 76/9 | I suppose [1] 88/1 | 4] 7/20 36/16 |
|  |  | 88/13 142/17 200/11 | I take [2] 62/13 | 38/11 48/21 5 |
| hosted [1] 180/ | 150/18 164/5 198/21 | 201/19 | 196/23 | 79/19 88/13 |
| Hot [1] 3/16 |  | I haven't | 1 t | 90/21 108/9 |
| hours [2] 16/22 | I apologise [1] |  |  | 143/7 167/22 197/21 |
| 16/24 | I appreciate [1] |  |  | 180 |
| household [2] 1 | 62/19 |  | 44/15 46/7 47/2 50/12 | 109/9 180/13 |
| 17/9 | 1 | I interru | 51 | I went [1] 190/5 |
| householde | 1 arrived [1] |  |  | I will [4] 77/10 107/13 |
| 129/5 | I ask [4] 1/18 52/3 | st [7] 31/25 57/23 | 72/22 73/15 74 |  |
| househo | 74/21 191/11 | /18 66/9 | 75/11 76/20 77/20 | on't [1] 71/ |
| 18/21 | I begin [1] 1/12 |  |  | onder [1] |
| housing [10] 18/1 | I believe [3] 75/2 | I know [6] 58/6 | 83/16 84/4 85/15 86/4 | I would [21] 21/17 |
| 94/16 101/4 101/24 | 176/5 176/20 | 126/7 182/11 189/18 | 88/10 88/21 88/25 | 48/14 78/3 84/10 |
| 102/8 102/10 102/12 | I call [2] 148/2 | 00/25 | 89/4 89/13 90/21 | 89/14 95/25 105/10 |
| 102/16 103/6 142/7 | 177/19 | 1 lamented [1] | 91/21 92/1 93/15 | 105/16 110/8 117/1 |
| how [76] 4/22 5/3 | I can [8] | I left [4] 90/8 105/25 | 93/22 93/25 94/10 | 121/5 121/15 130/3 |
| 10/15 10/19 13/17 | 62/9 83/22 103/2 | 13 | 95/15 96/9 97/22 98/9 | 14 |
| 18/3 18/12 21/15 | 147/9 178/3 188/9 | I looked [1] 50/5 | 99/15 100/13 100/22 | 188/23 195/14 200/ |
| 23/15 24/1 46/16 | I can't [11] 26/18 | I may [7] 73/15 87/1 | 101/17 102/21 105/12 | 202/3 202/22 |
| 50/11 50/13 50/13 | 31/5 37/23 88/14 91/4 | 156/2 162/24 167 | 106/6 107/12 109/6 | I wouldn't [8] 78/ |
| 51/4 52/12 53/22 | 95/16 96/1 100/14 | 189/6 189/16 | 109/8 112/13 112/16 | 95/18 137/23 147/13 |
| 53/23 55/16 62/17 | 105/23 127/6 202/4 | I mean [9] 10/14 | 113/12 113/14 113/15 | 157/13 196/7 197/24 |
| 68/15 68/16 70/15 | I chaired [1] 28/17 | 26/18 33/23 34/8 | 113/24 114/1 114/8 | 197/24 |
| 71/25 82/14 83/3 | I confess [1] 32/5 | 70/24 110/4 129/19 | 114/9 115/20 116/6 | I'd [9] 8/19 44/20 |
| 84/10 93/15 94/12 | I could [3] 18/24 | 139 | 116/8 117/9 118/9 | 46/7 122/14 138/18 |
| 99/15 100/11 100/16 | 34/19 69/11 | 1 | 118/15 119/20 119/22 | 144/22 157/14 177/24 |
| 101/6 103/21 103/24 | I couldn't [1] 86/23 |  | 121/1 122/14 123/1 | 179/24 |
| 104/2 108/6 120/3 | I did [1] 73/18 | 1 might [2] 2 | 123/23 126/2 127 | I'Il [2] 61/5 196/12 |
| 122/23 124/5 126/15 | I didn't [2] 82/10 |  | 129/7 130/2 130/5 | [89] 2/8 6/5 21/ |
| 127/1 129/14 129/19 | 166/21 |  | 131/15 | 21/16 21/17 22/17 |
| 130/21 130/24 132/21 | I do [8] 27/7 87/15 | ase [1] 74/25 | 133/22 137/1 137/14 | 24/25 31/15 33/2 |
| 134/18 135/8 136/24 | 117/22 122/19 145/7 | I prepared [1] 19/8 | 138/20 139/6 139/12 | 33/9 33/10 37/20 |
| 138/18 143/13 154/2 | 156/4 159/11 180/3 | I press [1] 112/18 | 143/5 143/7 144/22 | 37/20 41/19 44/1 |
| 155/2 155/14 155/15 | I don't [58] 6/4 11/7 | I probably [1] 164/10 | 144/24 145/3 145/13 | 54/10 61/3 67/24 69 |
| 156/9 156/11 158/12 | 11/21 27/8 32/7 33/17 | I promise [1] 32/11 | 148/3 148/16 149/22 | 69/13 83/19 87/2 |
| 158/21 159/5 171/4 | 44/1 53/3 59/17 67/24 | I reading [1] 32/17 | 150/13 150/18 151/23 | 89/14 91/4 95/25 |
| 177/7 181/20 181/25 | 73/17 74/6 78/22 | I really [2] 197/14 | 152/20 153/13 154/6 | 97/13 103/1 103/10 |
| 184/16 185/24 186/4 | 79/21 98/5 98/18 | 197 | 154/16 155/11 156/20 | 105/10 105/10 105/ |
| 186/13 187/8 187/17 | 103/1 105/16 108/5 | I recall [1] 113/4 | 157/4 157/19 158/23 | 105/23 109/9 111/25 |
| 188/18 189/2 189/2 | 111/18 111/21 112/12 | I recollect [1] 181/10 | 159/12 160/1 160/15 | 114/9 117/22 120/12 |
| 189/19 201/12 | 113/5 117/1 118/8 | I refer [1] 6/14 | 161/15 161/19 162/5 | 121/2 123/17 123/18 |
| however [9] 23/4 | 118/24 122/19 127/12 | I referred [1] | 162/18 164/2 164/9 | 130/4 131/15 142 |
| 43/1 45/23 48/13 69/7 | 138/17 142/11 142/1 | I rem | 166/12 167/17 169/8 | 142/22 146/21 148/9 |
| 104/22 170/3 179/9 | 147/8 149/4 151/6 | 187 | 170/23 171/1 172/1 | 149/19 150/13 158 |
| 183/20 | 153/13 156/2 156/3 | I remind [1] 74/17 | 74/17 176/25 | 15 |
| huge [3] 5/17 129/17 | 157/1 157/4 157/24 | I repeat [1] 141/1 | 177/4 177/11 179/23 | 162/19 162/19 164 |
| 169/6 | 158/4 158/24 163/11 | I represent [1] 66/9 | 179/25 180/3 180/12 | 166/19 167/8 167/8 |
| human [4] | 165/14 166/19 167/11 | I return [1] 13 | 180/24 181/2 182/2 | 67/17 173/8 176 |
| 120/17 169/13 172/3 | 179/22 180/7 181/24 | I right [1] 199/13 | 182/13 184/15 185/7 | 177/21 180/15 183/16 |
| humanitarian [3] | 185/18 186/6 188/20 | I said [12] 23/21 | 186/23 187/13 189/6 | 186/2 186/25 187/ |
| 124/24 128/4 129/12 | 190/11 190/25 191/6 | 5/25 26/16 29/6 35/4 | 189/16 189/19 190/3 | 187/15 188/20 |
| hundreds [1] 172/8 | 195/13 196/18 198/12 | 37/23 47/4 54/3 73/4 | 190/22 191/6 191/7 | 191/25 193 |
| hurricane [4] 58/16 | I expect [1] 104/15 | 126/23 133/12 168/2 | 192/7 193/3 193/14 | 194/2 194/16 194/19 |
| 58/21 59/2 59/5 |  | I saw [1] 197/24 | 94/22 195/2 | 95/2 196/9 196 |
| rricane |  | I say [3] 25/10 27/8 | 196/8 198/21 199/9 | 196/21 196/25 199/2 |
|  |  | 190/25 | 199/24 201/10 202/15 | 199/2 202/3 202/14 |
|  |  |  | 202/22 202/23 | 202/25 203/7 203/8 |
| $58 / 21$ | $\text { I got [2] } 11 / 732 / 23$ | $\begin{gathered} 96 / 25147 / 18 \\ \text { I sit [1] } 73 / 14 \end{gathered}$ | I thought [1] 119/2 I understand [3] | I'm afraid [18] 44/1 67/24 83/19 91/4 |

I'm afraid... [14]
103/1 103/10 105/10 105/16 105/23 117/22 120/12 142/16 166/19 173/8 187/15 188/20 191/25 202/3
l've [26] 5/4 7/11 8/3 12/10 39/15 39/17 39/18 67/8 69/4 72/14 76/18 80/7 91/2
119/21 120/13 125/15 136/9 137/15 138/2 169/23 173/8 176/7 183/3 191/8 196/12 198/16
Iceland [2] 23/8 24/8 idea [5] 26/20 140/22 152/15 152/24 168/23
identification [1] 123/19
identified [27] 46/3 72/18 77/8 108/12 108/18 120/24 149/10 149/11 151/25 152/2 153/20 159/2 159/19
159/24 160/16 160/18 161/12 161/17 162/18 163/2 164/8 165/17
171/22 172/12 184/25 194/12 195/6
identify [15] 73/2
80/9 96/4 96/5 152/13 160/12 160/21 161/18 163/8 176/18 185/13 195/23 197/11 197/13 200/19
identifying [7] 80/12 92/25 128/24 149/24 152/15 168/20 176/11
identity [2] 21/16 68/13
ie [2] 174/20 199/25 if [151] $1 / 181 / 20$ 1/22 6/14 7/16 8/21 10/18 14/20 16/7 18/24 19/9 19/17 24/21 24/23 27/3 27/8 29/2 29/20 29/23 29/24 30/20 32/7 32/21 33/11 33/19 33/23 34/8 34/19 35/14 35/16 36/6 36/7 36/18 36/18 36/20
37/10 37/10 37/12 $37 / 1437 / 2038 / 15$ 39/1 39/7 39/10 39/15 48/11 48/14 50/8 50/16 50/19 52/11 55/17 55/25 56/1 56/3 56/10 56/11 58/5 58/6 59/12 60/19 62/25 63/23 66/17 68/2 69/3

69/9 69/11 69/23 69/25 70/7 70/13 70/24 72/9 72/10 72/16 73/16 73/17 73/22 74/9 74/21 79/7 83/17 83/23 85/2 85/6 87/16 88/7 88/16 89/24 94/6 95/15 100/7 102/5 104/3 104/9 105/2 105/10 110/11 110/13 113/12 113/15 113/16 114/3 118/19 119/21 120/12 120/13 121/2 122/21 123/17 124/2 124/3 129/13 131/7 132/12 137/15 140/24 141/3 142/18 142/25 144/22 145/16 148/9 152/3 155/5 156/2 156/17 168/23 169/1 171/8 172/10 174/17 174/22 175/15 176/24 176/25 177/10 178/3 187/13 189/6 189/16 191/19 192/8 196/19 197/21 198/21 199/1 199/18 203/1 203/2
ignore [1] 169/4
ignored [1] 176/24 ill [6] 6/23 10/9 27/5 27/11 27/12 27/14 illness [2] 29/14 56/12
Illustration [2] 121/3 124/1
imagine [2] 106/1 166/20
immune [2] 56/15 56/21
impact [53] 2/15 3/19 6/1 17/12 18/5 27/12 38/3 50/3 50/6 53/1 53/11 57/18 62/1 63/4 70/2 70/5 73/11 80/7 88/6 103/2 115/5 115/16 115/20 116/7 116/10 116/22 118/19 122/6 124/9 155/3 157/25 160/24 160/25 161/2 164/14 166/11 168/23 168/24 169/1 169/6 169/24 172/20 172/22 173/16 173/20 174/10 174/12 175/14 176/21 176/22 179/13 189/3 190/20
impacted [8] 47/17 57/14 69/6 119/3 139/6 139/14 189/11 190/13
impacting [1] 118/23
impacts [36] 17/21
18/2 18/17 52/14

52/22 53/13 54/15 $\quad$ incidents [2] 108/13 55/8 55/9 56/19 72/1 194/13

115/13 117/13 144/7 include [8] 20/9
159/20 159/24 159/25 $134 / 13$ 150/1 198/9 160/6 160/8 160/13 160/19 160/20 161/10 200/19
161/17 161/17 161/20 included [7] 115/12 161/25 162/17 162/23 $133 / 15$ 165/8 173/23 164/7 164/9 168/19 171/2 172/7 183/11 189/9
implementation [7]
85/25 86/16 86/17 90/11 109/5 109/12 110/14
implications [1] 65/1
implied [1] 121/15 implies [4] 79/14 122/20 193/14 195/18 inclusion [7] 14/15 implying [1] 201/10 import [1] 102/24 importance [5] 14/6 14/8 95/4 96/15 102/24
important [27] 7/25 11/3 24/1 32/10 35/18 36/3 39/12 46/24 47/12 61/20 71/23 72/2 74/18 78/4 91/7 101/2 114/15 120/7 121/8 134/20 144/25 145/3 145/19 146/3 160/2 189/6 200/12 importantly [1] 73/2 impose [1] 114/6 imposed [2] 112/3 113/1
imposing [1] 114/3 impossible [1] 152/12
impression [1] 40/7 imprimatur [1] 92/14 imprisonment [1] 20/22
improve [4] 24/4 29/3 37/6 195/23
improved [2] 35/11 37/1
improvement [15]
18/8 22/20 23/1 23/4
23/24 24/6 24/11
24/17 25/18 26/8
33/21 37/7 41/11 43/5
197/6
improvements [2]
170/4 177/4
improving [1] 23/2
inadequate [5] 30/18
163/5 192/22 193/13
193/14
incident [5] 108/14
131/10 131/11 131/22 198/8
incident' [1] 44/12

182/5 184/13 197/8
includes [4] 4/15
45/15 86/7 109/22
including [20] 2/14
4/10 14/8 15/3 20/18 22/8 42/11 45/10 63/1 63/6 96/12 99/19 99/19 114/25 134/5 135/21 136/7 150/18 166/13 173/6 19/25 20/5 20/9 20/14 21/1 40/23
inclusive [1] 18/7
income [9] 4/10 9/17 9/19 17/4 17/7 20/18 27/3 28/23 61/21 incomplete [1] 193/16
incongruously [1] 75/8
inconsequential [1] 164/4
inconsistent [2] 196/4 196/15
incorporate [2] 99/1 151/7
incorporated [1] 101/18
increase [3] 30/13
34/23 56/6
increased [5] 22/13
40/18 41/3 41/12 49/9
increasing [6] 22/23
33/20 34/20 57/6 58/14 142/23
increasingly [2] 62/2 182/13
incubation [2] 154/2 157/10
indeed [17] 43/18 73/21 73/24 76/25 93/14 101/16 114/17 115/10 121/7 135/17 150/18 156/14 157/9 190/5 193/4 197/1 200/5
independent [1] 48/1 index [4] 26/6 26/7 36/4 36/5
Indian [2] 16/4 16/9 indicate [5] 1/21
110/6 129/24 174/14 179/6
indicated [4] 95/20 191/14 197/4 200/7
indicates [5] 45/20
109/23 172/17 175/12 196/14
indication [2] 65/23 191/12
indicators [2] 4/10 15/11
individual [10] 10/16 14/18 45/10 118/24 146/19 146/20 146/21 157/8 166/19 181/6 individually [2] $8 / 20$ 201/24
individuals [4] 44/10 89/12 154/14 178/6 industrial [1] 25/17 inequalities [100] 2/14 3/19 3/20 3/23 3/24 3/24 4/1 4/6 4/8 4/15 4/16 4/17 4/18 4/21 4/22 4/24 5/3 5/5 5/12 5/14 5/16 5/22 5/24 6/2 6/17 6/24 8/17 8/23 9/1 10/4 13/22 14/8 14/14 15/19 15/24 17/13 22/3 22/18 24/14 24/20 26/14 29/4 29/15 29/17 39/25 40/9 40/10 40/15 40/18 40/20 41/2 41/5 41/12 41/19 42/3 43/4 43/15 44/18 46/22
48/6 48/8 48/18 48/18 48/23 49/1 49/6 49/18 49/23 50/21 50/25 51/11 53/15 53/20 54/15 54/19 55/2 55/8 55/10 55/12 57/7 57/16 58/3 58/13 59/15 60/1 60/7 60/9 60/23 61/22 63/5 63/6 63/12 64/8 64/17 70/13 71/20 72/19 72/23 73/3 73/10
inequality [6] 3/17
10/13 13/11 53/19 57/1 64/22
inequitable [1] 6/10 inevitably [1] 113/23 infant [4] 18/6 18/8 34/23 40/16 infection [3] 55/25 56/23 173/1 infections [4] 48/20 57/10 163/13 163/14 infectious [13] 55/14 58/5 80/23 93/8
115/11 116/2 116/12 171/23 172/16 173/4 174/7 175/6 175/10 influence [2] 70/12 87/8
influenced [1] 63/5
influenza [71] 49/15
115/3 115/17 115/21 115/24 116/4 116/13 116/19 117/6 117/12
120/18 120/19 120/23
121/12 122/1 122/11 122/15 125/1 128/7 128/10 128/13 128/14 131/1 131/23 132/1 132/4 132/18 132/25 133/11 134/7 134/12 134/14 134/16 134/21 142/2 142/4 149/10 152/4 153/21 154/1 154/6 154/11 154/16 154/19 156/25 159/18 166/9 170/5 170/12 171/22 172/1 172/5 172/13 172/15 172/20 173/5 173/14 173/20 174/5 174/23 175/22 178/17 178/20 178/22 179/9 179/15 180/5 181/2 188/13 188/15 189/11
influenza-type [9]
120/18 120/23 121/12
170/5 171/22 172/1
172/5 172/20 173/14
inform [3] 122/22
130/13 203/3
information [16] 14/1
27/22 104/6 106/4
106/7 106/10 106/22
111/18 121/16 127/16
137/21 160/4 170/18
180/24 189/1 201/17
informative [1] 34/3
infrastructure [1]
44/11
initial [1] 181/25
initiatives [1] 170/19
injury [1] 20/24
input [2] 149/19 149/21
INQ0000005260 [1] 109/11
INQ000022687 [1] 98/21
INQ000022975 [1] 133/5

## INQ000023122 [1]

 131/3INQ000036475 [2] 104/17 114/16
INQ000055887 [2]
117/15 118/1
INQ000056232 [1] 177/6
INQ000056240 [1] 196/13
INQ000068403 [1]

## 177/10 $\quad$ interest [2] 5/16 35/22

interested [2] 7/13 8/13
interfered [2] 146/13 184/2
interfering [1] 62/8
internal [1] 100/9
internally [2] 149/15 202/19
international [1] 91/17
interpersonal [2]
17/16 17/18
interpreted [2]
109/25 170/17
interpreting [1] 124/7
interrupt [1] 11/21
interrupted [1] 28/12
interrupting [1] 32/3
intersection [2] 36/8
36/9
intersectionality [2] 21/13 21/14
intervene [1] 95/1
intimately [1] 167/1
into [43] 1/17 3/21
14/5 19/13 19/13
23/10 31/15 33/11 42/3 45/11 48/2 52/15 52/23 57/9 62/13 64/16 65/4 69/8 69/20 84/3 84/20 87/22
87/24 88/7 94/21 96/13 99/17 100/9 101/18 102/3 105/17 127/16 132/21 138/1
144/11 145/13 149/19
154/7 180/25 181/13
182/7 183/24 191/23
intra [2] 128/1 131/8
intra-operability [1] 131/8
intricacies [1] 31/15
introduce [1] 93/24
introduced [3] 6/5
6/7 66/13
introduction [1] 2/8
invested [2] 143/25
197/18
investigator [1] 2/17
invitation [1] 146/25
invited [2] 111/3
147/1
involve [1] 199/21
involved [8] 108/10
109/9 118/16 140/3
148/12 199/14 202/7
202/17
involvement [2]
124/25 193/19
involving [1] 105/6
Ireland [14] 7/10 7/17
8/2 8/3 8/5 8/9 8/9

8/13 8/15 13/10 13/14 | $131 / 24 ~ 132 / 5 ~ 141 / 20 ~$ |
| :--- | :--- | :--- | :--- | 15/17 28/2 187/18

Irish [2] 16/5 188/2
irrelevant [1] 171/20
is [458]
is: [1] 159/21
is: broadly [1]
159/21
island [1] $8 / 15$
isn't [9] 1/18 36/23
86/5 98/8 105/20
170/10 170/25 186/18 189/16
isolate [1] 56/4
issue [15] 66/13
77/13 111/14 111/17
112/21 112/25 113/7
145/12 156/4 159/13
173/3 189/2 193/17
199/1 201/19
issued [7] 94/2 97/25
98/18 100/7 117/16 117/21 118/8
issues [15] 14/20
22/6 31/23 46/1 46/4
65/7 66/17 67/9 72/8 85/14 90/18 111/20 115/12 193/21 195/4 issuing [1] 100/14
it [412]
it's [144] $2 / 12 / 22 / 3$ 6/3 6/8 10/15 10/15 10/16 10/17 10/20 10/22 10/25 11/1 11/3 11/4 11/5 11/14 14/15 15/6 15/7 15/12 18/18 January 2021 [1] 19/5 19/17 21/9 23/25 177/10
26/18 26/20 26/22
27/9 27/13 27/19
29/14 32/23 32/24
33/22 34/2 34/3 34/5
34/6 34/16 34/19 36/3
36/5 36/6 36/7 36/8 $37 / 7$ 37/8 37/10 37/11 join-up [1] 128/2 38/6 39/19 44/21 joint [1] 95/7
44/23 45/7 47/11 jointly [1] 1/24
50/10 50/10 50/12
55/6 56/2 61/4 62/12 63/8 63/9 65/1 65/6 67/7 68/11 68/15
70/10 72/2 72/14
74/17 75/10 77/1
78/23 81/5 82/24 86/3
87/12 89/12 89/19
89/21 92/10 92/12
92/17 93/8 93/13
97/17 99/17 101/1 103/21 103/24 103/25
104/2 104/5 104/11 jumping [1] 37/21
105/25 106/16 109/13 June [3] 1/1 188/2 116/20 117/24 118/24 203/16
118/25 124/12 126/15 junior [1] 86/9 127/21 128/19 129/7 jurisdictions [1]
129/14 131/5 131/6 198/5
just [72] 1/20 1/22
5/4 12/1 12/3 17/11 19/2 24/16 25/2 26/23 30/2 31/25 33/21 34/4 34/19 37/11 44/6 45/1 48/25 51/15 53/2 57/23 58/4 61/23 63/8 63/9 65/1 65/18 66/9 71/5 72/6 72/9 72/22 73/7 74/5 74/25 76/18 79/16 93/24 97/1 97/7 101/6 117/24 123/15 123/17 125/15 131/15 135/14 138/15 138/18 139/13 140/13 142/25 145/17 146/3 146/21 159/12 167/3 169/23
172/13 172/15 177/17 178/9 180/15 180/21 186/25 190/6 192/13 195/25 202/11 203/5 203/10
justice [4] 6/13 20/13 65/24 200/7
Justice Cymru [1] 200/7
Justice UK [1] 65/24

## K

Katharine [3] 74/5
74/11 204/11
Katharine Hammond
[1] 74/5
Katrina [4] 59/2 59/3
59/8 59/13
KC [4] 66/5 192/12 204/9 204/16
keep [3] 1/16 74/17 132/12
Keith [8] 80/7 96/23 107/13 131/16 147/16 159/11 191/9 192/11
Keith's [1] 113/8
key [17] 9/21 55/11 55/18 61/8 62/14 71/2 90/15 110/21 162/6 164/2 172/24 175/12 179/4 179/15 179/20 181/24 182/22
key workers [1] 55/18
kicks [1] 145/12
kids [2] 19/10 19/11
kind [3] 18/18 54/4
68/10
kindly [1] 191/14
King's [3] 66/1 66/12 191/13
King's Counsel [3] 66/1 66/12 191/13
Kingdom [18] 6/25 10/4 22/18 24/7 25/19

42/4 49/15 79/11 $\quad$ Ladyship [1] 62/23 101/22 143/10 145/20 Ladyship's [1] 66/2 148/11 171/15 171/17 laid [2] 6/19 58/4 182/17 187/8 200/21 201/15
Kingdom's [4] 89/15 91/25 114/13 179/9 knew [3] 11/10 11/10 57/8
knighthood [1] 3/6 know [71] 7/16 11/7 11/9 11/9 14/21 18/1 18/4 27/8 30/15 31/9 33/24 42/24 43/20 46/8 46/14 47/8 48/17 50/17 52/9 58/6 58/21 61/17 61/25 66/18 68/19 73/17 78/21 88/16 88/16 88/17 90/10 100/12 102/18 103/2 103/11 103/23 105/16 109/8 109/10 110/2 110/10 111/15 111/24 112/20 113/4 113/5 122/9 124/8 124/8 126/7 129/1 133/15 135/17 135/19 142/17 149/5 152/2 153/5 155/17 158/1 164/21 166/19 167/1 167/4 167/11 182/11 188/18 188/22 189/18 196/25 200/25
knowledge [8] 53/25 67/4 69/5 109/18
109/21 110/3 124/10 171/16
known [7] 80/25
89/25 102/11 121/21 161/23 167/2 193/25 knows [1] 203/10
L
laboratory [1] 72/3
lack [16] 13/24 15/14 32/5 57/15 64/21
66/21 69/12 70/3 70/5 71/23 71/25 73/7 86/4 108/5 194/14 197/8
lacking [1] 22/3
Lady [38] 1/4 1/24 2/1 12/10 33/3 41/19 42/1 62/13 63/20 65/12 65/15 65/22 66/6 72/10 72/14 73/13 73/14 74/2 74/7 79/24 82/21 85/10 85/23 96/24 142/21 143/2 143/7 143/20 145/16 147/15 167/4 167/21 171/14 177/9 191/10 192/8 200/6 203/4
Lady's [1] 71/4
lamented [1] 69/11 Lancaster [4] 86/2 86/11 87/14 87/19 Lancet [1] 20/20 landscape [3] 3/24 22/18 96/20
language [1] 178/4 languages [1] 65/4 large [8] 5/12 5/22 78/17 96/10 119/7 137/1 159/25 168/13 largely [1] 48/2 last [7] 3/16 72/14 75/5 119/8 131/16 163/6 169/14 lasts [1] 17/22 later [4] 61/25 122/10 180/11 203/11 latest [1] 97/3 laws [2] 18/4 18/6 lead [53] 34/23 52/9 63/25 74/12 78/20 90/3 92/21 92/22 92/24 93/11 93/12 93/18 93/25 94/3 94/3 94/9 94/13 94/24 95/8 97/8 97/10 98/7 98/23 98/25 99/9 99/13 99/15 99/24 100/7 100/23 104/25 107/22 lesson [2] 182/10 112/6 120/10 121/19 195/17 123/20 143/12 143/16 lessons [10] 79/4 143/23 144/19 144/24 $114 / 25$ 192/13 193/17 145/25 149/24 158/17 $194 / 12$ 194/20 194/20 158/18 165/22 173/7 173/12 198/5 199/16 200/14 204/14 204/19 lead-up [1] 34/23 leadership [1] 144/12
leading [7] 6/23
38/14 51/22 90/9
125/22 144/10 145/1
leads [4] 19/2 19/20
76/23 158/20
learn [4] 129/14 195/23 196/3 197/10 learned [3] 156/5 194/21 195/6 learning [19] 28/21 61/9 62/14 79/4 109/22 128/2 179/4

## 179/15 $179 / 20182 / 22$

179/15 179/20 182/22 Levelling [4] 94/16 192/13 192/17 192/25 $101 / 4$ 102/12 142/7 193/17 194/14 195/16 levels [4] 16/4 16/6 195/17 197/5 197/18 142/22 178/23
least [24] 12/9 12/14 levers [2] 112/15 12/20 12/25 13/4 13/8 13/11 26/8 28/23 35/10 35/15 37/12 38/6 38/17 39/2 43/3
leave [2] 35/8 79/23 left [15] 59/11 76/19
76/20 90/8 90/22
101/23 102/6 105/25
118/2 120/15 127/6
174/15
left-hand [3] 101/23 102/6 118/2
legal [12] 108/23
111/12 112/2 112/9
112/16 113/1 113/12 113/14 113/22 114/3 114/6 132/9
legislation [3] 46/19 95/16 112/3
length [3] 10/25 11/4 165/11
lens [2] 63/19 63/22
lesbian [1] 22/1
less [17] 11/4 11/5 15/7 15/17 17/25 35/16 56/3 68/17 68/20 91/1 91/1 116/22 127/11 153/1 156/10 176/23 197/16
lesser [1] 168/25 195/5 195/16 197/18
let [3] 23/23 77/3 160/22
let's [5] 25/20 35/21
54/8 63/17 153/18
letters [1] 107/2
level [33] 4/11 9/18
14/11 16/6 17/16
17/17 17/17 21/5
30/23 40/21 46/3 47/24 51/20 86/10 89/25 90/16 99/7 105/6 110/2 113/2 116/9 116/24 122/11 140/23 146/19 146/20 146/21 146/21 148/13 155/10 159/3 162/15 202/19

## 113/10

## LGBTQ [10] 4/14

 22/8 22/11 22/12 68/9 87/1149/5 76/4 90/6 181/25 $70 / 21$
190/25 194/19 199/20 LGD [2] 99/9 144/6 202/19

LGD model [1] 144/6
$\begin{array}{ll}\text { leave [2] } \\ \text { led [6] } 3 / 106 / 2424 / 5 & \text { liaised [1] 140/8 }\end{array}$ 41/8 88/8 166/19 liaising [1] 77/14 liaison [4] 108/1
145/24 146/15 199/12
lie [3] $4 / 2$ 162/2
138/13 172/20 174/14 lies [1] 62/20

14/15 21/17 22/1 22/6 likewise [2] 68/6

L
limit [1] 62/9
limitations [1] 144/6 limited [6] 45/24
50/10 50/12 144/17 175/1 197/5
line [10] 32/18 33/12 36/20 36/21 36/22 36/22 36/24 36/25 111/13 161/4
lines [6] 3/23 7/22
32/13 59/6 85/20
147/11
link [7] 92/10 92/17
101/11 102/2 125/8
142/8 142/15
linking [1] 13/24
links [3] 56/17
145/19 146/2
liquor [1] 59/11
list [8] 46/8 78/3
86/23 110/9 118/15
133/9 169/16 171/12
listed [1] 190/22
listen [1] 113/20
literally [1] 46/14
little [8] 12/1 42/20 48/10 50/19 79/7
105/17 129/22 136/12 live [13] $8 / 18$ 10/16 10/20 12/13 12/24 28/25 35/20 36/2 36/2 41/6 61/21 94/21 178/3
lives [7] 3/12 10/8 10/8 21/5 38/3 38/3 115/6
living [9] 12/7 12/9 12/18 12/20 17/3 17/7 18/15 31/13 57/11
Lloyd [1] 44/21
Lloyd's [1] 45/8
local [93] 38/16
38/16 38/17 38/25
39/2 39/8 39/11 39/14
39/22 44/22 45/11 45/21 45/22 45/23 46/1 46/3 51/17 51/18 51/23 51/25 64/9 91/19 92/6 101/12 101/25 102/2 102/8 102/11 103/7 103/14 103/15 105/6 107/6 107/6 109/15 109/18 109/19 109/20 110/5 110/11 110/20 120/2 121/3 121/10 122/21 124/2 124/3 124/6 125/12 126/3 127/3 127/7 127/17 127/19 128/20 129/4 129/24 130/10 130/12 130/19 131/5 131/8 131/12

132/2 132/15 132/20 $\quad 58 / 12$ 91/15 125/22 134/17 135/12 137/18 125/23 126/25 137/24 138/23 138/25 Lord [1] 95/19 139/22 140/12 140/19 Lord O'Donnell [1] 140/20 140/20 141/3 95/19
141/3 141/5 141/11 loss [1] 181/9 141/11 141/14 141/22 lost [4] 33/21 120/13 142/5 142/9 142/9 173/8 181/8 142/10 152/7 178/23 $\operatorname{lot}[20]$ 7/12 8/14 192/2 194/21 194/24 17/17 32/14 33/22 locality [1] 89/23 locally [1] 197/7 locate [1] 129/10 location [2] 124/11 153/7
lockdown [6] 96/13 164/20 166/5 185/19 185/20 185/20
lockdowns [4] 161/2 164/17 164/25 185/14
London [13] 2/25 24/19 24/21 35/6 35/24 36/13 36/16 36/19 36/21 36/25 37/12 37/16 37/17 long [14] 10/16 10/19 27/10 73/18 89/1 127/12 149/9 154/2 161/23 162/3 163/9 177/7 185/14 203/8 long-term [2] 89/1 185/14
longer [5] 9/11 26/20 84/25 102/19 157/10 look [56] 8/19 10/5 10/14 10/21 11/12 11/22 19/9 19/25 25/11 25/20 26/2 26/21 27/3 27/5 28/4 29/20 32/16 35/14 35/21 36/20 36/21 36/21 36/25 37/2 37/3 38/15 39/1 40/3 40/5 44/20 50/4 54/8 58/11 60/5 62/25 70/8 72/16 99/23 105/17 114/14 117/15 122/14 123/1 124/5 131/7 147/22 147/24 150/7 153/5 153/16 153/18 161/19 167/14 167/20 190/11 191/1
looked [15] 5/8 23/20 38/9 38/10 43/9 45/2 47/21 49/15 50/5 52/25 64/20 73/16 140/13 145/17 181/19 looking [16] 6/16 12/3 14/11 30/2 33/3 33/4 68/20 69/7 70/9 76/8 104/10 123/5 151/4 156/11 168/19 202/1
looks [7] 58/8 58/10

33/22 34/6 55/22 80/13 80/18 85/16 87/6 87/7 91/12 108/11 113/4 129/8 132/24 138/5 193/3
lots [1] 127/16 low [9] 16/15 16/18 17/3 30/23 55/20 56/4 57/19 58/23 170/5 low-paid [2] 16/15 16/18
lower [15] 9/2 9/19 9/21 20/15 21/6 23/9 27/19 56/15 57/9 57/10 58/18 59/9 67/1 115/14 173/16
lowest [6] 9/16 13/3 16/6 49/12 58/24

## 140/23

LRF [2] 123/1 129/13 LRFs [20] 45/10
110/11 111/9 123/9 123/23 124/14 125/6 125/9 125/20 126/7 126/12 126/25 127/15 127/17 128/4 128/16 130/2 131/17 133/23 142/12
lucky [1] 24/21
lunch [1] 97/7
lunchtime [1] 74/23
M
made [24] 3/7 28/19 51/15 61/12 65/11 75/18 76/18 91/2 96/12 102/21 113/25 116/12 126/1 134/11 135/10 140/9 142/1 148/18 154/19 157/25 170/4 175/15 181/4 193/12
magnitude [2] 95/7 115/13
mainly [1] 14/17
major [18] 42/24 79/5 101/8 103/5 108/17 111/22 112/12 112/24 114/11 117/16 119/15 121/12 171/24 174/2 174/7 179/3 183/12 194/13
majority [4] 5/22 41/3 144/5 145/4
make [21] 23/23
60/22 67/11 97/2
109/2 110/22 113/18
113/19 113/22 114/2
114/10 124/10 143/25
155/9 156/13 162/22 165/3 193/11 199/5 199/17 202/11
make-up [1] 124/10
maker [1] 52/19
making [18] 39/16
52/16 68/1 69/16
77/22 78/4 90/16 93/2
96/19 114/5 141/20
150/8 167/17 174/19
176/21 179/1 184/18 187/6
male [1] 37/24
male/female [1]
37/24
males [1] 26/24
malicious [18] 80/4
80/5 80/21 80/22
80/25 81/5 81/6 82/9
82/14 82/25 83/5
83/24 83/25 85/11
85/12 87/3 170/9 172/6
manage [6] 77/25
89/18 95/2 140/22 155/15 182/1
managed [9] 92/3 92/3 93/4 102/19 106/20 137/19 140/10 143/22 143/25 management [14] 53/9 54/13 62/18 77/3 77/14 88/2 89/16 91/22 94/4 94/7
127/17 128/5 170/19 194/9
manager [1] 91/24 manages [1] 78/3 managing [6] 92/25 94/25 140/1 164/14 184/9 193/6
manifestations [1] 169/1
Mann [8] 76/12 109/8 111/15 111/24 192/19 194/25 197/4 199/4 manner [1] 60/2 manual [2] 104/3 129/1
many [28] 16/17
24/10 55/18 75/17 100/18 107/7 107/9 115/6 127/1 150/19 150/23 159/19 159/24 160/5 160/13 160/18 160/20 161/10 161/16 162/23 164/6 184/16 185/25 186/4 186/13 187/8 187/17 188/18

March [10] 94/2 97/8 104/20 109/13 118/3 118/7 120/22 185/24 186/3 188/1
March 2004 [1] 94/2
March 2010 [1]
104/20
March 2012 [3] 118/3
118/7 120/22
March 2017 [2]
109/13 186/3
marginalised [6]
68/8 69/1 70/20 72/21
189/4 190/18
marginally [1] 37/5
Maria [1] 58/21
mark [2] 44/21 78/17
Mark Lloyd [1] 44/21
marked [3] 23/7 24/7
25/12
markedly [1] 26/13
Marmot [27] 1/6 1/8
1/25 2/23 3/11 3/13 3/14 6/25 7/19 12/2
15/21 16/13 18/16
23/14 25/2 25/5 35/13
56/18 61/9 61/12 66/8
70/23 72/22 73/12
73/16 73/21 204/2
Marmot's [1] 56/14 Mass [1] 164/12 massive [3] 164/6 166/11 188/25
match [2] 157/6 160/24
material [12] 51/8 51/14 76/8 92/18 124/21 125/1 125/4 125/6 125/11 128/7 129/17 137/9
materialise [2] 156/9 160/17
materials [1] 134/5 matrix [4] 145/8 170/3 170/21 171/2 matter [4] 7/6 7/15 95/3 183/12
matters [9] 10/25
35/16 35/20 46/22 62/16 65/8 75/1 80/1 80/21
Matthew [1] 76/6 may [68] 1/7 1/12 2/4 4/3 14/25 19/21 25/13 27/7 27/21 35/9 37/10 40/5 43/25 52/3 57/17 62/10 62/11 73/15 74/25 77/12 78/24 78/25 79/22 81/12 85/21 87/16 89/23 105/12 109/23 112/18 120/9 130/6 130/7 147/22 150/15 154/13 155/25 156/2 156/25
may... [29] 157/12
157/12 157/18 157/18 157/20 157/20 157/22
162/24 167/24 169/6
172/17 173/1 176/23
180/21 180/22 189/6
189/16 189/22 189/25
190/13 191/11 191/13
198/18 200/11 200/13
200/23 201/4 201/5
203/11
maybe [3] 5/10 25/15 157/16
me [50] 1/5 1/19 6/5
6/14 23/23 28/10 32/3 32/7 33/15 37/25 38/4
38/5 62/12 73/23
74/22 80/7 83/20
95/15 103/12 116/7
122/14 123/17 127/5
127/22 136/12 137/15
138/1 138/3 138/6
143/2 145/5 145/17
148/9 150/16 159/11
160/22 165/10 167/3
167/21 172/15 179/22
186/16 191/15 191/18
192/1 194/7 194/16
199/24 200/23 202/14
mean [26] 10/14
26/18 33/23 34/8
34/15 36/8 55/4 65/2
65/10 70/24 87/13
91/13 97/17 110/4
126/9 129/19 139/9
139/15 144/25 146/20
168/16 170/22 186/16
196/19 197/14 202/12
meaning [1] 144/7
meaningful [1]
185/17
means [16] 5/12
10/13 33/20 43/6 67/3 67/9 71/7 72/23 72/24
119/7 143/20 155/25 163/1 170/23 178/3 196/23
meant [11] $4 / 20$
21/12 57/17 91/14
91/16 91/18 108/15 144/17 148/16 150/17 186/18
measure [8] 4/25
15/7 34/3 34/6 126/13 132/3 174/18 185/21
measured [1] 4/9
measures [3] 5/1
161/6 164/19
mechanism [1] 125/14
mechanisms [2] 99/2 100/10
medical [6] 2/12 3/2 157/15 166/13 199/21 200/2
medications [1] 64/1
Medicine [1] $3 / 5$
meet [10] 82/8 82/16
83/5 83/16 83/21
126/14 146/24 185/25 186/4 186/14
meeting [3] 147/5 187/25 188/1
meetings [12] $83 / 12$
146/17 147/5 182/4 182/8 186/7 187/9 187/14 187/19 188/2 188/6 202/23
member [2] 2/21 3/4 members [5] 4/14 146/5 151/23 190/18 198/22
memory [6] 83/17 110/9 133/22 161/19 181/7 181/9
men [10] 12/7 12/18 13/3 13/12 27/5 27/6 28/7 35/2 37/9 38/2
men's [1] 38/3
mental [7] 15/12
17/21 22/5 22/7 22/11 62/1 68/19
mention [7] 42/17
46/13 51/16 51/18
53/12 53/18 53/19
MERS [3] 117/8 174/1 174/6
messages [2] 64/2 143/5
messaging [2] 46/16 178/24
met [9] 83/2 83/10 83/25 185/23 186/3 186/6 186/20 186/21 188/18
methodological [2] 170/4 171/3
methodology [2] 150/8 170/7
Michael [9] 1/6 1/8 2/23 14/10 47/11 60/4 65/2 72/5 204/2
Michael Marmot [2] 1/6 2/23
microphones [1] 1/17
mid [3] 9/14 41/21 61/4
mid-morning [1] 41/21
mid-ranking [1] 9/14
mid-sentence [1] 61/4
middle [7] 9/7 58/23 171/12 174/10 174/11 174/11 186/24
might [44] 18/13 21/4 misunderstood [1] 21/19 25/14 43/21 44/4 47/14 50/11 50/14 51/24 53/22 53/24 54/1 54/4 54/6 70/8 70/12 77/7 94/13 99/18 106/1 110/6 123/2 124/5 124/6 124/9 127/7 130/14 149/6 149/7 153/3 153/11 153/16 154/2 154/24 165/21 168/25 178/5 178/10 178/13 190/19 198/17 198/17 201/10
migrants [2] 20/11 67/16
migration [1] 67/13 milder [1] 173/15 million [1] 175/3 millions [1] 172/9 minimum [1] 28/23
minister [8] 85/25
85/25 86/10 86/16 86/17 87/7 146/10 182/13
ministerial [15] 83/6 83/9 84/1 84/11 84/12 84/16 85/19 85/21 86/3 86/5 86/8 86/13 87/2 90/11 96/16 ministers [6] 87/5 87/8 87/11 165/16 182/4 182/8
Ministry [5] 101/24 102/7 102/10 102/15 103/6
minorities [3] 4/13 14/14 18/7
minority [37] 14/25
15/3 15/8 15/13 15/18 16/1 16/9 16/14 16/21 16/23 16/25 18/14 18/19 19/10 19/16 40/22 42/23 45/17 46/13 49/8 49/12 50/1 55/19 55/19 56/7 57/12 57/19 65/4 67/2 67/15 67/23 69/12 69/17 70/19 71/10 72/20 73/8
minus [2] 30/11 30/11
minus 0.07 [1] 30/11
minutes [1] 200/12
miserable [1] 19/5
mismanagement [1] 59/5
misremembered [1] 137/15
missing [1] 70/10
mission [1] 69/15
missummarised [1] 67/16 68/18 69/5 70/11 72/6 81/25 82/12 82/21 83/12 83/23 85/10 85/16 86/9 86/10 88/14 89/24 90/17 94/8 105/18 111/13 114/1 116/4 116/8 116/18 117/11 121/8 122/2 122/2 123/4 129/25

130/1 130/3 136/20 136/20 140/2 144/7 146/22 158/3 172/11 172/15 172/17 173/15 176/19 190/1 190/5 196/23 203/1
morning [7] 1/4
41/21 66/7 66/7 66/13 69/2 189/18
mortality [27] 4/16 4/25 9/4 9/23 10/17 10/19 10/21 13/24 15/4 18/6 18/8 20/20 22/4 34/23 40/16 40/16 49/3 49/7 49/9 55/13 58/7 58/22 60/10 67/5 68/14 68/20 161/4
mortuary [3] 159/8
184/18 184/23
most [57] $5 / 128 / 24$
8/25 12/7 12/12 12/18 12/23 12/23 13/3 13/7 13/11 18/21 23/21
24/18 26/3 27/16 28/5
31/6 33/4 33/8 33/8
$35 / 1137 / 1438 / 20$
39/5 42/6 42/9 47/14
47/17 49/3 54/1 64/15
64/19 68/11 69/5
71/14 73/6 80/15
81/23 90/16 115/4
118/22 129/10 133/19
157/5 160/6 168/20
168/24 169/18 169/20
170/12 170/24 171/7
172/1 172/5 173/22
189/4
move [6] 16/7 22/17
41/19 54/8 63/17
123/15
moved [2] 31/24
170/3
moves [1] 96/13
moving [10] 12/16
60/16 94/20 96/22
104/1 107/7 132/6
134/10 136/20 195/19
 37/9 37/18 43/1 51/6 $76 / 6$ 76/17 76/23 80/7 51/6 51/25 55/21 56/2 88/11 88/11 93/20

56/2 56/6 56/11 56/21 | 54/11 $96 / 23 ~ 107 / 13 ~$ |
| :--- | :--- | :--- | 56/22 57/14 58/9 67/7 129/25 129/25 130/1

113/8 118/16 131/16 141/16 147/16 159/11 191/9 191/12 191/25 192/9 192/10 192/11 192/12 194/25 200/5 204/16
Mr Hargreaves [5]
75/25 76/17 76/23 94/11 141/16
Mr Hargreaves' [2] 118/16 191/25

## M <br> Mr Keith [8] 80/7 <br> 96/23 107/13 131/16 147/16 159/11 191/9 192/11 <br> Mr Keith's [1] 113/8 <br> Mr Lloyd's [1] 45/8 <br> Mr Mann [4] 109/8 111/15 111/24 194/25 <br> Mr Rutnam [1] 93/20 <br> Mr Rycroft [1] 88/11 <br> Mr Weatherby [4] <br> 191/12 192/9 192/10 200/5

Mr Wilson [1] 88/11
Ms [52] $1 / 3$ 32/3 66/1 66/3 66/5 66/12 72/13 74/11 74/14 74/16 76/10 77/1 79/2 79/18 84/24 88/16 89/21 97/7 101/23 105/18 110/2 112/18 114/3 115/23 118/14 123/17 129/19 133/21 138/15 139/5 139/18 144/20 147/22 152/21 155/17 161/23 162/22 164/21 166/23 170/10 172/14 173/19 175/9 180/8 187/6 189/22 191/13 200/15 202/14 203/7 204/9 204/11
Ms Blackwell [3] 1/3 32/3 66/12

## Ms Hammond [41]

74/14 74/16 76/10 77/1 79/2 79/18 84/24 88/16 89/21 97/7 101/23 105/18 110/2 112/18 114/3 115/23 118/14 129/19 133/21 138/15 139/5 139/18 144/20 147/22 152/21 155/17 161/23 162/22 164/21 166/23 170/10 172/14 173/19 175/9 180/8 187/6 189/22 191/13 200/15 202/14 203/7
Ms Munroe [3] 66/1 66/3 72/13
much [44] 5/3 7/22
11/2 11/9 14/25 18/15 20/4 25/4 25/12 26/25 27/1 33/19 37/15 38/1 38/10 47/15 54/25 56/2 57/13 63/5 65/14 67/1 68/15 68/16 70/24 73/6 73/12 73/21 73/24 74/7 103/2 111/9 113/5 116/9 117/7 155/24 174/3 175/23 189/2

191/9 200/5 200/9 202/25 203/6 multi [2] 105/5 132/21
multi-agency [2] 105/5 132/21 multiple [6] 20/7 26/6 36/4 125/18 128/17 169/9
Munroe [6] 66/1 66/3 66/5 66/8 72/13 204/9 must [18] 118/4 126/13 126/14 126/14 131/12 131/12 131/13 131/19 132/3 132/9 132/15 132/17 134/18 134/18 143/24 170/17 176/11 191/15 muster [1] 164/8 my [104] $1 / 41 / 242 / 1$ 6/14 7/12 7/18 7/22 8/14 12/10 12/10 25/10 28/15 33/3 33/13 38/6 41/19 42/1 46/9 59/2 61/3 62/11 62/13 62/25 63/20 65/12 65/15 65/15 65/17 65/22 66/6 66/8 69/11 71/4 72/10 72/14 73/13 73/14 74/2 74/7 77/10 79/24 82/21 83/11 83/17 84/22 85/8 85/10 85/23 86/15 87/8 91/16 96/1 96/24 100/15 101/15 103/1 103/12 107/13 109/4 110/8 114/8 117/22 118/9 119/16 119/17 119/23 127/13 129/8 134/2 136/15 142/21 143/2 143/7 143/20 145/14 145/14 145/16 146/2 147/9 147/15 151/1 161/19 167/4 167/6 167/12 167/21 171/14 177/9 183/3 184/6 185/5 186/21 187/11 188/20 191/10 192/8 194/25 195/14 195/14 196/20 197/17 200/6 200/10 203/4 my Lady [37] 1/4 1/24 2/1 12/10 33/3 41/19 42/1 62/13 63/20 65/12 65/15 65/22 66/6 72/10 72/14 73/13 73/14 74/2 74/7 79/24 82/21 85/10 85/23 96/24 142/21 143/2 143/7 143/20 145/16 147/15 necessary [3] 28/23 167/4 167/21 171/14 191/10 192/8 200/6

203/4 $\quad$ need [52] 1/20 10/5

| my Lady's [1] 71/4 | 29/19 29/24 29/25 |
| :--- | :--- | 30/16 38/23 38/23 39/21 39/21 49/1 54/9 64/15 64/19 65/8 65/11 68/1 68/25 69/20 69/24 71/1 71/5 71/7 72/6 72/18 74/7 87/16 89/7 97/1 99/4 106/1 109/23 114/23 125/25 131/19 132/2 133/14 134/14 152/10 152/18 157/2 161/19 163/8 165/22 166/12 185/13 185/16 187/15 189/13 191/20 198/22 200/1

needed [7] 50/6 85/3 119/6 130/11 193/9 199/10 199/19
needs [10] 14/21 45/11 47/18 63/20 64/11 66/18 68/3 69/6 74/5 156/6
negative [4] 20/15 21/6 30/13 62/6 neighbourhoods [2] 18/21 49/4
neither [2] 153/24 188/23
network [1] 151/12 networks [3] 129/4 149/25 150/20 never [4] 39/17 112/1 138/24 155/9
nevertheless [1] 193/13
new [14] 30/16 59/1 116/2 122/11 149/11 153/22 154/1 163/25 166/9 172/11 172/16 175/5 175/9 175/14
New Orleans [1] 59/1
Newcastle [1] $2 / 13$
newly [2] 172/11 192/22
next [14] 25/22 26/11 30/11 37/5 37/21 40/19 65/9 65/18 74/4 143/21 144/3 166/8 166/17 176/13
next week [1] 143/21 NHS [11] 5/11 20/5 30/21 30/25 31/21 31/24 38/10 64/10 69/14 181/13 181/17
NHS England [1] 20/5
nine [2] 28/18 148/17
Ninth [1] 59/10
no [86] 8/7 9/19
14/17 26/20 32/23
37/22 42/16 45/25
46/20 51/3 51/13

53/12 53/18 53/18 53/19 54/4 59/11 59/11 68/2 68/2 74/15 75/10 75/23 84/11 84/25 85/9 92/8 92/10 92/13 95/21 96/2 98/5 98/19 100/6 100/6 102/19 107/15 109/25 114/3 117/24 120/1 121/16 127/11 134/11 137/1 137/23 139/21 141/10 141/22 142/1 142/3 142/8 144/21 145/9 145/14 149/2 151/6 152/22 155/22 156/23 158/5 163/11 163/15 163/17 163/18 163/20 164/5 164/16 165/1 165/15 166/6 167/12 171/1 180/7 181/22 183/11 186/21 188/2 191/3 191/8 193/24 198/12 199/20 199/20 201/12 201/19
no one [1] 155/22
no-deal [1] 181/22
No. [1] 75/11
No. 3 [1] 75/11
noble [1] 62/10
nodding [2] $9 / 25$ 70/23
nomenclature [1] 98/16
non [15] 17/7 43/11
45/2 80/4 80/21 80/22
83/5 83/25 85/12 87/3
108/22 169/22 170/9
172/6 174/25
Non-contaminated
[1] 174/25
non-malicious [8]
80/21 80/22 83/5
83/25 85/12 87/3
170/9 172/6
non-statutory [3]
43/11 45/2 108/22
nor [3] 45/14 53/14 188/23
normal [1] 59/12
normality [1] 94/21
normally [3] 94/19
106/9 142/24
norms [1] 18/4
north [6] 2/21 35/24
36/6 36/7 60/9 60/13
North America [1] 60/9
northeast [10] 24/15
24/23 25/16 26/1
27/18 36/14 36/16 36/18 37/2 37/11
northern [13] 7/10 7/17 8/2 8/3 8/5 8/9 13/10 13/14 15/17

N
northern... [4] 28/2 35/5 187/18 188/2

## Northern Ireland [11]

 7/10 7/17 8/2 8/3 8/5 8/9 13/10 13/14 15/17 28/2 187/18
## Northern Irish [1]

 188/2northwest [3] 24/24 25/16 26/2
Norwegian [1] 60/11 not [200] 5/10 5/13 5/23 6/9 7/4 8/24 10/15 10/20 10/24 23/16 23/22 24/16 24/22 29/13 29/16 31/15 32/4 33/9 34/1 34/3 34/15 37/11 37/22 39/9 39/10 39/11 45/12 50/14 50/18 50/24 51/13 51/23 52/1 54/6 54/14 54/17 59/4 61/23 63/8 63/9 65/1 67/6 69/8 70/7 71/5 71/20 72/6 74/21 75/10 77/2 77/4 79/23 80/9 80/16 83/17 84/9 86/3 88/13 89/11 89/14 89/21 90/6 90/20 92/10 92/12 93/13 96/18 100/11 103/9 103/12 103/22 104/5 105/10 106/9 106/24 107/8 107/8 107/13 107/15 108/2 110/11 111/12 112/25 113/17 114/22 115/3 115/19 116/5 116/9 116/15 116/18 117/22 119/17 120/4 122/7 126/6 128/3 128/23 130/5 130/22 133/25 135/1 135/2 135/3 135/4 135/12 135/16 136/23 137/7 138/13 138/15 139/15 139/15 140/5 145/5 146/19 150/22 151/2 151/4 151/7 152/21 155/7 156/22 157/8 157/12 157/18 157/20 158/18 159/1 159/18 160/8 160/15 160/17 162/4 162/9 162/18 162/19 163/15 163/18 164/4 164/5 164/9 164/12 164/18 164/20 165/12 165/19 166/7 166/17 167/1 167/2 167/8 167/21 169/9 169/15 170/1 170/20 172/15 173/5 175/16

178/5 178/6 178/9 $\quad$ Nuffield [1] 30/4 179/11 179/16 180/17 Nuffield Trust [1] 181/1 181/4 181/10 30/4
182/18 182/20 183/6 number [49] 5/11 183/21 184/20 185/12 $25 / 14$ 28/22 28/24 185/21 188/9 189/10 $\quad 28 / 25$ 30/20 30/24 189/20 191/23 192/11 $44 / 2$ 75/16 75/25 192/25 193/11 193/15 $81 / 17$ 84/2 84/14 193/16 193/21 194/2 $\quad 85 / 21$ 86/2 95/9 96/10 194/16 194/18 194/19 195/6 195/11 196/9 196/12 197/12 198/16 199/3 201/5 201/16 201/21
note [2] 1/18 169/25 noted [1] 16/14 nothing [12] 42/22 48/4 49/24 49/25 59/12 89/11 121/18 138/12 138/16 139/9 139/13 197/10
notice [1] 29/5
notion [1] 92/20 novel [1] 162/11 November [10] 185/24 185/25 186/1 186/4 186/5 186/5 186/13 186/20 186/22 187/3
November 2018 [4] 185/24 185/25 186/4 186/5
November 2019 [6] 186/1 186/5 186/13 186/20 186/22 187/3 now [43] 10/22 11/22 12/10 15/24 22/17 24/25 25/13 30/15 31/24 37/2 38/9 38/22 39/7 40/2 42/2 44/20 45/7 49/1 58/7 58/11 59/17 61/12 62/16 66/2 69/14 73/19 73/20 76/23 77/1 81/8 89/11 96/25 101/3 objectives [1] 178/21 105/13 120/13 142/24 obligated [2] 129/3 145/17 147/25 164/23 147/4
173/8 192/1 193/17 195/25
nowhere [1] 24/10 NRA [1] 170/2
NRPA [1] 163/8
NRPAs [2] 159/18 160/18
NRR [1] 42/15 NSC [5] 81/18 82/3 84/5 84/7 183/20 NSRA [16] 42/15 115/23 123/10 124/15 143/22 148/2 148/2 158/8 166/21 168/12 168/20 170/2 171/4 172/6 173/17 173/19 nuclear [1] 81/4
objective [1] 128/24 103/8 117/6 118/17 118/25 119/7 119/18 123/20 126/8 127/6 132/6 133/16 135/19 139/25 142/18 154/8 154/20 154/24 155/8 155/15 155/22 159/7 159/8 161/14 168/13 169/12 172/21 172/21 175/23 184/16 184/24 186/3 199/17
Number 10 [2] 95/9 199/17

## number 11 [1]

133/16
number 3 [1] 172/21
number 5 [1] 172/21
number one [1] 5/11 numbers [8] 67/10
154/12 154/13 161/4 161/6 175/17 184/21 191/17
numerous [1] 170/14 nurses [4] 23/18 31/3 31/7 31/11
nurses' [1] 31/13 nurturing [1] 62/5 0
o'clock [1] 203/11
O'Donnell [1] 95/19 oath [1] 74/9
obesity [3] 58/8 58/9 58/10
obligation [3] 93/2
126/23 128/22
obligations [1]
125/21
obligatory [1] 147/8
obliged [3] 126/4
126/6 126/9
observations [1]
71/17
Observatory [2]
69/14 69/14
obtained [2] 42/10
99/9
obvious [3] 68/24
80/15 156/16
obviously [20] 15/6
15/8 17/20 32/10

43/16 44/16 47/10 $\quad 107 / 25$
67/7 70/10 85/16 93/9 official [6] 13/25
94/14 97/12 98/9 $\quad 48 / 14$ 123/7 124/15
101/15 131/11 161/13 148/13 202/19
162/5 192/11 193/22 officially [1] 7/11
occasion [2] 32/6
officials [9] 82/3 82/6
84/6
occasional [1] 84/8
occasions [1] 46/12
occupation [2] 4/11
76/14
occupational [3]
9/13 9/16 64/6
occupations [1] 9/15
occur [2] 169/2 176/23
occurred [3] 162/21
167/18 197/19
October [5] 76/21 177/15 182/23 182/25 older [3] 29/25 30/1 188/18
October 2016 [2]
182/23 182/25
October 2018 [1] 188/18
October 2020 [1] 76/21
off [5] 3/16 9/7 56/5
61/3 65/12
office [77] 55/22
75/20 76/3 76/12
77/13 77/19 78/5 79/3
81/9 81/18 86/1 86/5
86/9 87/5 87/8 87/11
87/24 88/8 89/15 90/4
91/1 92/16 92/17
93/20 94/5 95/1 95/5
95/9 95/11 95/21 98/6 98/11 100/15 101/13 101/15 101/17 103/16 104/4 104/10 106/17 107/5 109/2 112/7
113/3 114/18 117/16 119/11 129/23 133/4 135/9 136/1 139/21 140/7 141/9 141/10
142/9 142/12 143/11
144/3 145/24 147/6
158/8 175/25 187/19
188/3 191/14 191/20
192/4 192/4 193/17
195/22 196/3 196/24
199/12 199/13 199/16
201/8
Office's [3] 77/15
78/22 91/22
officer [4] 76/3 76/4
108/1 166/13
Officers [2] 199/22 200/2
offices [11] 102/14
102/20 103/4 105/7
105/9 105/11 105/14
105/21 106/21 106/25 only [27] 7/3 10/25
only... [25] 23/9
23/16 25/11 26/1 26/2 37/7 49/22 53/1 53/3 68/11 70/9 92/10 92/13 92/17 100/23
104/5 107/8 140/24
142/17 149/5 165/24
170/23 175/17 189/23
189/23
ONS [1] 67/18
onset [4] 40/25 41/9 88/5 109/3
onwards [4] 83/12
118/13 125/5 140/14
open [2] 111/19
155/25
operability [2] 128/1 131/8
operated [3] 90/6 90/13 90/19
operates [2] 103/24 124/3
operating [4] 76/3
76/4 90/7 133/16
operation [16] 90/12
90/21 92/2 119/14
135/21 139/6 146/14
177/14 177/15 177/18 177/20 181/22 181/23 183/8 183/9 184/3

## Operation Cygnus

[2] 135/21 177/14

## Operation

Yellowhammer [7]
119/14 139/6 146/14
181/22 183/8 183/9
184/3
operational [2]
104/11 139/22
operationally [1] 140/3
operations [10]
103/18 104/12 104/19 107/8 114/15 124/17 180/19 181/3 186/11 198/3
opinion [5] 40/3
54/23 70/2 157/5 173/22
opportunities [1] 16/16
opportunity [2] 76/7 176/7
opposed [6] 15/4
80/11 80/11 122/3
176/22 181/14
or [218]
order [14] 62/17
67/11 72/15 73/1 87/4 89/4 106/4 114/23 118/19 122/22 146/9 161/20 163/25 183/7
ordinary [1] 26/20
ordinated [1] 106/20 ordinating [7] 78/12 105/6 107/20 130/25 140/21 141/6 142/6 ordination [11] 77/20 78/23 94/4 95/12 95/22 131/9 178/24 198/10 198/12 199/6 199/12
organisation [5] 2/21
3/9 6/21 28/16 119/6 organisational [1] 178/22
organisations [4] 71/10 132/17 179/6 181/6
organised [1] 18/3 organogram [2] 101/19 201/4
oriented [1] 197/12 original [1] 151/1 originally [1] 104/20 Orleans [1] 59/1 other [83] 4/12 4/23 7/4 7/8 8/11 13/16 14/8 14/12 14/13 20/24 23/5 23/7 24/8 29/9 29/18 39/24 $42 / 2142 / 2344 / 12$ 48/19 49/21 51/21 53/15 57/19 58/13 65/22 67/23 68/8 69/1 70/19 72/8 72/20 73/6 77/14 77/17 78/16 90/17 91/2 91/7 91/7 92/9 92/11 93/16 96/16 99/10 99/22 99/23 103/7 103/9 105/1 105/12 105/13 105/13 106/18 107/9 112/2 113/16 115/11 116/17 119/6 120/3 128/18 129/14 130/15 overall [7] 40/7 70/9 132/8 133/10 136/24 100/24 101/7 115/18 140/15 140/16 140/19 115/24 194/22
145/4 146/16 149/7 154/1 159/9 160/20 161/16 161/17 170/18 overcrowded [1] 174/7 187/14 188/6 190/17
others [13] 15/10 70/12 89/24 91/6 92/18 93/19 95/18 99/19 125/25 134/15 136/15 197/4 197/10 ought [1] 119/13 our [11] 5/21 7/9 19/8 37/25 38/4 41/21 44/17 54/22 57/16 57/17 168/9 out [48] 6/19 12/10 16/1 18/11 40/3 48/25 overwhelmingly [1] 49/2 50/9 51/17 53/2 59/9

58/4 61/10 62/15 62/19 67/13 77/25 78/14 84/18 84/21 84/24 99/8 103/21 108/7 108/21 120/2 120/7 122/4 122/19 124/7 125/20 129/25 132/15 132/19 133/22 137/21 138/22 140/16 146/23 156/7 160/25 161/20 171/8 172/10 178/15 183/3 184/16 184/21 202/15
outbreak [5] 171/24
173/10 173/12 178/17

## 178/20

outbreaks [1] 174/2 outcome [2] 132/8 157/2
outcomes [11] 4/16 4/18 4/21 4/24 5/4 9/14 9/15 9/19 20/15 120/9 175/20
outdated [1] 43/22 outline [2] 55/11 136/9
outlined [4] 18/16 40/13 47/11 69/4 outlining [1] 72/6 outside [6] 37/12 37/17 128/22 144/17 151/3 151/18
outwith [1] 77/7
over [27] 8/12 10/23 13/13 16/7 20/17 31/11 31/12 31/14 34/20 38/13 58/22 82/17 84/23 86/6 90/11 91/3 96/15 98/10 111/16 113/25 119/1 121/24 127/4 144/2 148/18 163/9 172/11
overall [7] 40/7 70/9
100/24 101/7 115/18
overarching [1]
180/18
56/2
overlapping [1] 20/7
overnight [1] 12/10 overrun [1] 181/17 overseeing [1] 186/8 overseen [1] 186/10 oversight [3] 78/13 84/12 95/18
overstate [2] 24/1 26/18 overusing [1] 29/13 overwhelming [1] 111/6
own [18] 2/3 89/17 93/3 93/13 94/10 100/9 100/17 116/11 126/4 126/5 131/17 137/11 137/19 141/18 158/7 161/24 162/2 192/4
owned [2] 100/19
143/22
owner [1] 158/7
owners [1] 169/18
ownership [1]
143/17
owns [2] 108/11 158/14

## $\mathbf{P}$

page [81] 2/2 4/3
16/7 22/21 25/22
25/24 27/21 28/3 32/9 35/9 40/6 44/1 44/4 44/5 44/24 45/7 52/5 60/17 72/11 75/5 75/5 75/12 98/21 101/20 101/23 102/5 104/22 104/23 106/3 107/19 109/11 109/13 110/13 114/16 117/20 118/1 120/6 120/12 120/15 120/16 121/2 121/9 127/12 131/3 131/7 132/1 132/5 132/12 132/13 133/8 133/10 133/10 142/18 143/8 159/15 167/14 167/20 168/3 168/7 169/11 169/13 169/14 169/25 170/8 170/16 171/3 171/12 171/13 171/14 171/25 173/9 174/6 174/22 178/15 178/21 179/3 180/17 181/5 181/11 182/3 196/13
page 1 [4] 118/1
131/3 167/20 168/3
Page 10 [1] 171/3
Page 12 [1] 182/3
Page 13 [1] 171/12
page 135 [1] 171/25
Page 140 [1] 174/6
page 15 [1] 22/21
page 16 [1] 104/23
page 160 [1] 120/6
page 164 [1] 120/15
page 17 [1] 101/20
page 175 [1] 174/22
page 19 [1] 143/8
page 2 [1] 133/8
page 20 [1] 25/24
page 21 [1] 27/21
page 22 [2] 28/3 32/9
page 24 [2] 35/9
106/3
page 26 [1] 196/13
page 28 [1] 159/15
page 29 [1] 40/6
page 3 [4] 102/5
131/7 168/7 178/15
page 35 [1] 75/5
page 36 [3] 132/1 132/12 178/21
page 4 [4] $4 / 352 / 5$ 75/12 98/21
page 40 [1] 44/4
page 43 [1] 44/24
page 45 [1] 107/19
page 5 [2] 114/16 169/11
page 6 [3] 169/14 179/3 180/17
page 7 [2] 169/25 181/5
page 8 [3] 109/11 109/13 170/8
page 82 [1] 60/17
page 83 [1] 72/11
page 9 [2] 170/16 181/11
page which [1] 167/14
pages [1] 123/14 paid [6] 16/15 16/18 55/20 85/11 87/10 156/23
Pakistani [4] 16/11 17/2 18/20 49/11 pan [2] 132/18 199/1 pan-flu [1] 132/18 pandemic [179] 2/15 3/25 11/9 11/10 23/10 23/16 29/20 30/24 31/19 34/24 38/14 41/1 41/10 41/10 41/20 42/3 42/19 42/25 43/1 43/18 43/24 47/9 47/17 47/19 47/23 48/8 48/24 49/10 49/16 50/17 50/20 51/7 52/10 52/24 54/20 55/3 55/9 56/5 57/6 57/15 57/16 58/16 60/3 62/18 63/4 63/9 63/11 63/13 63/19 63/21 64/13 64/25 65/9 70/3 70/5 70/8 70/17 71/16 73/11 88/5 93/8 115/2 115/3 115/7 115/8 115/14 115/17 115/22 115/24 116/4 116/13 116/19 117/2 117/4 117/12 120/19 122/1 122/6 122/11 125/1 125/4 125/11 128/7 128/10 128/13 128/14 130/20 131/1 131/23 132/1 132/4 132/18 132/25

| $P$ | 51 | 75/22 76/2 79/9 80/8 | Patrick [1] 150/24 | 71/13 75/8 75/17 79/7 |
| :---: | :---: | :---: | :---: | :---: |
| pandemic... [86] |  | 8 |  |  |
| 133/11 133/14 133/18 |  | 88/13 89/4 91/22 | 27/23 35/2 147 | 12 |
| 133/21 134/7 134/12 | paragr | 100/18 100/20 101 | patterning [1] | 145/16 14 |
| 134/13 134/16 134/21 | 52/5 52 | 101/9 102/21 107/9 | patterns [4] 26/25 | 151/1 153/18 156/6 |
| 135/5 142/2 142/4 | paragraph 160 [2] | 108/17 108/21 113/4 | 27/1 67/13 100/21 | 162/24 167/17 171/1 |
| 144/14 146/5 146/12 |  | 7 | ity [2] 66 | 203 |
| 149/10 152/4 153/14 |  | 614 |  |  |
| 153/21 154/15 154/20 | 60 | 144/10 146/6 148 | pause [10] | period [25] 13/13 |
| 156/12 156/18 | p | 155/2 155/11 161/25 | 9 | 31/14 36/23 40/10 |
| 159/20 160/9 160/13 |  | 165/20 171/9 171/9 | 101/21 142/20 143/3 | 40/24 40/25 41/3 |
| 16 | paragraph 199 | 173/25 176/7 176/10 | 167/23 168/1 180/23 | 68/23 75/23 86/6 |
| 4/7 164/21 165/3 |  | 182/5 185/10 188/7 | paused [4] 183/7 | 90/13 111/17 118/1 |
| 165/8 166/9 168/5 | paragr | 200/20 201/25 202/25 | 183/23 184/12 185/ | 119/1 119/22 120/1 |
| 170/12 171/22 | paragraph 2.18 | part A [1] | pay [6] 31/11 31/ | 139/17 148/21 154/2 |
| 172/5 172/20 173/5 | 104/24 | part-way [1] | 31/14 31/17 31/18 | 157/10 163/9 186/2 |
| 173/14 173/20 174/5 | paragraph 20 [1] | partially [1] 124 | 15 | 187/2 187/7 187/13 |
| 174/23 175/22 178/16 | 109/ | participants [1] | payments | permanent [4] 52/8 |
| 178/20 178/22 179/9 | pa |  | payroll [1] 15 | 76/2 93/20 100/16 |
| 179/12 179/15 179/17 |  |  |  |  |
| 179/19 180/5 180/19 |  |  |  |  |
| 181/2 181/18 182/19 |  |  | 8/5 9/7 9/13 |  |
| 183/15 183/17 183/24 | p | p | 11/14 14/14 14/2 | Pe |
| 185/22 186/17 186/18 |  | 96/7 98/2 | 15/1 16/14 17/6 1 |  |
| 187/9 187/12 187/20 | paragraph 3 [1] | 111/10 111/25 114 | 18/18 20/6 20/12 | permanently |
| 187/23 188/4 188/8 | paragr | 120/11 124/10 125/24 | 2 | 139 |
| 188/12 188/15 189/3 | 106/3 | 129/3 130/20 134/20 | 22/6 22/8 22/11 22/1 | permission [4] 2/4 |
| 189/5 189/19 190/1 | paragra | 136/25 136/25 145/ | 24/4 24/14 24/17 | 66/2 191/11 200/11 |
| 190/6 190/8 190/13 |  | 15 | 2 | itted [1] |
| 190/20 192/21 192/21 | paragraph 34 [1] | 152/23 153/10 153/15 | 29/25 30/1 30/20 | persistent [1] 175/1 |
| 193/1 193/4 |  | 153/25 156/23 169 | 30/24 39/24 | person [8] 38/16 |
| pandemics [15] 3/18 | paragr | 80 | 41 | 8/18 39/1 |
| 3/19 3/20 57/9 60/25 | 22/21 | 185/6 189/13 190/7 | 45/16 45/17 45/18 | 39/3 173/2 173/2 |
| 3/1 63/23 64/11 72/7 | pa | 195/1 | 46/11 46/11 46/ | person's [1] 9/21 |
| 72/24 117/6 166/8 |  | particular | 47/14 49/7 55/16 | personal [4] 95/4 |
| 170/6 173/15 189/8 | paragraph 5 [1] | 15/12 17/21 20/23 | 56/15 57/7 57/10 | 146/19 146/19 163/3 |
| paper [2] 178/9 194/8 |  | 24/14 27/14 37 | 57/11 57/12 57/1 | ersons [2] 120/8 |
| [2] 202/3 | paragr | 80/19 129/12 144 | 58/23 58/23 58/24 |  |
| 202/22 | 40/5 | 145/3 151/16 162/8 | 59/8 60/10 67/13 68/2 | perspective [4] |
| paperwork [6] 91/13 | p | 184/9 189/1 | 68/9 68/1 | 34/25 43/24 44/1 |
| 122/22 127/21 128/24 |  | p |  | 93/18 |
| 129/16 129/25 | paragraph 97 [ | 60/13 69/21 78/15 | 111/20 115/6 129/14 | erspectives [1] |
| paragraph [41] 4 | 4 | 78/16 87/23 8 | 144/25 145/1 1 | 96/12 |
| 8/21 11/25 12/4 15/22 | paragraphs [4] | 97/20 97/25 98/ | 151/7 158/20 178/6 | ersuasion [2] 95/3 |
| 16/2 18/11 20/2 20/3 |  | 104/1 107/7 108/20 | 178/9 190/13 190/15 | 95/23 |
| 21/25 22/21 40/5 | paragraphs 174 | 119/6 132/6 134/10 | 199/2 | RB [1] |
| 40/19 43/25 44/25 |  | 144/11 144/13 145/18 | p | se [3] 84/23 |
| 45/7 51/17 52/5 52/11 |  |  |  |  |
| 54/9 60/18 63/17 |  |  | /18 39/1 39/2 39/3 | hase [1] [1] |
| 72/16 72/17 98/22 | paragr 25/22 | pass [1] 164/8 <br> passage [2] 194/19 | 38/18 39/1 39/2 39/3 perceived [2] 22/12 | phenomenon [1] 27/2 |
| /24 106/3 107/19 | 25/22 <br> paragr | passage [2] 194/19 | perceived [2] 22/12 | hilip [1] 93/ |
| 110/13 114/16 | $\begin{gathered} \text { parag } \\ 10 / 4 \end{gathered}$ | passing [1] | perception [1] 197 | hrase [1] 89/16 |
| 161/11 165/25 168/8 | parallel [2] 90/1 | past [4] 73/18 117/6 | perfect [1] 96/24 | hysical [3] 22/4 |
| 169/14 178/18 195/2 |  | 172/11 173/24 | fectly [2] 33/ | /3 |
| 196/13 |  | patches [2] 197 | 34/14 | ysically [1] 83/ |
| Paragraph 1.2 [1] |  | 197/16 | performance [6] 19/9 | [1] |
| 114/16 | $1 / 23122 / 20$ | pathogen [1] 173 | 127/10 131/18 |  |
| [1] | 1/23 122/20 | $\begin{aligned} & \text { pathway [2] 55/2 } \\ & 56 / 24 \end{aligned}$ | 127/10 131/18 |  |
|  | Parliamentary [ | pathways [1] 5 | $141 / 25$ | 37/9 41/9 106 |
| paragraph $12 / 4$ | 94/ | ience [1] 71/4 | rformed [2] 89/1 | 106/23 124/4 153/8 |
| paragraph 137 [1] | $\begin{aligned} & \text { part [49] 1/21 31/12 } \\ & 35 / 1738 / 2447 / 2 \end{aligned}$ | $\begin{aligned} & \text { patients [2] 181/13 } \\ & \text { 181/17 } \end{aligned}$ | $\begin{aligned} & \text { 125/8 } \\ & \text { perhaps [24] 46/15 } \end{aligned}$ | $\begin{gathered} \text { piece [9] 95/16 112/2 } \\ 113 / 6 \text { 117/16 136/18 } \end{gathered}$ |

(75) pandemic... - piece
piece... [4] 138/17
190/7 191/1 191/6
pieces [3] 45/2
124/23 129/11
PIR [1] 111/19
place [19] 8/12 36/9
50/17 52/17 59/11
65/9 100/9 114/21
127/16 129/10 145/23
149/23 155/16 161/6
161/8 173/8 177/15
180/25 182/7
placed [2] 60/24 155/21
places [1] 28/24
plain [1] 77/1
plainly [1] 100/8
plan [14] 63/11 65/1
65/2 99/6 128/14
130/13 152/3 152/14
154/21 168/23 169/1
169/4 170/23 185/19
planned [11] 155/20
162/4 163/12 163/16
163/19 164/12 164/15
164/17 165/18 168/14
181/1
planners [1] 169/19
planning [72] 3/25
41/20 42/4 47/10 51/3 51/16 53/4 53/10 53/13 54/3 54/14 54/20 62/18 63/9 63/10 63/19 63/21 64/13 64/16 64/21 64/25 69/7 69/9 70/3 71/15 71/19 71/22 72/1 72/7 88/23 89/1 91/25 92/1 99/1 99/6 109/20 115/15 144/17 152/8 152/16 152/22 155/2 155/11 155/23 157/3 158/12 159/19 159/21 159/23 160/11 165/14 165/23 166/1 166/5 168/18 169/7 169/21 169/23 170/14 171/1 171/10 174/22 175/2 175/7 175/15 175/24 176/15 181/22 183/10 187/24 188/24 189/2
plans [13] 45/10
45/21 57/16 99/5 99/20 99/25 156/7 156/10 159/3 168/10 178/22 179/10 185/1 plausible [2] 41/7 171/7
play [3] 110/21 168/4 178/3
played [1] 91/1
playing [1] 178/5 please [98] 1/7 1/16 1/19 1/20 1/22 2/3 4/3 4/20 8/20 10/6 11/24 13/21 15/23 16/7 18/25 20/2 21/13 21/25 22/19 22/21 25/3 25/20 25/22 25/24 27/21 28/3 35/9 35/21 36/12 37/22 40/2 40/19 44/1 44/20 44/24 52/11 53/6 54/8 55/1 55/4 55/15 58/3 60/16 60/17 60/19 61/13 63/17 65/17 66/3 72/10 74/10 74/22 74/25 75/4 75/5 75/12 79/24 85/23 101/19 101/20 102/5 104/16 104/23 106/3 109/11 110/13 112/18 120/6 120/12 120/15 127/23 131/7 132/12 133/5 133/6 134/2 136/14 142/16 142/16 143/8 147/18 147/22 148/1 159/14 160/21 167/20 167/25 168/7 168/8 169/11 169/14 171/8 172/10 172/24 177/11 178/15 179/3 200/16
pleased [1] 69/13 pleasing [1] $8 / 10$ pleasingly [2] 8/7 8/7 plot [4] 58/5 58/6 58/7 58/11
plotted [1] 27/22 plus [1] 187/21 pm [5] 97/4 97/6 147/19 147/21 203/14 point [40] 29/9 32/10 34/8 37/1 43/25 44/6 51/2 63/15 63/16 68/15 79/13 84/19 85/2 91/4 92/13 95/16 101/11 105/4 105/25 113/12 113/14 114/3 121/9 124/5 127/7 129/7 135/3 142/21 147/15 150/3 167/3 167/17 172/14 181/3 181/11 183/22 186/12 187/5 199/5 201/3 point 4 [1] 181/11 points [4] 106/1 145/17 146/4 149/22 poisoning [1] 20/24 police [2] 80/15 81/2 policies [8] 40/8 52/16 52/24 78/13 131/20 179/11 182/18 189/1
policy [10] 61/11

90/18 99/25 100/7 114/12 130/1 140/8 160/8 162/17 195/7 political [2] 95/3 95/23
Pollock [5] 193/24 194/4 194/5 194/8 195/10
poor [9] 15/12 16/15 16/18 19/10 19/11 20/8 20/14 59/8 192/21
poor-quality [1] 16/18
poorer [4] 9/8 14/25 35/18 35/19
poorest [6] 26/13 26/14 37/5 37/5 41/13 57/7
populated [1] 124/1 population [20] 2/11 17/5 18/22 20/23 29/22 29/23 30/7 30/7 30/12 30/13 30/15 49/10 51/22 64/4 64/14 66/16 67/4 67/11 70/20 190/8 populations [5] 14/22 16/12 66/19 67/24 68/11
portfolio [1] 86/15 position [23] 9/3 9/22 42/14 58/18 58/23 58/24 58/25 59/20 76/21 77/6 77/12 77/24 84/3 86/13 95/2 97/12 97/13 122/12 170/3 170/20 190/21 194/1 200/16
positions [2] 85/24 86/8
positive [5] 30/16
62/4 147/9 147/11 162/22
possession [1] 135/7 possibilities [1] 167/10
possibility [3] 121/13 164/24 181/16 possible [8] 62/12 74/22 96/4 96/4 149/1 166/8 175/13 185/13 post [29] 23/24 25/17 27/11 30/19 40/8 40/12 43/1 61/19 76/14 76/19 83/9 86/13 90/13 90/21 97/24 109/4 109/12 110/14 131/6 131/25 137/17 139/3 147/9 150/23 177/24 178/2 178/2 178/8 178/17 post-2010 [5] 23/24 27/11 30/19 40/8

40/12
post-Covid [2] 131/6 131/25
post-industrial [1] 25/17
posted [1] 88/7
potential [6] 51/20
53/13 165/16 165/20 169/5 172/6
potentially [5] 22/14
47/8 51/6 127/5 189/4
poverty [5] 17/4 17/8
18/17 20/8 25/17
power [5] 95/14 95/16 95/17 96/16 165/8
powers [4] 95/12
95/21 96/2 111/21
PPE [2] 64/1 64/5
practical [1] 129/6
practicalities [1]
65/8
practically [1] 129/2
practice [21] 78/16
90/11 97/11 107/14 108/6 109/18 114/24 125/22 125/23 126/24 129/15 132/10 132/14 132/22 144/5 153/11 155/7 182/5 195/8 199/9 199/13
practices [1] 45/20
pragmatism [1]
114/4
pre [16] 11/9 29/20
30/24 42/19 48/12
54/15 54/18 56/9
57/15 58/2 63/5
145/24 189/14 191/15
193/18 193/19
pre-Covid [1] 145/24
pre-dated [2] 193/18
193/19
pre-dates [1] 48/12
pre-existing [7]
54/15 54/18 56/9
57/15 58/2 63/5
189/14
pre-pandemic [4]
11/9 29/20 30/24
42/19
precise [2] 77/8
196/22
precisely [4] 83/23
155/1 157/6 203/1
predict [1] 47/16
predictable [2] 58/17 189/10
predicted [1] 58/22
predicting [2] 10/15
10/20
predominantly [1]
46/10
prefer [1] 83/8
pregnancy [1] 48/4 prejudice [1] 19/12 preparation [7] 42/11 53/23 63/19 63/21 78/12 101/7 131/10 preparations [5] 64/18 100/1 116/12 186/8 193/7
prepare [6] 114/14
120/3 122/23 130/12 152/7 152/14
prepared [8] 1/24
3/21 19/8 134/24
152/25 156/17 180/4 180/9
preparedness [24]
49/16 52/24 70/4
117/17 118/2 124/18
125/1 128/7 128/10
132/1 132/4 134/4
141/19 164/22 178/16
178/19 179/10 182/17
187/20 188/8 188/13
188/16 192/20 193/1
preparing [3] 79/3
125/24 158/13
present [3] 1/6 48/6 169/16
presented [1] 13/13
presently [1] 99/2
press [2] 3/16 112/18
pressure [2] 31/8
89/9
presumably [3]
98/11 130/10 130/18
pretty [8] 11/1 19/5
26/25 27/1 123/2
130/2 146/17 147/2
prevalence [1] 22/5
prevalent [1] 122/1
prevent [3] 155/16 155/25 195/8
prevention [1] 29/1
previous [8] 27/24
44/5 45/18 49/20 57/8
63/1 114/25 175/20
previously [1] 173/13
PRFB [1] 186/19
primarily [3] 77/19
143/22 144/25
primary [9] 77/16
90/9 103/25 104/3
107/4 108/2 135/1
135/15 142/15
prime [4] 87/7 94/14
100/3 146/10
Prime Minister [2] 87/7 146/10
principle [6] 92/20
92/22 93/24 141/4
144/4 152/11
principles [1] 62/19
prior [1] 76/13
priorities [3] 112/15

| P | 121/9 | 64/12 | $38 /$ | 84/23 |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \hline \text { priorities... [2] } \\ & 113 / 13 \text { 168/10 } \\ & \text { prioritisation [1] } \\ & 113 / 19 \\ & \text { prioritise [1] 108/16 } \\ & \text { prioritised [2] 184/7 } \end{aligned}$ |  |  |  | quo [1] 197/9 |
|  |  | proposed [1] 137/17 | 119/12 126/8 129/9 | 1] |
|  | professor [40] 1/5 | proposition [6] | 132/21 138/1 161 | quoted [1] 173/16 |
|  | 1/6 1/8 1/10 2/10 2/11 | $\begin{aligned} & 116 / 23140 / 4151 / 1 \\ & 159 / 2159 / 12176 / 9 \\ & \text { propositions [2] } \\ & 136 / 20139 / 19 \end{aligned}$ | 162/24 167/24 180/24 | quoting [1] 195/2 |
|  | 2/23 2/23 6/15 6/25 |  | 191/18 193/4 195/1 | R |
|  | 18/16 23/14 25/2 25/5 |  | 200 | race [6] 18/12 19/24 |
|  | 25/6 35/13 42/5 55/3 | protect [1] 63/12 | puts [1] 31/8 | 69/1 69/13 69/1 |
| priority [3] 113/17 | 56/14 56/18 59/25 | protected [3] 14/7 | putting [5] 29/1 | 71/13 |
| $113 / 22114 / 2$ | 61/12 62/14 66/7 66/8 | 45/13 72/20 | 34/12 67/7 77/21 | [ |
| prison [2] 190/8 | 66/16 70/23 73/12 | protection [2] 72/2 | 18 | ism [14] 17/1 |
|  | 180/3 192/19 195/1 |  | Q | 18/2 19/2 19/5 19/20 |
| $\text { ons [1] } 19$ | 199/4 204/2 204/4 | 16 | qua | 19/22 19/24 53/11 |
|  | Professor Alexander | pr | 85/1 93/11 16 | 53/13 53/22 56/1 |
| 0 | [4] 111/15 192/19 | provide [7] | qualifications [2] | diological [1] 81/4 |
| eged [1] $8 / 25$ | 195/1 199/4 | 92/12 92/18 106/22 |  | raise [1] 111/20 |
| probably [4] 32/24 | Professor Ba | 108/1 165/25 179/8 | lify [1] | sed [4] |
| 34/1 164/10 186/23 | [9] 2/10 6/15 25/6 | ed [12] 42/9 | lity [3] 11/3 1 | 81/11 195/4 201/19 |
| problem [5] 47/2 | 42/5 55/3 59/25 66/7 | /6 75/19 76/18 | 16/18 | ises [1] 23/2 |
| 68/2 69/16 74/15 | 66/16 73/13 | /11 108/23 110/19 | antitie | [2] 100/16 142/13 |
| 161/13 | Professor Cla | 9 125/12 125 |  |  |
| problems [3] 22/8 | Bambra [1] 1/5 | 8/9 176/8 | queer [1] | 2/16 143/24 168 |
| 31/9 193/18 | Professor Ma | provider [1] 92 | question [39] | 172/7 174/11 174/12 |
|  | [14] 6/25 12/2 15/21 | providers [1] 92/11 | 23/2 23/5 28/11 33/1 | 175/11 176/11 176/18 |
|  | 16/13 18/16 23/14 | provides [1] 92/15 | 37/21 53 | ranging [1] 11 |
| 145/23 188/25 | 25/2 25/5 35/13 61/12 | providing [4] 2/8 | 66/14 68/6 74/21 79/8 | ranked [1] 5/11 |
|  | 66/8 70/23 73/12 | 103/14 106/19 148/10 | 80/8 94/1 112/16 | ranking [1] 9/14 |
| $1]$ | 73/16 | provision [1] 52/18 | 113/8 119/18 131/1 | rapid [2] 102/6 |
|  | Professor Marmot's | provisional [2] 65/23 | 134/2 145/16 159/11 | 162/10 |
| 124/15 126/10 127/9 | [1] 56/14 | 191/12 | 166/12 167/7 167/8 | rapidly [1] 197/19 |
| $127 / 13137 / 6137 / 9$ | Professor Sir [2] 1/6 | psychosocial [4] | 167/12 176/16 177/ | rare [1] 46/12 |
| $138 / 2 \text { 141/22 141/23 }$ | 2/23 | 19/4 19/22 56/16 | 182/14 182/24 186/21 | RASG [1] 151/10 |
| 147/23 148/2 148/8 | Profess | 56/19 | 188/20 189/6 191/21 | rate [9] 18/6 23/1 |
| 148/12 148/16 149/1 | 180/3 | public [26] 2/11 2/24 | 196/16 198/16 202 | 23/4 24/6 49/3 111/9 |
| 149/23 150/4 15 | professors [4] 1/25 | 3/1 3/3 3/7 8/4 8/8 | 202/11 202/15 202 | 154/5 191/22 192 |
| 151/4 152/11 155/11 | 2 | 8/11 31/12 34 | questioning [2] 1/ | d [2] 141/2 |
| 158/8 158/14 160/4 | profile [1] 52/1 | 40/11 41/11 42/1 | 22/2 |  |
| 160/11 161/12 162/2 | profusion [1] 128/23 | 43/24 54/17 64/2 65/3 | questions [26] | rates [20] 4/17 9/4 |
| 162/23 166/15 166/24 | programme [18] | 25 123/6 | 3/18 42/6 57/24 65/15 | 9/23 10/17 10/19 |
| 167/1 167/2 167/6 | 97/22 124/22 125/2 | 130/13 148/5 148/14 | 65/25 66/2 66/5 66/10 | 10/21 18/9 20/20 22 |
|  | 146/6 179/19 180/11 | 155/13 178/25 179/22 | 68/12 72/12 74/12 | 34/23 40/16 57/12 |
| 176/4 176/10 177/3 | 181/19 183/2 183/5 | publication [3] | 111/19 191/8 191/1 | 67/1 129/22 130/2 |
| 184/18 184/22 184/25 | 183/15 183/16 183/22 | 120/21 148/12 202/18 | 192/12 192/14 192/16 | 160/6 160/20 161/13 |
| 185/12 189/24 195 | 183/25 184/12 185/7 | publish [3] 2/4 97/9 | 200/8 200/12 200 | 165/20 165/24 |
| 199/23 200/18 200/19 | 185/18 188/13 190/7 | 103/16 | 204/6 204/9 204/13 | rather [15] 6/15 46/3 |
| 201/6 201/9 202/2 | prom | publishe | 204/16 204/18 | 46/16 73/23 76/23 |
| 202/7 202/25 | promotes [1] 77/23 | 37/24 45 | quick [2] 74/5 | 87/6 102 |
| 2027 | promulgated [1] | 4/20 125/3 133/3 | quickly [2] 89/20 | 11/22 140/16 177/17 |
|  | 185/22 | 133/13 133/23 133/25 | 199/2 | 78/3 178/8 179/23 |
| $138 / 6 \text { 179/1 }$ | pronounced [1] | 134/11 143/10 179/21 | q | 82/10 |
| $311$ | 37/18 | 194/ | 26/13 26/14 | rating [2] 115/24 |
| $158 / 10201 / 1$ | proper [3] 5 |  | tiles [ | 121 |
|  | 77/25 100/9 | Puerto Rico [1] | quite [32] 7/11 7/25 | rationalised [1] |
| $75 / 275 / 16117 / 4$ | properly [4] 54/14 | 58/21 | 8/14 21/3 21/7 26/13 | 84/20 |
|  | 93/4 132/24 171/19 | pupils [1] | 34/6 34/7 34/17 35/1 | rationalising [ |
| $\begin{aligned} & 130 / 23138 / 20 \\ & 194 / 8202 / 13 \end{aligned}$ | property [3] 56/2 | purport [1] 65/7 | 39/12 43/20 54/5 | 129/16 |
| produces [1] | 56/2 86/21 | purpose [5] 109/2 | 68/19 71/18 74/2 | re [2] 98/18 118/8 |
|  | proportion [2] 84/9 | 129/22 136/17 144/20 | 80/17 90/19 92/1 | re-issued [2] 98/18 |
|  | 138/25 | 201/22 | 111/19 118/17 118/17 | 118/8 |
| $163 / 21202 / 12$ | proportionalism [1] | purposes [1] 150/15 | 119/24 125/21 126/ | reach [2] 70/22 |
| professional [2] 2/9 | $\begin{aligned} & \text { 64/15 } \\ & \text { proportionalism' [1] } \end{aligned}$ | put [29] 4/3 29/21 <br> 34/9 35/9 37/25 38/4 | $\begin{aligned} & \text { 127/22 127/22 136/17 } \\ & 138 / 17 \text { 145/15 156/2 } \end{aligned}$ | $\begin{aligned} & 146 / 23 \\ & \text { reached [5] 23/3 89/7 } \end{aligned}$ |

reached... [3] 89/13
136/16 144/11
reacting [1] 94/6 read [2] 60/19 180/21
reader [1] 121/10
readers [1] 169/25 readily [2] 11/4 157/23
readiness [15] 125/5 125/11 136/25 138/19 141/15 146/6 146/12 179/19 183/15 183/18 183/25 185/22 186/19 187/9 187/12
reading [6] 32/17 46/10 120/8 121/2 125/13 202/14
reads [1] 45/8
ready [18] 66/1 74/4
100/11 130/12 130/12
130/13 130/14 131/13
131/13 132/25 134/18
134/19 135/2 135/10
152/18 160/5 168/25 169/3
real [7] 31/9 31/11
127/14 161/12 178/6 178/6 178/11
realistic [1] 153/2
realities [2] 156/19 156/22
reality [5] 107/15 155/24 159/6 162/21 170/25
really [39] 24/9 26/18
26/19 31/19 32/7
32/10 33/12 34/6
34/17 36/3 43/23 65/8
78/4 85/2 88/14 93/15
96/1 108/6 119/15
126/6 129/14 129/17
135/20 145/6 146/3
153/12 158/1 162/5
162/6 164/8 186/25
189/6 193/8 196/8
196/12 196/21 197/14 197/14 202/25
reason [13] 6/7 27/8
59/3 59/18 93/12
136/23 156/21 157/4 160/25 162/18 165/7 184/12 186/6
reasonable [33]
115/7 115/9 117/3
149/2 149/13 152/1
152/3 152/16 152/24
153/12 153/13 154/15
155/3 155/6 155/18 156/3 156/8 156/18 156/21 157/5 158/9 159/4 159/22 161/7 161/8 162/1 167/5

173/18 173/23 174/9 $\quad 108 / 15$
174/12 174/19 175/22 reduced [2] 40/17 reasonably [1]
152/20
reasons [7] 25/14
29/6 47/11 119/10 183/3 185/11 197/7 recall [13] 97/11 111/21 112/23 113/4 117/20 122/7 122/12 130/6 161/11 179/22 180/2 180/6 191/19 received [2] 111/4 137/10
recent [3] 31/6 42/16 67/16 recently [4] 3/16 5/10 43/1 68/11
recognise [1] 196/5
recognised [6] 106/7
106/22 172/12 180/10 189/9 189/10
recognises [1]
168/13
recognition [2] 189/8 189/12
recollect [3] 181/10 188/9 195/13
recollection [4]
110/10 130/3 187/12 201/19
recommend [1]
62/12
recommendation [6] 62/10 65/5 89/4 176/17 176/25 180/21 recommendations
[10] 4/1 28/20 29/3
57/23 60/16 60/20
60/22 62/24 63/20
180/16
recommended [6]
88/21 176/10 176/17
176/20 180/18 180/18
reconvened [1] 85/2
record [3] 68/1 68/15 191/16
recorded [2] 68/14 154/13
recording [1] 67/5
records [1] 13/25
recovering [1] 79/4 recovery [6] 45/4
94/17 105/1 105/5 124/19 132/21
Recreate [1] 129/4 red [12] $45 / 19$ 101/10 101/18 109/17 112/6 142/6 142/13 142/15 145/8 145/9 147/24 166/23
redacted [1] 171/19
redressing [1] 69/15 reduce [2] 60/23 155/8
reducing [1] 72/23 reduction [3] 38/24 39/5 39/22
refer [5] 6/14 43/16
98/24 107/10 117/11
reference [24] 48/11
49/17 51/15 61/12
62/11 76/18 91/3
105/8 105/15 105/20
106/6 106/24 120/13
133/10 134/12 134/19
135/10 138/23 142/2
142/17 154/12 170/8
196/13 196/21
references [7] 45/15 46/8 49/22 50/24 91/12 128/17 134/22
eferred [27] 101/1
109/17 111/15 124/16
129/13 130/8 130/9
132/5 133/16 134/5
134/6 136/8 140/17 147/24 159/10 161/10 162/12 166/23 171/10
175/21 177/5 181/5 183/13 190/4 195/21 196/10 202/1
referring [13] 44/7 83/7 92/2 97/22 105/12 119/22 121/2 149/17 149/19 150/13 183/16 193/21 194/20
refers [2] 168/17 175/13
reflect [5] 41/14 46/5
171/7 176/12 184/24
reflected [5] 47/18
49/19 112/13 122/8
162/20
reflecting [1] 33/12
reflection [3] 43/14
54/4 185/5
reflects [7] 13/16
60/4 64/20 94/19
94/22 126/23 126/24
refocus [1] 183/7
refresh [3] 110/8
161/19 194/7
refreshed [2] 201/21 202/8
regard [11] 64/21
71/19 120/9 122/25
134/23 153/9 156/23 159/6
regarded [2] 80/1
115/17
regarding [3] 66/14
71/13 191/22
regards [2] 53/4 70/3

123/13 131/12 132/10 Relativity [1] 191/24
regime [2] 40/22 99/4 reliable [2] 66/21
regions [13] 57/11 105/11 105/14 105/22 198/21
register [5] 42/13 138/3
71/21 123/5 127/20
148/6
registers [2] 42/19
43/7
regressive [2] 39/15 39/17
regular [8] 13/25
69/16 82/17 146/17
147/2 147/4 148/21
188/5
regularly [3] 68/7 171/6 185/24
Regulations [1]
109/24

110/7
reinstated [1] 84/23
relate [2] 4/23 31/20
related [2] 5/13 127/2
relates [2] 26/23
relating [5] 52/24
75/1 77/6 98/7 124/21
relation [31] $7 / 3$
13/22 15/25 28/7 42/6 42/14 43/13 49/4 49/17 54/11 57/5 58/5
66/22 77/13 78/23
87/9 88/18 94/12 98/3
110/21 125/8 130/20
145/1 145/3 152/17
160/9 180/16 191/10
196/7 198/7 201/20
relationship [2] 95/6 192/15
relationships [2]
140/10 147/10
relative [4] 17/7 64/6
87/2 96/15
relatively [4] 35/16
37/14 91/11 156/12
Relativity [1] 191/24
relevance [1] 201/17
relevant [15] 40/23

76/2 97/25 105/6
121/5 128/6 142/4
170/18

68/7
reliant [1] 66/23
religious [1] 45/16
relying [1] 181/6
remaining [1] 200/12
remains [3] 144/20
170/12 172/5
remember [4] 73/19
127/6 187/13 202/4 103/5 105/7 105/9 remembering [1]

106/21 106/25 107/25 remind [2] 74/17
renamed [1] 136/10
render [1] 156/10
reorganise [1]
102/22
Rep [1] 106/13
repeat [7] 1/19 141/1 167/3 180/5 186/2
186/25 194/2
repetition [1] 195/8
replace [1] 101/13
replaced [3] 138/12
138/16 138/23
replicate [3] 48/18 137/21 137/23
report [55] 1/24 2/4
regulatory [2] 110/1 $3 / 21$ 4/2 4/4 4/5 7/9

Republic [2] 8/9 8/13
40/25 41/3 43/11 46/6 request [3] 106/17
54/17 68/23 75/23 191/10 191/16
require [1] 79/22
required [2] 98/25
144/12
requirement [1]

## R <br> requirement... [1] 45/25 <br> requires [2] 60/25 61/7

research [10] 2/18
17/17 17/25 20/25
40/14 45/18 48/12 48/13 57/9 60/21
researched [1] 2/14
researchers [2]
22/13 48/16
researching [1] 3/18 reside [1] 35/17
resilience [85] 45/22
46/1 81/24 83/4 83/20 84/13 85/23 86/13
86/22 87/3 88/3 88/25
91/17 91/19 91/20
97/21 101/3 101/10 102/1 102/3 102/8 102/16 102/19 103/15 107/7 108/8 109/16 109/19 109/19 120/2 121/11 122/21 124/3 124/21 125/7 125/12 125/18 125/19 125/20 126/4 126/17 127/3 127/8 128/20 129/24 130/11 130/13 130/19 131/4 131/5 131/12 132/2 132/15 133/3 133/11 134/17 135/11 135/12 136/21 137/18 137/24 138/24 139/1 140/13 140/20 141/5 141/11 141/23 141/24 142/5 142/9 142/10 142/19 143/9 147/2 152/7 168/18 170/14 185/6 191/17 191/22 192/2 192/6 195/15 197/6
ResilienceDirect [1] 180/25
resistance [1] 171/23
resource [1] 70/16
resourced [2] 196/15 197/1
resources [8] 64/18
86/19 88/22 113/25 114/5 119/16 139/10 196/23
resourcing [2]
181/19 182/1
respect [5] 14/7
52/14 68/8 72/20 190/4
respective [1] 201/22 respiratory [6] 48/20 55/14 57/9 57/14 163/14 173/7
respond [10] 64/11

80/3 89/2 104/2 116/17 118/22 119/3 120/3 127/10 159/5 responded [3] 80/10 110/19 110/24
respondents [1] 111/8
responder [1] 110/11 responders [19] 92/7 101/12 103/15 108/22 109/20 110/5 110/20 111/3 111/10 111/13 111/14 111/22 114/7 127/25 130/15 132/17 135/12 141/12 145/4 responding [12] 79/4 93/6 100/4 103/17 104/4 104/18 108/13 109/21 118/17 126/1 128/22 134/16
responds [2] 94/9 135/14
response [37] 45/3 47/23 67/1 88/22 94/20 94/25 108/3 108/24 110/22 111/6 111/8 114/22 119/5 124/19 124/24 128/11 128/14 130/17 135/15 135/17 139/22 142/4 144/9 145/13 158/19 178/16 178/20 179/7 179/8 179/10 181/7 182/6 182/17 184/10 185/2 195/18 195/24 responses [7] 46/15 56/15 57/17 108/9 111/4 129/23 194/21 responsibilities [8] 80/16 94/23 96/14 99/16 132/16 135/18 136/7 143/19
responsibility [8] 45/22 93/1 93/6 94/15 94/24 96/10 100/5 166/15
responsible [8]
29/17 77/2 78/11
78/13 85/22 86/12 92/24 101/8
rest [2] 152/5 196/24
restricted [1] 8/24
restrictions [2]
164/24 185/15
result [9] 21/1 22/14
47/22 55/13 56/16 56/22 120/9 155/18 203/12
resulted [2] 136/19 185/19
results [2] 67/14 137/2
return [6] 41/22
96/25 110/8 134/2

147/18 151/1 returning [1] 94/21 reverse [1] 181/12 review [47] 3/11 3/13 rightly [4] 81/1 87/12 3/14 7/2 7/3 7/18 7/19 119/25 187/13 7/20 7/21 8/14 16/13 rise [5] 1/23 6/2 74/7 20/17 22/6 22/10 28/15 47/21 47/25 48/1 49/19 62/15 62/20 69/12 88/12 89/6 109/5 109/12 110/14 126/2 134/3 138/4 151/12 151/21 171/4 176/1 176/3 176/6 176/10 177/8 177/9 181/1 193/24 194/4 194/5 194/13 195/10 195/20 197/4 reviewed [6] 42/20 47/3 51/8 53/14 109/1 171/6
reviewers [1] 99/11 reviewing [1] 110/1 reviews [3] 7/16 61/9 99/20
Revision [3] 117/17 118/1 124/18
rhythm [3] 83/11
83/22 182/6
rich [3] 23/8 24/8 35/16
riches [1] 14/16 Rico [1] 58/21
right [97] $5 / 256 / 2$
6/11 9/24 13/18 13/20 14/2 14/3 15/5 15/24 18/10 23/9 31/16 32/19 43/4 44/19 45/4 45/5 73/17 75/12 76/22 78/24 79/6 81/7 83/17 84/4 86/24 86/25 91/5 92/19 93/22 95/25 96/21 96/25 97/19 98/9 98/20 101/23 103/4 103/9 103/13 104/13 104/16 104/21 105/24 107/4 109/10 117/14 122/10 122/18 126/21 130/7 131/14 132/6 132/12 133/7 134/1 136/5 136/22 137/4 137/24 138/5 139/2 141/20 142/24 145/8 146/15 147/14 147/18 148/18 148/23 151/6 154/17 154/18 154/19 157/1 157/4 157/13 157/16 158/14 165/2 169/10 174/8 174/14 178/1 178/14 180/13 184/4 184/23 188/10 193/20 194/11 198/9 198/12 199/13 199/15
risk-specific [1]

| $202 / 6$ | $131 / 1$ |
| :--- | :--- |

right-hand [3] 104/21 133/7 145/8 risks [56] 80/22
80/25 84/6 92/25 93/3
120/10 122/8 122/16 123/20 125/24 128/6 130/20 134/7 134/20
134/22 136/25 138/19
143/19 143/22 144/7
145/4 145/7 148/11 149/2 149/3 149/4 149/14 150/7 151/25 152/9 152/22 153/4
153/21 153/24 158/15 159/2 164/3 166/20 168/11 168/13 169/17 169/20 170/1 170/6 170/9 170/13 170/17 170/24 171/3 171/6 171/12 171/15 171/18 173/17 176/11 200/19 robust [3] 69/9 72/18 72/25
role [19] 51/20 77/16 77/19 78/22 88/25

89/2 91/2 96/15 97/11 100/3 104/25 108/7 125/8 139/22 141/10 144/2 178/5 186/11 199/11 | $127 / 19$ | $131 / 1$ | $131 / 8$ | roles [5] 85/12 85/21 |
| :--- | :--- | :--- | :--- |
| $131 / 20$ | $133 / 14$ | $133 / 18$ | $86 / 3$ |
| $132 / 15$ | $143 / 18$ |  |  | 133/20 134/25 135/6 roll [1] 138/22 143/17 144/1 144/14 Roma [1] 20/11 145/1 147/23 148/4 148/6 148/23 149/1 149/7 149/9 149/20 149/24 150/10 151/2 151/9 152/1 152/11 152/13 152/14 152/16 round [6] 33/24 34/4 152/17 153/7 153/10 5 59/4 113/16 178/12 153/20 154/10 155/12 185/5 156/9 158/16 158/17 route [3] 114/1 158/21 158/23 159/17 $162 / 11$ 163/21 159/22 160/10 160/16 routine [5] 13/24 161/20 162/1 162/20 66/21 69/12 73/5 73/8 162/23 166/14 166/16 routinely [4] 52/15 166/19 166/24 167/6 $52 / 22$ 53/4 82/11 167/13 167/19 168/3 Royal [4] 3/3 149/17 168/4 168/14 168/22 175/25 177/7 168/24 169/9 169/9 Royal Society [1] 3/3 169/12 169/15 169/18 Rubin's [1] 150/9 170/13 170/18 170/21 rule [4] 34/12 140/4 171/21 172/6 174/7 176/2 191/15 176/18 176/22 177/2 rules [1] 127/24 180/13 184/17 184/21 run [4] 33/24 50/17 184/25 188/24 189/7 $\quad$ 130/24 136/23 189/23 189/24 189/25 run-up [1] 50/17 190/3 190/4 200/17 running [1] 34/4 200/18 200/22 201/1 runs [1] 9/5 201/3 201/5 201/8 rural [1] 60/12 201/16 201/18 201/20 Rutnam [2] 93/17 202/1 202/7 202/12 93/20

202/18 202/20 202/21 Rycroft [1] 88/11
safety [1] 165/22
SAGE [5] 199/11 199/14 199/15 199/18 199/24
said [32] 14/10 15/20 23/21 25/25 26/16 29/2 29/6 29/19 30/4 35/4 37/23 47/4 54/3 59/3 66/16 72/22 73/4 81/1 83/4 87/21 94/22 112/22 114/18 119/2 119/18 126/23 130/9 133/12 151/20 153/24 168/2 173/10
sake [1] 152/4
same [28] $3 / 153 / 23$
7/22 7/23 8/1 8/6
13/13 26/7 26/25 27/1 27/22 35/2 58/8 58/10 58/12 76/12 76/17 80/17 80/18 97/17 115/20 116/6 135/14 138/22 158/18 162/15 195/3 199/25
SARS [7] 117/8 120/20 120/23 121/13 122/3 174/1 174/6
SARS-type [2]
120/20 120/23
sat [1] 84/1
satisfactorily [1] 134/24
satisfactory [1] 100/2
Saving [1] 71/4
saw [6] 24/15 27/12
145/13 157/7 160/16 197/24
say [74] 1/23 14/24 25/10 27/8 29/5 32/24 33/23 34/1 38/5 39/16 44/8 50/18 51/18
59/15 68/22 69/13
72/25 73/16 74/18
80/21 82/13 87/12 87/13 88/13 94/20 95/25 98/13 98/23 99/24 105/11 107/13 111/12 112/10 112/20 112/21 114/5 119/25 121/6 121/15 122/19 127/13 127/21 134/18 136/6 137/10 137/18 137/23 144/15 146/23 147/9 157/13 157/14 158/5 158/14 159/15 159/18 160/18 162/20 164/6 164/9 180/13 181/13 186/16 189/7 189/16 189/25 190/25 191/18 192/19 195/14 196/2 197/22 197/24

200/25
saying [11] 10/18 35/23 46/8 56/18 60/5 96/2 151/18 152/18 159/21 160/10 160/14 says [6] 65/2 75/11 82/5 102/7 143/14 198/21
scale [5] 117/8 117/13 145/12 164/18 174/3
scenario [45] 115/8 115/9 117/3 149/3 149/14 149/25 150/5 152/1 152/3 152/17 152/24 153/12 153/14 153/15 154/15 155/4 155/6 155/12 155/19 156/4 156/8 156/18 156/21 157/6 157/6 158/6 158/9 159/16 159/22 162/1 165/3 167/5 169/4 171/7 173/14 173/15 173/18 173/21 173/23 174/9 174/13 174/20 175/22 179/15 185/20
scenarios [6] 121/16
153/1 159/4 169/9 176/11 176/19
SCG [1] 133/16 schematic [1] 201/13 scheme [5] 138/25 139/5 139/9 139/13 166/2
school [7] 19/9 19/11 61/18 61/19 61/20
164/19 165/7
schools [4] 165/5 165/19 165/21 185/14 science [2] 151/14 180/1
Sciences [4] 2/12 2/12 2/16 3/2
scientific [13] 2/22 5/2 20/17 21/10 40/14 41/4 132/19 150/12 150/18 150/20 150/21 150/22 151/13
scientists [3] 151/5 151/19 199/22
scope [1] 178/15 Scotland [11] 7/10 7/17 7/20 12/16 12/17 15/15 15/18 25/13 25/21 25/25 26/1 Scottish [2] 187/17 187/25
Scottish Government
[2] 187/17 187/25
scratch [2] 134/11 136/3
screen [10] 2/1 4/3
11/24 25/3 32/9 61/3

75/4 101/20 117/23 | $104 / 21 ~ 120 / 16 ~ 131 / 7 ~$ |
| :--- | :--- | 192/1

scroll [2] 12/1 172/10
scrutiny [1] 150/11
seasonal [1] 48/17
second [15] 19/3
24/12 26/13 31/25
55/24 75/8 80/8 82/23 88/2 101/8 150/4
171/13 177/21 178/17 184/20
secondary [1] 163/13
Secondly [1] 48/17 secretariat [25]
76/11 76/24 77/9 78/6 78/8 78/11 79/9 81/8 81/10 83/21 84/16 87/20 87/25 88/6 89/8 91/9 97/9 98/12 107/5 114/12 119/11 137/11 139/20 156/17 187/20 secretaries [3] 100/16 112/14 113/9 secretary [7] 52/8 76/2 86/10 93/20 95/19 113/16 113/21 secretary of state-level [1] 86/10 section [6] 57/25 97/22 114/17 114/18 194/25 197/3
section 6 [1] 57/25 sector [8] 31/12 64/9 92/4 124/25 144/18 151/20 181/14 181/20 sectoral [1] 144/8 sectors [6] 55/20 160/7 172/8 179/13 185/3 185/7
secured [1] 137/22 security [32] 42/12 76/7 81/10 81/13 81/15 81/16 81/18 82/2 82/15 83/15 83/24 84/12 85/13 86/20 87/25 122/8 123/7 123/10 146/9 147/23 148/23 149/9 159/17 166/14 167/13 168/3 169/15 169/16 183/13 185/23 200/18 202/21
see [57] $2 / 15 / 13$ 5/23 9/24 16/7 18/8 18/11 23/22 25/5 25/6 25/18 26/8 26/12 27/22 28/5 29/10 34/10 34/13 35/5 $35 / 1335 / 1435 / 23$ 36/11 36/25 37/3 37/8 37/19 48/18 48/19 53/3 57/2 59/19 60/7 68/3 68/3 78/24 101/24 102/6 104/10 132/14 133/6 133/15 150/9 152/9 168/25 169/11 169/25 170/8 171/8 172/19 174/8 174/22 176/7 189/7
seek [1] 149/1
seem [1] 27/10
seems [5] 19/12
32/22 34/4 123/21 145/5
seen [19] 27/23
34/22 35/1 39/17 45/21 52/20 68/10
75/23 134/20 136/15 145/9 159/20 160/6 160/13 164/7 173/12 184/6 201/4 201/5 self [13] $15 / 1122 / 9$
56/4 89/21 91/11 126/10 126/16 127/9 134/9 136/2 137/6 141/23 171/16
self-assessed [1] 134/9
self-assessment [3] 126/10 126/16 127/9 self-assurance [1] 136/2
self-assured [1] 141/23
self-evident [3] 89/21 91/11 171/16
self-harm [1] 22/9
self-isolate [1] 56/4 self-reported [1] 15/11
seminal [1] 3/10
sending [1] 181/13
senior [7] 2/17 81/15 86/10 90/16 99/4 100/16 151/13
seniority [1] 113/2
sense [8] 11/2 85/10
110/22 149/8 151/3
sensible [2] 94/8
140/23
sensitive [5] 123/7
124/15 148/13 171/20
202/19
sentence [6] 61/4
61/5 144/3 160/1
161/1 200/23
separate [2] 31/23
127/11
separately [2] 12/5 25/21
separation [2] 88/22
89/3
September [1]
177/11
series [10] 15/24
42/12 43/10 118/12

185/17 189/21 190/13 several [3] 5/25 51/9

119/2 119/18 119/24
125/23 187/21 192/14 serious [8] 82/21
89/24 113/6 133/19 169/18 169/20 171/16 185/15
servants [4] 9/10
92/6 137/19 151/13
served [1] 129/22
service [6] 5/22 29/7
76/5 86/19 86/20
163/24
services [8] 3/7
22/12 41/11 44/10 106/20 110/5 130/15 132/20
serving [1] 136/17 set [53] $6 / 217 / 15$ 7/16 16/1 18/11 28/18 40/3 48/25 49/2 51/17
61/10 62/14 65/6 69/15 69/23 77/24 91/19 103/22 104/5 108/21 112/15 113/10 118/10 119/9 119/11 122/4 122/19 124/7 125/20 127/4 127/24 130/23 132/15 132/19 133/12 133/17 134/13 136/19 138/10 139/12 139/15 139/15 140/10 140/16 142/13 149/3 152/8 153/16 160/25 161/20 162/16 183/3 199/5
set aside [6] 118/10 119/9 119/11 139/12 139/15 139/15
sets [4] 103/21 120/2 120/7 178/15
setting [1] 62/19
settlement [2] 38/24 115/1
settlements [1] 39/17 100/13
severe [10] 94/13
116/22 153/1 168/20
168/24 170/24 172/5
179/12 179/17 182/19
severely [1] 57/14
severity [1] 60/3
sex [5] 20/12 20/22
25/7 35/10 35/23
sexual [1] 68/13
shall [3] 41/22 96/25 147/18
shape [1] 201/24
share [1] 68/16
shielding [1] 185/15
shifted [1] 170/7
shock [3] 58/15
59/18 59/21

S
shocking [1] 26/19 shocks [3] 58/1 58/2 59/14
short [8] 41/10 41/24
97/5 125/21 147/20
157/10 192/13 192/14
shortage [1] 158/25
shorter [4] 9/4 9/23 10/8 36/14
shortly [1] 45/19
should [27] 25/15 28/22 46/2 46/25 61/2 61/8 63/21 63/23 63/24 64/3 64/5 64/7 64/12 64/24 70/18 70/21 113/1 120/9 146/24 156/22 159/5 160/5 169/2 170/19
176/18 176/21 182/5
shouldn't [1] 170/23
show [1] 59/19
showing [2] 40/10
175/11
shown [3] 39/15 56/15 198/3
shows [3] 62/3 85/19 174/8
shutting [1] 185/14
sic [2] 110/16 142/16
sick [5] 29/14 29/20
30/1 56/5 59/12
side [9] $83 / 2584 / 1$
84/1 85/20 101/23
102/6 119/12 129/6 141/3
signed [2] 2/2 75/13
significance [1]
102/25
significant [8] 17/20
33/7 103/16 118/22
147/5 172/25 185/10 194/1

## significantly [3]

20/20 146/13 192/25
Silver [1] 51/10
Silver Swan [1] 51/10
similar [8] 7/16 15/15 27/23 37/8 92/18
173/10 173/12 195/3
Similarly [2] 9/17 13/6
simple [1] 80/4
simplest [1] 77/21
simply [4] 23/3 80/9 155/14 201/16
since [11] 19/7 40/18
41/8 76/19 76/22
105/25 148/25 170/2 174/1 176/4 193/3
single [11] $96 / 5$
96/14 113/7 129/1

129/10 132/5 144/10 $71 / 1$ 71/7 93/10 152/13 152/14 158/16 $128 / 10$ 144/16 158/3 187/12
Sir [7] 1/6 1/8 2/23 52/7 93/17 150/24 204/2
Sir Christopher
Wormald [1] 52/7
Sir Patrick Vallance
[1] 150/24
Sir Philip Rutnam [1]
93/17
sit [11] 73/14 81/8 83/14 85/7 85/8 106/13 106/18 165/13 166/21 178/9 178/12
Sit Reps [1] 106/18
sits [3] 158/3 201/8
201/10
sitting [2] 87/6
203/10
situation [5] 23/15 23/18 106/11 106/13 106/17
six [6] 28/19 28/25 29/2 37/6 61/10 127/5
size [7] 29/22 30/6 30/12 30/16 67/4 67/11 118/18 slavery' [1] 20/13 slides [1] 106/11 slightly [8] 17/11 29/8 46/7 72/15 90/14 114/8 140/2 203/11 slow [2] 23/4 154/4
slowdown [6] 22/20 23/6 23/24 24/16 25/12 25/18
slowed [4] 23/1 24/6 24/9 24/11
small [9] 22/25 35/16 37/14 48/23 107/9 119/5 139/24 140/15 156/12
smaller [3] 56/1
117/8 174/3
snow [1] 170/5
so [329]
social [68] 2/16 3/9 4/8 4/12 5/4 5/25 6/3 6/13 6/18 6/22 6/23
8/17 8/23 9/1 9/5 9/9 11/18 11/19 15/20
15/25 19/2 19/20 21/2 21/16 21/20 22/14 24/12 24/13 28/16 28/25 29/11 31/21 38/12 38/12 38/15 38/18 38/20 39/12 39/23 41/5 41/8 47/16 52/9 52/13 53/16 54/18 55/13 56/19 57/15 58/13 59/19 60/5 62/7 63/24 64/22

164/19 164/24 181/12 181/16 181/20 185/15 188/12
social care [13] 31/21 38/12 38/12 38/15 38/18 38/20 52/9 52/13 93/10 144/16 181/12 181/16 188/12
socially [5] 20/6
40/22 57/20 67/23 190/10
societal [2] 54/14 190/21
society [8] $3 / 33 / 11$ 9/6 18/3 59/7 59/16 63/6 144/12
socio [21] 4/9 4/10
9/3 9/22 10/3 40/21 48/7 49/25 55/7 57/10 57/19 58/18 58/23 58/24 58/25 60/7 71/6 189/17 189/21 191/2 191/3
socio-economic [21] 4/9 4/10 9/3 9/22 10/3 40/21 48/7 49/25 55/7 57/10 57/19 58/18 58/23 58/24 58/25 60/7 71/6 189/17 189/21 191/2 191/3 sole [5] 91/25 92/5 92/10 92/14 134/9 solely [2] 86/12 170/20
solid [2] 36/21 36/25
solution [1] 140/8 some [85] 5/1 8/19 12/2 14/24 15/10 23/4 24/25 27/17 27/18 42/21 47/3 48/21 48/25 49/8 54/12 59/23 65/11 67/2 67/9 70/11 70/11 73/22 74/25 80/14 83/10 86/4 89/23 90/17 90/19 96/12 98/9 99/7 101/17 102/24 106/1 110/11 111/23 118/15 60/6
119/8 119/8 125/9 Spanish flu [2] 59/23 125/11 125/23 126/16 60/6
126/23 126/24 128/17
128/19 129/8 136/24
137/2 138/20 139/25 142/14 146/4 146/22 146/25 146/25 149/7 150/8 151/23 153/4 154/10 154/13 156/14 157/25 160/23 160/23 specific [27] 5/1 9/4 162/5 162/6 162/24 163/25 164/19 170/1 171/14 173/5 175/20

184/4 184/5 184/11 190/22 191/13 192/17 193/5 195/18
somebody [8] 10/18 33/24 98/11 98/12 108/2 129/3 142/18 202/15
someone [1] 56/20
someone's [1] 21/4
something [23] 15/6 19/17 73/17 81/1 82/23 83/18 86/16 89/2 90/1 110/15 112/10 123/18 130/21 131/11 137/17 153/2 183/14 193/18 195/11 196/5 196/6 197/11 197/13
sometimes [3] 46/11 82/19 99/20
somewhat [1] 43/22
somewhere [2] 9/7 63/10
sorry [21] 28/12
31/22 37/20 61/3
72/12 87/15 115/8
140/15 171/3 176/16 177/7 177/19 177/21 182/24 186/2 186/25 190/5 196/16 196/21 200/25 203/7
sort [9] 48/4 83/22
90/2 120/8 120/9
130/21 149/21 151/7 189/16
sort of [6] 48/4 90/2
120/8 120/9 149/21
151/7
sought [1] 137/22
sound [4] 33/18
33/22 86/24 179/8
sounds [5] 38/5
82/21 86/25 134/1 138/5
source [1] 104/5
sources [1] 99/9
south [1] 60/14
southeast [1] 35/7
space [2] 32/14 39/9
Spanish [2] 59/23
sparse [1] 14/17
speak [1] $1 / 17$
speaking [1] 108/14
specialist [2] 53/8 54/12
specialists [1]
151/15
9/23 10/17 10/19
10/20 45/25 62/16
63/8 64/4 69/6 78/8

90/18 99/20 99/20 124/23 125/24 131/1
133/18 152/22 169/22 176/19 181/18 189/20 199/6 200/19 201/2
specifically [7] 39/23
47/9 70/18 91/16
153/5 181/10 187/23
speculate [1] 27/9
speed [1] 118/21
spend [5] 29/24
29/25 38/16 38/20 39/22
spending [9] $30 / 3$
30/5 38/18 38/24
38/25 39/1 39/1 39/3 108/12
spent [1] 82/11
split [7] $3 / 2187 / 21$
87/22 88/7 88/9 89/8 89/9
spoke [2] 179/25 180/3
spot [1] 123/18
spread [4] 56/3 56/6
103/8 166/11
staff [2] 31/9 165/21
staffed [1] 83/24
staffing [1] 193/6
stage [2] 70/17 156/6
stakeholders [1] 99/10
stalled [1] 41/12
standard [7] 127/12
128/25 131/13 131/21
131/25 132/2 132/11
standards [42] 91/10
91/13 91/14 91/14
91/15 91/17 91/19
91/23 125/19 125/19
125/20 126/5 126/7
126/12 126/14 126/22
127/1 127/2 127/11
127/15 130/8 130/8
130/10 130/18 130/22
131/4 131/17 133/3
133/11 133/13 134/9
134/13 135/11 135/12
135/25 136/4 140/10
140/12 140/15 140/15
140/16 141/25
standing [3] 83/19
94/23 119/5
star [2] 174/9 174/12
stark [1] 36/1
start [11] 28/20 32/22
61/5 61/15 62/21
65/12 77/12 90/6
120/14 149/23 182/2
started [4] 59/18
138/24 148/8 176/4
starting [4] 16/2
25/21 124/5 201/3
starts [1] 61/22
state [9] 23/15 41/13 57/8 86/10 110/20 112/14 113/9 113/16 113/21
stated [1] 21/9
statement [27] 44/21
45/8 52/6 75/3 75/6
75/8 75/9 75/10 75/11 75/13 76/1 76/5 89/17
93/16 94/11 101/2
116/11 118/16 141/7
147/13 150/9 155/18
156/16 159/14 161/24
164/11 191/25
statements [5] 75/2
75/19 75/24 76/1
76/19
States [3] 5/15 23/11 24/9
statistical [2] 117/5 117/10
statistics [5] 11/8 66/15 67/19 73/5 73/5 status [8] 2/17 4/10 8/23 40/21 49/25 57/19 69/17 197/9 status quo [1] 197/9 statutory [6] 43/10 43/11 45/2 108/22 125/21 126/23
stayed [1] 160/7
steep [1] 11/19
steeper [4] 11/20
24/13 36/15 38/20
steering [1] 151/9
stenographer [1] 1/17
stenographers [1] 74/19
step [3] 66/1 151/9 151/10
stepped [1] 78/16 steps [2] 151/6 155/9 stigma [2] 21/1 22/14 still [12] 50/16 50/24
55/21 81/12 90/7 97/16 98/1 102/7 102/11 109/2 122/15 196/15
stint [1] 203/8
stockpile [5] 163/2 163/4 163/4 163/12 163/22
stockpiled [1] 64/5
stood [4] 72/23 73/14 179/19 186/11
stopped [3] 23/2
155/22 185/11
stopping [1] 200/24
stores [1] 59/11
storms [1] 170/5
straight [1] 74/4
strains [1] 189/11 strategic [9] 128/13 130/24 131/9 140/21 141/6 142/6 170/19 177/3 179/1
strategy [11] 49/16 49/20 50/3 50/11 50/16 64/12 114/13 125/3 128/7 132/22 181/2
Street [1] 51/10 strength [1] 96/17 stress [1] 56/16 stretching [1] 62/11 strike [1] 31/10 strikes [1] 155/8 striking [1] 11/18 strong [4] 22/5 60/1 65/5 129/19
struck [6] 147/11 175/15 183/1 187/10 193/2 193/5
structural [7] 17/17 17/24 18/2 53/11 53/12 53/22 145/17 structure [16] 76/22 84/18 84/20 84/22 84/25 86/5 89/12 98/15 100/24 119/4 145/19 147/4 147/8 150/5 182/8 186/9
structures [8] 53/8 54/12 96/16 102/22 105/12 105/13 145/23 179/8
struggling [1] 196/21 studies [11] 9/10 14/18 17/20 18/1 20/17 22/7 39/19 48/12 48/13 72/3 72/4 study [3] 49/6 59/25 60/11
studying [2] 72/7 72/7
stuff [1] 73/23
stuttering [1] 157/22
subcommittee [3]
81/23 89/20 183/14
subject [5] 10/18
66/2 113/2 134/3
143/12
submissions [1]
52/18
subordination [1]
21/22
subparagraphs [4]
11/25 16/1 18/11
61/14
subsequent [1] 109/6
subsequently [1] 62/2
subset [1] 111/8
subsidiarity [1]

141/5
substance [2] 20/22 22/10
substantial [5] 15/19 40/20 118/18 119/24 162/13
substantially [2]
97/23 98/8
succession [1] 102/6 successive [1] 125/18
successor [2] 138/14 138/15
such [20] 4/13 5/20
14/14 15/11 20/8
39/17 41/2 43/20 52/14 53/16 68/8 69/9 70/21 80/22 100/6 159/3 163/9 163/9 165/11 203/8
suffer [2] 14/13 190/1
suffering [1] 46/21 sufficient [7] 89/5 159/6 179/11 179/16 182/18 195/7 201/17
sufficiently [3] 14/21 66/18 100/10
suggest [4] 31/6
87/16 121/17 197/21
suggested [1] 22/13
suggesting [6] 64/23
160/15 164/5 167/4
167/8 193/15
suggestions [3]
65/12 150/8 162/24
suggests [3] 20/25
158/24 195/5
suicide [1] 22/9
suitable [3] 41/21
64/5 131/22
suite [1] 102/21
summaries [1] 171/9
summarise [2] 42/14
54/10
summarising [1]
10/16
summary [11] 10/7
10/22 34/5 106/19 122/15 132/9 152/19 152/20 195/2 195/9 195/9
summer [1] 136/19
superseded [3]
97/21 103/6 136/24
supervise [2] 78/17 78/19
supervised [4]
102/19 135/10 137/20 142/5
supervision [3] 77/3
77/14 98/23
supervisory [1]
78/22

Supplementary [1] 75/10
support [5] 90/7
93/19 165/21 166/3 185/16
supported [1] 40/9 supporters [1] 132/16
supporting [2] 62/5 132/17
supports [1] 77/22
suppose [1] 88/1
suppressed [1]
56/20
sure [18] 32/1 68/1 69/8 69/16 79/17 89/14 93/3 95/25 105/10 105/23 109/2 111/25 141/20 143/25 155/9 184/18 193/21 202/11
surely [1] 88/17
surge [4] 181/19
182/1 184/13 193/6
surges [4] 51/17
51/19 51/23 51/25
surprise [1] 48/10
surprised [4] 48/14
48/22 188/22 188/23
surrounding [1] 51/14
surveillance [3]
66/11 72/18 72/25
survey [24] 15/7
68/18 110/16 110/18
110/19 110/23 110/23
111/7 126/17 126/19
129/20 129/21 136/8
136/10 136/17 136/22
137/5 137/16 137/22
137/23 138/12 138/13
141/24 191/17
surveys [4] 129/23
129/25 191/23 192/6
susceptibility [3]
44/9 56/13 59/20
sustainable [1] 28/24
sustained [1] 118/25
Swan [1] 51/10
Sweden [1] 20/19
swine [6] 47/23 48/8
48/19 49/5 49/7 181/7
swine flu [5] 47/23
48/8 48/19 49/7 181/7
switch [2] 102/14
102/18
sworn [3] 1/7 1/10 204/4
symptomatic [5]
154/4 166/10 166/18
167/10 167/15
syndemic [1] 55/4
synergistically [1]
55/7
system [46] 20/13
29/10 29/12 29/16
29/16 29/19 29/21
30/18 56/21 57/25
58/1 68/25 69/10
71/12 71/14 73/1 77/7
89/10 92/23 93/16
99/13 101/7 103/21
103/24 104/1 104/6
105/19 108/4 108/17
110/25 124/3 130/22
134/9 134/10 135/24
136/7 140/22 152/2
152/15 155/13 179/16
191/24 194/24 197/12
197/17 198/8
systematic [9] 4/6
5/3 6/18 8/6 11/1
20/16 40/20 195/24 196/4

## systematically [1]

54/17
systemic [1] 190/11
systems [4] 5/9
69/19 77/4 131/20

## T

table [1] 178/12
tabletop [1] 178/8
take [42] 1/18 2/7
3/25 10/6 13/20 25/1
30/20 33/11 38/9
41/21 45/11 53/6 55/2
55/15 61/13 62/13
65/18 82/10 84/6
84/20 89/19 91/3 93/2
95/1 99/16 106/16
114/21 124/4 129/22
130/2 130/6 142/24
165/16 167/25 169/20
177/15 191/22 192/2
192/4 195/18 196/23 202/25
take-up [5] 129/22
130/2 130/6 191/22 192/2
taken [15] 34/8 42/3
52/15 52/23 69/8
84/18 84/21 84/24
90/11 110/10 155/9
160/8 161/8 171/2 182/10
takes [5] 52/17 89/20
93/5 94/24 149/22
taking [4] 18/10
28/25 64/16 168/14
Taliesin [1] 51/9
talk [5] 6/12 8/11
178/12 187/23 188/7
talked [8] 8/4 50/25
71/19 71/25 189/18
193/5 193/6 193/7
talking [7] 35/25
69/19 70/19 84/5
talking...[3] 114/9
187/1 187/2
talks [1] 69/18
Tamiflu [1] 163/22
targeted [1] 64/4
task [2] 28/18 28/18
tasked [1] 128/21
taught [2] 34/9
114/20
teaching [1] 165/21
team [9] 53/7 119/5
137/14 137/18 137/18 137/25 138/8 138/24
146/21
teams [1] 88/23
technically [2] 77/7 95/25
technology [2] 30/17 180/2
tell [4] 30/3 73/23 79/24 127/23
tells [2] 168/25 171/5
temperatures [1] 170/5
template [1] 123/23
temporary [1] 165/19
temptation [1]
177/22
ten [5] 27/19 38/14 83/22 111/4 148/17
ten years [2] 27/19 38/14
ten-week [1] 83/22
tend [10] 6/12 9/7
10/14 10/22 20/14
27/4 27/6 43/3 87/5 116/13
tended [4] 81/22
81/25 111/9 117/7
tends [3] 6/7 11/15 80/16
tens [1] 166/20
tenure [1] 84/15
term [7] 4/15 6/5 6/7
43/6 89/1 164/10 185/14
terminology [2] 135/25 158/7
terms [70] 6/12 10/11 10/13 14/16 15/14 17/24 18/5 18/12 18/16 21/5 22/3 23/16 23/17 42/22 43/14 45/13 47/1 48/3 48/4 49/25 50/10 50/12 52/12 54/10 56/25 60/2 61/21 62/11 62/14 62/20 62/24 64/10 64/21 64/24 65/3 66/24 67/6 67/10 67/14 67/22 68/1
68/18 72/3 79/24 80/3

| $80 / 4 ~ 80 / 10 ~ 82 / 8 ~ 85 / 12 ~$ | $203 / 6$ | $203 / 13$ |
| :--- | :--- | :--- | 85/19 87/2 87/5 88/21 thank you [58] 1/12 99/24 103/14 103/23 2/5 2/6 8/16 8/22 118/19 118/21 121/18 $11 / 25$ 12/1 13/20 148/12 153/22 163/5 170/1 174/11 179/10 183/5 198/16 198/18

199/11 202/17
terrible [1] 90/23
terribly [3] 36/3
89/11 161/14
terrorism [2] 47/15 81/2
terrorist [1] 43/18 test [3] 46/2 79/21 131/19
tested [4] 93/5 99/14 128/25 135/19
testing [4] 64/1 64/7 98/23 99/7
tests [1] 129/25 text [2] 174/16
175/13
than [67] 6/15 9/8 9/14 9/16 9/19 15/1 15/10 16/22 17/1 19/11 20/22 23/7 23/10 24/7 25/13 27/5 27/6 27/7 27/19 35/6 36/16 36/18 38/2 38/3 42/21 46/3 46/16 49/5 60/14 70/11 73/6 74/13 76/24 82/12 83/13 85/11 85/17 88/15 89/24 102/12 105/13 105/18 107/9 111/9 115/14 116/19 117/11 122/11 127/11 130/3 140/16 153/1 154/13 158/4 172/11 173/16 174/5 175/11 177/17 178/3 178/8 179/23 182/10 182/14 190/5 196/24 197/1 thank [71] 1/12 2/5 2/6 8/16 8/22 11/25 12/1 13/20 18/23 19/23 20/3 20/3 21/23 22/16 25/4 25/24 27/20 28/1 38/8 38/9 40/1 40/6 41/18 42/1 43/8 44/4 44/5 44/6 45/6 45/7 47/20 49/14 53/5 54/25 57/4 57/22 59/22 60/15 60/18 63/14 65/14 65/20 66/4 66/6 68/5 72/16 73/12 73/13 73/21 73/24 74/1 74/2 74/7 74/13 75/9 77/11 97/3 117/25 132/13 143/15 145/15 173/11 177/12 191/8 191/8 191/9 200/4 200/5 203/6

18/23 19/23 20/3 21/23 22/16 25/24 27/20 28/1 38/8 40/1 40/6 41/18 42/1 43/8 44/4 44/5 44/6 45/6 45/7 47/20 49/14 53/5 57/4 57/22 59/22 60/15 60/18 63/14 65/20 66/4 66/6 68/5 72/16 73/13 74/2 74/13 75/9 77/11 97/3 117/25 132/13 143/15 145/15 173/11 177/12 191/8 191/8 200/4 203/6 203/13
thanking [1] 1/12 that [873]
that's [132] 6/12 10/19 12/21 14/3 15/16 17/18 17/19 21/3 23/12 24/5 24/9 25/8 26/18 29/16 30/1 32/20 33/10 34/17 35/18 36/5 40/5 45/5 49/13 52/12 54/22 54/22 58/17 59/14 63/15 63/16 67/19 68/17 72/15 72/17 73/17 74/21 76/22 79/6 83/17 84/4 89/11 89/13 93/22 95/25 96/24 97/16 98/9 101/12 101/24 103/1 104/13 106/6 106/16 107/13 108/8 111/8 111/10 113/14 120/14 121/19 124/1 127/12 127/21 132/11 132/18 134/14 135/19 136/23 137/10 138/14 138/17 139/2 139/24 141/15 141/20 142/25 143/13 145/13 145/14 146/8 146/15 148/24 150/2 150/23 151/6 152/18 152/20 153/7 153/13 154/18 155/11 157/1 157/4 157/13 157/13 157/14 159/18 160/17 162/18 163/17 164/10 167/21 168/2 170/9 172/15 173/3 176/25 177/12 177/21 179/18 179/18 181/12 183/16 184/4 186/23 187/13 189/6 189/9 189/10 190/3 190/16 192/7 193/16 194/25 195/9 196/20 197/1 198/12 199/9 199/15 199/24

201/12
their [47] 2/3 9/22
9/24 15/22 21/5 54/20 59/5 69/6 74/2 93/13 100/17 100/18 112/15 113/10 113/13 113/20 114/21 125/8 125/12 125/21 126/4 126/5 127/9 127/10 127/19 129/5 130/19 131/17 135/6 141/25 144/7 149/24 149/25 170/2 176/12 176/25 187/15 190/20 192/20 192/21 192/22 195/1 195/8 199/4 199/18 200/20 201/2
them [43] 6/19 10/5 51/25 54/5 5417 69/25 71/4 71/8 75/17 100/18 104/7 113/1 118/15 118/25 124/7 125/9 125/16 126/8 126/8 126/14 127/16 127/16 128/19 129/12 131/24 132/24 134/21 135/1 146/23 147/1 148/20 150/7 150/19 150/24 154/10 165/22 166/22 178/13 180/17 181/14 199/8 199/10
them' [1] 9/8
theme [2] 111/22 112/24
themselves [8] 23/19 43/21 99/14 127/8 142/1 155/23 162/17 201/1
then [100] 9/21 11/15 14/15 18/8 23/2 24/21 27/9 28/2 29/5 30/11 31/9 33/1 33/1 36/20 37/10 38/19 39/4 39/9 47/10 54/5 55/1 55/20 56/2 56/5 56/11 58/15 60/6 60/16 63/17
64/25 69/4 69/23
69/24 69/25 70/10
70/15 75/5 75/8 75/12
76/23 88/7 92/20 93/2 94/1 94/9 97/12
101/25 102/5 102/5 105/8 105/21 107/24 113/12 119/25 120/14 121/21 122/1 123/11 127/8 130/25 132/9 133/17 136/11 137/16 137/20 144/2 146/10 147/22 148/4 149/13 150/4 150/9 151/1 151/10 151/11 151/25 152/5 152/17 153/18 155/2 156/10 160/19 164/23 171/25 172/19

174/7 185/22 186/9 186/14 186/20 190/4 190/5 191/14 192/14 193/1 197/22 199/18 201/1 202/20 203/2 theory [1] 168/21 there [258] there's [23] 5/2 5/15 8/8 8/10 8/12 8/14 15/2 15/16 29/14 46/8 63/9 68/2 68/2 68/17 80/13 125/3 132/8 133/9 142/14 164/18 189/8 189/12 190/11
thereafter [6] 90/25 93/5 95/2 102/13 133/18 139/9
therefore [14] 21/20 94/3 114/23 115/18 130/18 144/15 154/21 157/2 164/6 164/6 166/10 169/6 171/18 177/2
these [36] 4/22 6/8 6/18 26/4 29/2 36/11 37/24 39/16 39/18 39/19 40/18 41/7 42/11 43/16 46/2 46/9 46/25 47/18 49/2 53/23 54/10 59/14 61/13 64/23 65/7 67/20 104/1 126/7 126/12 126/22 131/16 132/7 145/17 148/13 151/21 191/23
they [105] 1/7 5/17 7/14 7/25 8/5 10/19 19/13 25/11 34/1 50/6 51/13 54/6 55/20 55/21 59/15 60/3 67/19 69/25 79/25 80/1 80/21 87/7 88/21 93/13 96/18 96/19 97/2 100/16 104/9 104/9 104/14 111/20 114/10 118/14 120/8 121/11 123/3 123/5 123/13 123/25 125/9 126/1 126/3 126/3 126/9 126/13 127/4 127/15 128/25 129/1 129/2 129/24 130/11 130/14 130/17 131/13 131/19 134/18 134/22 134/23 135/1 136/3 140/23 142/3 143/25 144/25 148/4 149/25 150/22 151/22 153/24 156/12 157/8 159/5 159/24 162/7 162/16 164/4 164/4 164/5 164/6 168/18 170/3 171/6 171/19 176/17 176/20 177/4 178/10

## $T$

they... [16] 178/10 178/12 178/12 180/17 182/14 189/19 191/16 191/17 191/18 191/24 192/11 198/5 199/5 200/8 200/9 200/10
they'd [1] 127/19
they're [15] 6/17 7/13 29/13 47/7 47/19 54/6 56/1 56/3 113/20 120/24 122/19 140/13 150/2 150/23 164/9
they've [2] 7/23
113/14
thing [5] 10/25 35/14 48/4 84/8 90/2
things [17] 39/13
39/24 42/24 87/4
90/13 90/15 95/5
108/6 129/9 129/14
130/11 150/13 154/24
156/5 156/12 166/5
193/9
think [227]
thinking [15] 7/25
21/15 47/9 47/19 48/5
50/13 51/4 54/7 56/9
56/14 65/12 66/24
70/8 112/11 156/8
third [7] 12/22 56/8
75/9 75/11 137/13
168/7 191/25
this [168] $4 / 5$ 13/16
19/7 19/19 21/24 22/9
22/13 22/23 23/2 23/5
23/24 24/1 25/18 26/6 27/23 29/21 33/15 34/19 34/22 35/8 35/9 35/25 36/4 39/16 40/2 41/14 42/7 42/15 45/1 45/21 46/18 49/1 51/17 52/3 52/6 53/14 54/10 54/11 56/9 56/14 57/5 58/6 58/20 60/19 60/20 60/22
60/25 61/7 61/12 62/9 62/10 62/24 63/25 64/20 64/25 65/13 66/13 66/21 68/6 68/23 69/2 72/13 73/6 77/4 87/10 87/17 96/6 97/20 97/25 98/3 98/13 98/21 99/13 99/15 100/24 101/6 101/22 102/15 104/1 104/14 104/21 105/12 105/25 106/15 109/12 109/21 111/16 111/23 112/10 113/17 114/18 114/19 116/12 116/23 117/20 118/4 120/2 120/21 121/9 122/7

122/20 122/24 123/1 $\quad 119 / 2$ 146/3 123/13 123/19 123/23 thoughts [1] 51/24 124/17 126/9 127/9 128/23 129/21 131/4 131/25 132/4 132/14 133/10 133/12 134/2 134/10 134/17 134/18 134/19 135/3 136/9 137/2 143/9 143/14 144/4 147/6 151/4 152/11 152/12 153/9 153/10 155/18 158/1 158/8 158/12 158/22 161/24 161/25 162/20 162/22 164/11 168/4 168/7 169/18 171/19 172/19 176/2 176/4 176/9 177/22 178/1 179/20 179/22 179/25 180/10 182/10 183/22 three [13] 7/4 13/16 185/18 188/24 189/18 189/23 196/2 197/3 197/22 199/5 those [114] 5/4 8/19 9/8 9/14 9/16 9/19 10/7 11/22 12/9 12/20 17/8 17/20 18/9 21/7 26/19 42/16 43/3 43/13 43/19 46/21 48/11 48/25 49/11 50/20 51/11 55/9 55/15 62/7 63/24 64/15 64/18 65/15 65/23 67/7 71/7 71/8 75/25 85/14 88/13 88/22 89/3 90/13 90/17 93/3 94/22 96/11 99/21 100/20 109/5 112/17 118/9 120/7 120/10 121/16 125/24 127/14 128/6 128/16 128/17 128/21 129/10 130/10 130/18 130/23 134/6 140/10 140/13 140/15 146/2 147/9 149/14 150/13 151/6 151/16 151/23 151/25 152/9 153/17 153/24 154/6 156/10 156/11 156/14 158/1 158/19 160/7 161/6 161/15 162/16 164/2 169/17 171/18 172/13 173/12 175/10 177/3 184/4 185/1 186/25 187/16 187/21 188/6 189/4 189/11 189/14 189/25 190/1 190/12 190/13 190/17 190/24 191/15 192/5 200/11 though [3] 156/5 159/16 173/17 thought [6] 50/15
52/2 111/20 112/13
thousands [1] 172/8 THRC [11] 81/24 83/14 83/19 146/9 183/14 183/20 185/23 186/7 186/11 186/16 186/18
threat [3] 58/14 58/20 80/5
threatening [2] 90/1 171/16
threats [19] 79/25 80/5 80/11 80/18
80/25 81/21 81/24 82/9 82/10 82/12 82/14 82/14 82/25 83/4 84/5 84/13 85/11 85/11 85/17 33/24 49/5 83/10 105/25 118/22 140/14 149/5 149/22 150/13 182/25 195/14
three years [3] 83/10 105/25 195/14 through [27] 1/21 25/1 49/2 55/12 55/15 60/19 61/13 67/8 71/4 75/17 94/17 98/13 102/5 102/19 109/19 122/22 124/6 125/14 148/21 184/5 184/21 194/14 196/3 198/13
throughout [2] 135/7 168/19
thrust [1] 70/25
Tier [1] 178/1
time [78] 1/20 8/3 8/4
13/13 23/4 23/16
27/10 41/21 59/23
60/2 76/2 77/9 79/10 82/12 82/17 83/10 85/8 85/14 86/6 86/15 87/8 87/22 90/19 90/20 91/16 96/1 96/15 97/14 98/4 98/4 98/10 100/15 101/15 102/22 103/1 108/13 109/4 111/16 111/23 112/1 112/7 112/8 113/20 114/1 114/24 118/9 119/1 119/8 119/13 119/16 119/23 121/5 122/9 122/13 127/4 129/8 133/24 137/22 138/13 143/11 146/2 147/9 147/11 148/18 149/9 149/18 149/21 163/6 165/11 168/5 175/1 176/3 177/21 183/4 189/2 194/19 196/12 203/5

126/16 136/18 142/15 took [6] 76/20 110/14
time-limited [1] 175/1
timeframe [1] 196/19
timely [1] 106/4
times [10] 30/22 33/24 49/5 185/25 186/3 186/4 186/13 186/21 187/17 188/18 tin [1] 82/5 title [1] 25/6 tobacco [1] 22/11 today [10] 1/4 1/15 10/18 71/19 79/20 97/2 161/25 167/2 203/4 203/7
today's [1] 10/18 together [24] 18/10 28/19 40/2 60/19 62/17 62/22 63/18 67/7 79/13 90/15
96/11 106/10 127/25 141/21 148/5 149/2 149/4 150/6 158/11 158/15 178/12 181/3 199/8 199/25
told [11] 79/19
123/20 126/12 127/2 130/10 131/19 132/2 132/7 135/1 158/11 192/17
too [4] 84/6 155/21 155/21 182/13

121/24 158/11 166/15 193/25
tool [6] 123/2 136/22 138/18 155/12 164/14 165/4
top [16] 9/6 26/23 34/11 37/7 75/12 120/15 121/2 130/19 145/7 148/11 153/2 169/24 169/25 174/8 174/14 174/14
topic [12] 21/24 42/7 52/3 53/14 54/11 57/5 57/25 65/25 66/10 96/22 112/12 198/2 topics [1] 3/22
total [4] 39/1 111/2
111/8 166/2
totality [1] 191/1
touch [1] 150/2
touched [1] 79/17
towards [5] 133/23 133/24 136/20 169/12 171/13
tracing [1] 164/12
tracking [2] 70/4
72/1
tract [2] 48/20 57/9
trades [1] 113/25
traditions [1] 79/22
trained [1] 135/10
training [10] 91/9
91/11 91/22 92/5 92/11 92/12 92/15 104/7 104/9 131/9 trajectory [1] 35/1 transcript [1] 74/20 transgender [1] 22/1 translate [1] 99/12 translated [1] 65/3 transmissibility [2] 166/11 173/3
transmission [6]
55/24 154/5 157/22 162/14 167/11 167/16
transmit [1] 173/2
transmitted [1]
157/23
transparent [1] 147/4
transpired [1] 162/3
transport [3] 111/2 111/4 129/4
trapped [1] 16/18
trauma [1] 21/1
trauma' [1] 20/9
travelled [1] 187/22
Traveller [1] 20/11
Travellers [1] 16/5
treat [1] 162/8
treated [1] 178/6 treating [2] 144/14 181/14
treatment [4] 30/21 30/25 56/24 59/13 treatments [1] 162/9
trend [2] 22/24 34/20
trends [1] 41/7
triage [2] 181/12 184/13
tried [1] 146/2
troubled [1] 27/9 true [9] 84/6 85/1 85/15 134/14 138/17 153/13 156/20 160/15 190/3
Trust [1] 30/4 truth [2] 75/6 75/13 try [5] 67/22 74/17 129/9 137/21 160/22 trying [6] 50/11 131/15 146/22 162/19 199/2 199/2
tsunami [1] 58/16 turn [5] 9/15 19/24 57/23 92/20 140/9 Turning [2] 2/10 55/1 twice [3] 17/3 30/25 46/14
two [42] 19/1 19/20
23/23 26/11 27/24
31/22 33/21 39/19
75/2 80/13 80/19
81/22 83/10 83/14
85/14 86/8 87/10
87/22 88/7 89/3 90/19
two...[21] 108/20
111/10 116/4 122/7 122/16 134/6 134/21 148/21 149/5 151/6 153/21 153/21 161/1 161/15 166/8 174/2 177/3 187/2 192/13 200/8 200/12
two minutes [1] 200/12
two months [1] 187/2
two years [1] 33/21
two-fold [1] 153/21
two-year [1] 148/21
type [16] 120/18
120/19 120/20 120/23
120/23 121/12 121/13
122/3 170/5 170/12
171/22 172/1 172/5
172/20 173/14 173/20
types [8] 17/14 43/17
44/17 47/5 47/18
64/22 89/22 171/21
typically [1] 20/7
U
UK [42] 3/11 3/24
17/25 20/19 22/7 22/22 23/7 23/10 24/11 25/8 26/7 40/7 41/10 54/16 57/1 57/6 60/24 61/1 61/8 65/24 66/9 69/19 69/21 70/1 72/21 91/20 102/23 128/7 143/16 168/13 169/20 170/13 180/4 192/20 193/1 198/9 198/11 199/1 199/7 200/3 200/22 201/8
UK government [5] 40/7 54/16 143/16 198/11 199/7
UK
Government-commi ssioned [1] 3/11
UK nations [1] 61/8
UK's [4] 115/1
178/16 178/19 179/7
ultimately [1] 114/4
unable [1] 57/17
unaltered [1] 98/8
uncertainties [2]
172/24 175/12
uncertainty [4]
172/25 173/5 174/17 176/14
under [18] 50/6
53/14 57/25 89/9
92/23 112/2 125/23
127/9 136/2 141/4 151/10 171/4 183/17

184/17 185/8 188/11 201/8 201/10 underestimate [1] 95/18
underline [1] 44/6
underlying [2] 41/4 59/15
underneath [1] 102/1 underpinning [2] 80/18 152/11 understand [13] 6/18 32/12 33/16 71/2 71/5 96/7 104/2 104/8 113/15 145/2 159/11 169/19 202/11
understanding [11] 32/5 46/25 73/10 84/22 105/19 122/1 122/4 144/14 158/21 175/20 194/25
understands [2] 45/24 171/17
understood [5] 87/18 108/7 119/13 143/25 200/9
undertake [1] 176/1
unduly [1] 127/13 unemployment [1] 16/10
unemployment' [1] 16/19
unequal [6] 2/14 50/12 55/24 56/8 56/13 56/24
unequally [1] 55/17 unexpected [4]
114/20 115/4 116/19 117/11
unfair [3] 6/10 79/8 199/3
unhelpful [1] 164/11
Union [1] 183/11
unit [4] 76/23 87/24 88/18 89/2
United [25] 5/15 6/25 10/4 22/18 23/11 24/7 24/9 25/19 42/4 49/15 79/11 89/15 91/25 101/22 114/13 143/10 145/20 148/11 171/15 171/17 179/9 182/17 187/8 200/21 201/15 United Kingdom [15] 10/4 22/18 24/7 25/19 49/15 79/11 101/22
49/15 79/11 101/22 updating [1] 108/13 143/10 145/20 148/11 uploaded [1] 191/23 171/15 171/17 182/17 200/21 201/15
United Kingdom's [4] 89/15 91/25 114/13 179/9

## United

Kingdom/devolved
[1] 187/8

United States [3] 5/15 23/11 24/9 universal [1] 64/3 universalism [1] 64/14
universities [2] 14/18 92/12
university [3] 2/13
2/25 9/18
university-level [1] 9/18
unmitigated [1] 161/5
unprecedented [2] 23/25 34/24 unpredictable [1] 172/17
unrest [1] 58/17 unsurprised [1] 188/23
until [8] 5/9 5/10 22/22 93/21 135/4 142/2 194/13 203/15 unwelcome [2] 115/4 115/5
up [67] 1/16 6/21 7/15 7/17 26/11 27/13 27/14 28/13 28/18 30/6 30/10 30/10 34/11 34/23 35/9 37/13 37/16 38/14 39/17 42/15 49/1 50/17 66/1 69/15 69/23 69/25 72/10 72/23 73/14 73/16 74/17 76/20 77/2 78/16 94/16 99/25 100/1 101/4 102/12 103/22 104/16 114/12 117/24 118/20 118/21 124/10 126/15 128/2 129/22 130/2 130/6 131/3 134/11 134/17 136/3 138/10 139/7 142/7 175/8 175/17 177/10 177/13 179/19 188/25 191/22 192/2 202/18
update [5] 49/20
98/18 108/2 108/5
118/9
updated [6] 50/18
50/22 98/3 104/22
107/8 118/7
upon [13] 44/13
52/20 68/25 72/1 77/8
113/1 116/13 118/19
137/22 139/19 152/5
181/6 189/3
uptake [1] 57/2
urban [2] 56/1 60/12
us [26] 12/3 21/12

23/14 23/19 24/5 25/1 $15 / 2$ 21/3 32/15 38/2 26/19 27/9 55/4 55/15 78/14 134/4
59/4 61/13 79/22
99/12 101/6 114/20
127/2 127/23 148/1
151/21 155/25 160/21
171/5 175/5 192/17 203/3
US Government [1] 59/4
USA [2] 20/18 23/8
usage [2] 29/10 29/12
use [25] 6/5 6/7
10/22 20/22 48/13
85/6 87/9 87/23 89/16
91/19 117/1 123/2
123/23 126/8 128/16
131/17 134/14 135/25
143/16 148/24 156/3
158/7 160/12 176/12
193/4
used [17] 24/1 32/6 43/19 80/19 81/8 99/5
119/21 127/16 138/21
159/16 161/16 164/10 170/17 171/18 173/24 184/10 185/1
useful [3] 127/15
129/17 193/15
using [9] 4/9 26/6
54/2 97/16 127/19
149/2 160/4 164/13
201/2
usual [1] 52/17
utilised [1] 53/22
utility [2] 111/3 111/5
V
vacancies [6] 23/18
31/1 31/2 31/7 31/8
31/18
vaccination [1]
163/20
vaccine [5] 57/1 57/2
157/18 162/11 163/18
vaccines [2] 64/1 163/24
validated [1] 151/2
validation [2] 99/7
135/24
Vallance [1] 150/24
valuable [2] 119/12 144/2
Valverde [1] 51/9
variant [1] 148/14
variants [1] 153/4
variation [1] 174/20
variations [2] $27 / 4$ 27/6
varies [3] 15/8 82/17 100/17
variety [2] 99/9 153/1
various [7] 11/13
vary [2] 113/25 153/6
vast [3] 144/5 145/4 163/9
verify [1] 86/23
version [7] 83/6 83/7
83/9 123/6 123/9
133/2 202/12
versions [1] 140/14
versus [1] 167/10
vertical [2] 32/17
32/18
very [77] 5/10 7/13
7/21 7/24 20/4 25/4
27/9 34/3 37/19 38/10
42/15 42/20 43/22
45/24 46/12 47/7
47/11 48/21 50/12
50/19 54/25 63/5
65/14 66/10 66/12
66/23 70/24 72/17
73/12 73/21 73/24
74/7 74/14 74/17
75/16 78/17 79/7
79/24 80/2 80/10
86/15 88/17 94/10
95/6 96/10 103/16
112/14 113/9 114/16
114/17 115/24 117/10
119/25 124/12 135/4
139/24 145/19 147/9
148/11 157/22 157/22
161/21 162/2 162/3
164/21 183/5 191/9
191/19 195/16 196/18 197/18 197/18 198/16
200/5 200/9 202/24
203/6
victimisation [2] 21/2
22/15
victims [1] 20/13
view [9] 39/10 39/11
41/4 46/24 51/2 62/25
68/24 136/16 192/20
viewpoint [2] 128/20
200/17
views [1] 110/10
violence [2] 17/20
20/8
virtually [2] 37/11
37/17
virtue [5] 95/4 115/3
115/16 115/16 173/19
virus [6] 55/14 55/17
58/11 156/25 157/20
164/1
vital [1] 147/7
voice [1] 74/17
voices [1] 1/16
voluntary [5] 64/9
124/24 136/10 138/25
139/5
vulnerabilities [8]

V
43/4 43/14 49/17 50/21 54/19 64/17 189/17 189/20
vulnerability [11] 42/20 43/19 44/9 44/16 45/12 45/20 46/21 48/2 49/22 56/8 190/23
vulnerable [10] 20/11 42/18 43/6 45/12 47/25 56/11 56/22 189/3 189/13 190/18

## W

wading [1] 122/21
waiting [2] 30/21 30/24
wake [1] 7/18
Wales [19] 7/10 7/17
7/23 7/25 13/2 15/15
15/19 17/5 25/13
25/15 25/25 27/22 48/9 59/24 60/12 60/13 107/6 147/1 201/18
walking [1] $96 / 3$
want [11] 1/22 6/4
11/21 17/11 19/24
40/2 68/15 129/13
142/25 158/22 200/15
wanted [2] 70/1 121/24
wanting [1] 165/16
Ward [1] 59/10
warn [1] 97/1
Wars [1] 34/21
was [431]
wasn't [18] 84/5
97/13 100/23 109/9 111/6 112/24 136/17 137/9 138/8 138/10 138/11 139/13 152/12 162/11 165/1 180/12 180/13 200/24
waste [1] 39/9 way [43] $1 / 214 / 5$ 5/19 7/23 8/1 8/6 9/12 10/16 18/2 21/14 29/9 29/9 29/18 32/12 36/8 39/15 42/15 42/20 50/8 54/2 60/20 65/12 68/10 77/21 109/24 113/16 122/19 122/22 124/3 129/23 135/14 162/3 164/10 164/13 168/12 178/4 181/21 182/7 190/19 191/15 195/24 196/4 199/25
ways [7] 11/13 19/1
19/20 21/21 99/18
100/13 135/19
we [262] we'd [4] 44/15 98/16 112/13 203/3 we'll [10] 74/23 96/25 124/16 135/23 143/20 145/9 148/24 156/14 167/14 179/20
we're [21] 5/19 11/7 11/21 14/11 19/19 33/13 34/9 42/2 47/9 63/2 64/22 66/23 68/20 70/19 74/14 97/1 147/24 172/1 180/17 187/2 203/10 we've [30] 5/20 6/7 6/19 19/7 19/8 19/15 24/12 31/24 33/21 34/11 34/22 38/9 38/10 50/25 53/1 65/11 69/2 71/19 86/2 92/21 108/20 134/5 134/20 140/13 145/17 192/18 193/5 193/6 193/7 201/4
wealth [1] $42 / 8$
Weatherby [6]
191/12 192/9 192/10 192/12 200/5 204/16
week [4] 3/16 33/25 83/22 143/21
weekly [4] 82/18 82/19 83/2 83/25 weeks [2] 177/24 187/7
welcome [1] 87/17 welcomed [1] 43/7 well [62] $3 / 124 / 17$ 7/10 11/3 19/10 25/10 26/20 27/3 27/17 33/16 34/8 34/15 35/8 35/21 50/4 65/6 65/15 72/8 74/24 78/15 78/20 87/5 88/10 88/25 89/11 95/14 96/13 97/20 98/13 100/13 108/5 108/6 109/18 116/17 118/15 121/1 121/13 121/18 128/20 132/7 135/18 143/25 144/4 144/22 148/6 153/18 156/14 158/24 164/21 165/14 171/15 180/4 180/9 186/18 187/21 193/22 195/16 196/8 196/11 198/16 198/18 202/14 well-embedded [1] 196/8
Welsh [7] 7/12 25/10 187/18 188/1 201/15 202/6 202/16
Welsh Government
[5] 7/12 187/18
188/1 202/6 202/16
went [15] 30/5 30/10
30/10 37/13 37/16 37/16 38/18 38/21 39/3 39/5 78/18 87/24 96/13 151/18 190/5 were [152] 2/15 2/17 3/6 7/16 18/6 20/20 22/12 24/1 24/21 24/23 28/13 29/20 31/1 31/7 31/9 31/18 35/25 37/14 39/7 40/17 42/3 42/8 48/7 49/1 51/11 51/13 53/7 53/14 55/18 55/21 55/21 55/22 57/17 59/8 59/8 59/11 59/12 60/7 60/9 71/18 72/12 78/7 78/9 79/10 79/21 79/25 80/1 81/17 81/17 85/20 90/10 90/21 92/9 96/19 97/7 97/16 97/24 97/25 99/14 101/18 103/8 104/9 110/10 111/3 111/4 111/20 116/15 116/15 116/16 116/24 118/5 118/8 118/9 118/14 118/22 119/18 119/24 121/1 124/2 124/3 125/9 126/1 126/3 126/3 126/4 127/1 129/9 130/2 130/9 130/19 130/23
134/11 134/22 134/23
135/2 136/3 137/17 138/20 139/3 139/10 140/2 141/25 142/1 142/5 143/5 145/23 146/5 146/16 146/17 147/1 147/9 151/2 151/4 151/11 153/1 153/21 155/19 158/7 159/2 159/25 160/23 161/4 161/17 162/18 163/24 164/7 164/17 164/22 170/9 175/15 175/16 177/16 180/4 180/8 180/9 181/6 181/11 182/18 183/7 184/23 185/1 187/9 188/6 189/20 193/9 195/11 197/8 201/14 201/21 201/22 201/23 202/24
weren't [6] 97/12
126/9 129/24 155/20 158/16 180/8
what [201] 3/19 4/20 6/3 6/14 6/15 10/12 10/20 11/10 14/21 17/11 18/10 18/12 19/3 19/15 19/25 21/12 22/19 23/19 24/5 24/15 25/5 25/18

27/11 27/23 29/10 30/22 31/21 33/9 33/12 33/12 34/15 35/13 35/22 35/25 36/11 38/12 38/13 39/11 43/6 43/13 44/13 46/5 47/24 48/25 49/16 50/8 50/18 55/4 56/18 57/24 58/1 58/4 58/18 59/10 60/4 60/6 61/18 61/18 61/19 61/25 62/9 62/12 62/15 62/20 62/23 64/20 65/2 65/8 65/10 65/10 66/18 67/19 67/21 70/2 70/5 70/8 70/13 70/25 74/18 77/15 77/16 78/18 79/11 87/25 88/8 88/20 91/13 91/14 91/15 92/1 94/22 94/25 98/22 101/3 101/24 103/5 103/20 104/10 105/13 105/20 106/10 106/16 108/9 110/2 110/4 110/18 112/16 113/18 116/8 118/11 118/22 120/8 120/9 121/19 121/24 122/12 123/18 124/6 124/8 124/14 125/19 125/21 125/22 125/22 126/25 whereas [2] 6/14 127/6 127/23 129/2 13/15
129/13 130/11 130/14 whereby [1] 99/13 137/24 138/21 138/23 whether [32] 23/3 139/5 140/7 143/20 145/13 145/23 146/13 146/15 147/4 149/13 149/21 152/2 152/9 152/18 153/11 153/15 154/21 156/9 158/15 158/25 159/21 160/10 160/13 160/15 160/20 161/16 161/17 162/3 162/4 162/19 164/9 164/20 165/18 166/7 166/14 167/9 167/12 168/2 168/16 169/8 169/23 170/9 170/22 170/25 171/17 173/22 174/14 175/12 175/23 176/20 177/19 178/1 178/2 178/5 178/10 180/15 181/2 181/16 182/7 183/9 184/16 189/16 190/17 193/8 193/21 197/2 197/22 202/16
what's [6] 11/18 14/6 38/7 89/25 109/4 132/11
whatever [4] 58/14 92/25 93/7 192/24

41/20 45/20 45/21 63/9 67/6 70/10 80/9 95/9 100/10 111/12 112/4 112/20 112/25 122/7 130/19 134/23 135/1 154/3 154/4 155/7 156/24 159/1 165/12 166/7 166/8 166/16 173/6 181/11 196/9 198/17 201/21
which [225]
Whichever [1] 83/8 while [1] 114/24
whilst [6] 22/3 65/17 74/16 90/21 118/4 150/23
whispers [1] 142/22 white [12] 15/1 16/9 16/22 16/24 17/1 17/4 17/7 17/9 18/22 19/11 21/17 49/9
whiteboard [2] 106/7 106/9
Whitehall [2] 9/10 151/14
whiteness [1] 21/18
Whitty [1] 180/3
who [52] 1/6 6/7 9/15
who... [49] 20/6 20/9 34/2 39/16 43/20 44/21 47/14 53/25 59/8 60/2 64/18 65/18 67/15 69/5 71/9 71/10 72/22 76/1 76/6 76/18 79/8 85/16 87/10 92/12 93/17 110/9 111/3 113/16 120/10 123/20 128/21 129/5 137/20 144/25 145/2 151/4 151/7 158/10 158/20 189/25 190/1 190/12 190/13 190/14 190/17 190/19 192/19 202/4 202/23
whole [21] 53/2
57/25 58/1 64/3 64/14 70/25 72/21 76/24 77/5 84/19 86/23 90/2
107/5 141/20 152/25
190/11 194/24 196/11
197/12 198/8 198/9
whole-system [2] 57/25 58/1
wholly [3] 192/22
193/12 193/14 whom [3] 55/18 76/13 76/17
whose [2] 17/6 17/8
why [25] 6/12 11/9
11/9 33/10 54/1 54/6 59/14 66/20 67/22 68/17 88/5 102/18 102/18 108/2 114/5 116/15 116/16 117/10 119/10 141/1 144/22 155/23 155/23 175/14 183/5
wide [7] 21/3 52/21
69/19 86/15 161/23 172/7 189/17
widely [1] 190/5
widen [1] 40/12
wider [3] 113/5
189/21 195/15
wider-ranging [1] 113/5
wield [1] 87/7
will [52] $1 / 5$ 1/21 $1 / 23$ 3/17 3/22 10/16 10/21 29/3 29/4 32/11 39/23 39/24 45/11 63/12 71/11 74/22 77/10 78/24 89/22 92/24 93/2 98/25 99/4 99/8 100/18 100/20 101/6 105/3 106/17 106/21 107/13 107/21 107/25 120/16 127/13 127/22 131/7 136/15 143/16 143/18 145/5 145/16

150/1 151/20 168/25 170/8 173/16 174/22 179/13 182/14 182/15 191/20
Willow [1] 51/9 Wilson [1] 88/11 Winter [1] 51/9 wisely [1] 171/19 wish [3] 85/6 97/2 191/16
withdrew [2] 74/8 203/9
within [26] 11/6 18/4 43/6 43/19 47/25 48/11 48/23 50/15 54/3 55/11 55/25 60/21 64/7 64/8 70/20 71/21 81/9 91/8 99/1 99/3 99/9 100/17 143/23 190/9 190/23 199/11
without [3] 79/1 157/25 196/21
withstand [1] 60/25 witness [14] 1/7 44/21 52/6 74/5 74/6 75/2 75/3 75/9 75/10 75/19 77/5 155/17 159/14 203/9
witnesses [3] 65/22 74/8 189/18
women [18] 12/12
12/23 13/6 13/13
21/16 21/19 27/5 27/6 27/10 27/12 27/15 27/16 28/7 35/2 37/3 37/4 37/8 38/1
women's [1] 38/3
won't [2] 71/4 75/17
wonder [1] 41/20
wondering [1] 123/17
word [11] 8/7 85/6 91/12 93/4 103/23 117/1 119/21 143/1 164/13 176/12 192/21
words [6] 58/13 137/12 141/18 160/12 161/16 192/23
work [67] 2/3 8/18 16/18 20/22 28/17 28/25 41/6 43/14 47/3 53/2 55/22 56/15 61/20 62/22 90/18 103/3 103/22 113/6 119/9 119/13 120/1 124/6 125/8 125/10 127/25 131/21 136/18 136/24 138/17 139/8 139/16 140/1 143/24 145/1 146/6 146/12 155/13 180/11 180/12 181/25 183/2 183/5 183/16 183/23 183/25

184/1 184/2 184/5 184/9 184/11 184/11 184/13 184/13 185/3 185/6 185/10 185/13 186/10 190/7 191/1 191/6 192/18 193/3 193/6 193/8 193/14 199/2
worked [8] 39/7
75/22 108/6 130/22 156/7 159/23 160/11 184/21
workers [8] 16/23 16/23 16/25 16/25 17/1 20/12 55/18 55/22
workforce [4] 160/6 161/3 161/13 165/24 working [9] 16/17 28/22 55/23 94/5 95/6 109/19 147/10 184/16 199/3
workplace [2] 160/20 185/3
works [4] 93/16
141/18 144/4 201/11
workshop [2] 59/2 59/3
workstream [2] 181/18 181/21
workstreams [2] 119/12 184/4
world [10] 2/21 3/8
6/21 10/23 21/20 28/16 34/21 61/20 96/6 177/22
Wormald [1] 52/7 worry [2] 79/18 177/12
worse [7] 9/3 9/22 15/10 26/17 26/22 36/6 36/7
worsening [1] 41/9 worst [36] 115/8 115/9 117/3 149/3 149/13 152/1 152/3 152/16 152/17 152/24 153/3 153/12 153/14 154/15 155/3 155/6 155/19 156/3 156/8 156/18 156/21 157/6 158/9 159/4 159/22 161/7 161/8 162/1 167/5 169/4 173/18 173/23 174/9 174/13 174/19 175/22

## worst-case [32]

115/8 115/9 117/3 149/3 149/13 152/1 152/3 152/17 152/24 153/12 153/14 154/15 155/3 155/6 155/19 156/3 156/8 156/18 156/21 157/6 158/9

159/4 159/22 162/1 167/5 169/4 173/18 173/23 174/9 174/13 174/19 175/22
worth [3] 34/1 34/4 112/10
would [185] 10/19
21/17 24/3 24/4 24/4 34/1 34/10 41/20 46/11 46/12 47/17 48/14 51/3 51/3 54/2 54/2 54/5 56/24 61/13 65/4 65/17 68/22 69/4 69/8 69/24 69/24 69/25 71/17 72/2 72/6 78/3 78/14 79/12 80/2 81/1 82/8 82/12 83/16 83/21 84/10 84/22 85/14 89/6 89/14 90/2 90/3 91/6 93/13 94/3 95/6 95/7 95/24 95/25 98/12 99/12 99/16 99/21 100/12 103/25 104/6 104/7 104/14 105/10 105/16 107/18 108/7 108/16 110/8 110/14 111/19 112/16 112/17 113/13 113/18 113/24 114/5 115/2 115/13 116/21 116/23 117/1 121/4 121/5 121/11 121/15 122/24 123/1 123/3 123/5 123/13 123/18 124/14 125/14 125/25 126/12 127/8 127/17 128/4 129/24 130/3 133/14 134/14 135/6 137/20 138/22 139/7 139/18 140/24 141/2 141/4 141/7 142/3 142/21 143/2 146/23 146/25 151/25 152/1 152/2 152/25 153/12 154/4 154/20 155/15 156/7 156/10 156/17 158/4 158/22 159/1 159/7 161/19 161/24 163/6 164/9 164/20 165/11 166/10 166/12 166/17 167/18 167/21 173/7 173/12 175/17 176/9 180/12 181/2 181/12 181/20 184/17 185/8 185/18 185/21 187/14 187/15 188/20 188/22 188/23 189/3 189/19 190/9 190/22 191/18 192/4 192/8 192/24 193/25 195/14 196/6 197/11 197/13 197/22 198/13 198/15 198/23 199/17 200/2 200/8 200/10 200/15 202/3

202/5 202/22 203/2 wouldn't [19] 34/10 68/14 78/19 79/19 95/18 113/22 125/6 136/22 137/23 142/24 147/13 155/14 157/13 164/13 196/7 197/14
197/14 197/24 197/24
write [1] 127/19 written [1] 129/11 wrong [4] 25/15 73/15 119/21 148/9 $\mathbf{Y}$ year [27] 3/15 22/23 24/3 24/4 24/4 26/21 26/22 30/6 30/10 33/18 33/20 33/20 33/23 33/25 34/2 34/5 34/6 34/9 34/15 34/16 34/17 59/1 59/13 90/23 136/19 148/21 202/13
years [45] 3/13 7/19 10/21 10/21 10/22 12/8 12/8 12/11 12/13 12/14 12/15 12/19 12/19 12/21 12/24 12/25 13/1 13/4 13/5 13/5 13/7 13/8 13/9 13/12 13/12 22/23 27/19 30/11 32/18 33/20 33/21 33/23 34/16 38/14 48/13 76/13 83/10 84/2 84/14 105/25 107/9 109/5 172/11 182/25 195/14
Yellowhammer [12]
119/14 119/15 119/23
139/6 146/14 181/22
182/2 183/8 183/9
184/3 184/6 186/8
yes [213]
yesterday [1] 76/13
you [600]
you know [16] 33/24
43/20 46/8 46/14 47/8
103/23 110/10 113/4
113/5 124/8 124/8
133/15 135/17 135/19 153/5 158/1
you'd [3] 70/13 83/23 203/1
you'll [7] 33/25 111/15 111/24 117/8 138/3 148/9 184/6 you're [42] 35/16 35/22 36/6 36/7 36/18 36/19 37/12 37/14 39/10 39/16 51/25 56/11 56/22 62/15 62/19 70/7 70/7 70/9 70/10 70/23 77/2 77/4


