

# Department of Health and Social Care

## 2018/19 Health and Social Care Sector Security and Resilience Plan (HSSRP)

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# 1. Executive Summary

The Health and Social Care Sector Security and Resilience Plan (HSSRP) provides an overview and assessment of the security and resilience of the health and social care sector and its Critical National Infrastructure (CNI). It outlines the risks and vulnerabilities to the sector in delivering its day to day business and sets out the risk management strategies undertaken to address these. It plays a critical role in presenting Ministers with an annual assessment of the health and social care sector vulnerabilities and resilience to risks, agreeing the year's action plan to mitigate against identified issues.

The health and social care sector is diverse and needs to be resilient to a wide range of risks and disruptive challenges which may affect its ability to deliver services, whilst also ensuring it is able to deal with any resulting casualties. The sector has a wide scope including acute care, ambulance services, primary care, social care, and many arm's-length bodies including Public Health England, NHS Blood and Transplant and NHS Supply Chain.

The National Risk Assessment (NRA) is a classified document that helps the UK Government monitor and prioritise the most significant domestic emergencies that we could face over the next five years. DHSC is participating in specific work streams to address the key risks in the NRA that may cause significant disruption to the health sector such as pandemic influenza (H23), **Irrelevant & Sensitive** and **Irrelevant & Sensitive**. The health sector can also be impacted by the majority of risks in NRA because of its role in managing and treating any casualties that result from the risks occurring. Because of this, it is essential that within the health sector national planners are planning against the common consequences of these risks as set out in the National Resilience Planning Assumptions (NRPAs).

The HSSRP demonstrates that there are generally good levels of resilience within the health sector, with good preparedness and business continuity arrangements in place. With respect to social care, the adult social care sector could effectively respond to a relatively short-lived or localised emergency situation, but it is likely to be much more challenged during a severe, prolonged emergency.

As part of the plan for 2018/19, there are a number of active work streams that will continue to be progressed during the year in order to reduce or mitigate the types of risk identified as being particularly significant. These are:

- **Irrelevant & Sensitive**
- Pandemic influenza
- Social care provider failure
- Preparing for mass casualties

The HSSRP presents an action plan for delivering these objectives including planned exercises to support these.

## **2a. Sector Overview: Key Functions and Assets**

## 2a. Overview of the Health and Social Care sector

The Department of Health and Social Care (DHSC) has the policy lead on health and adult social care in England. The Ministry for Housing, Communities and Local Government (MHCLG) owns the relationship with Local Authorities who are responsible for commissioning social care and meeting various statutory duties. Most providers are in the independent and voluntary sector.

The health and social care system is complex with fragmented commissioners, providers and regulators. A simplified diagram is shown below.

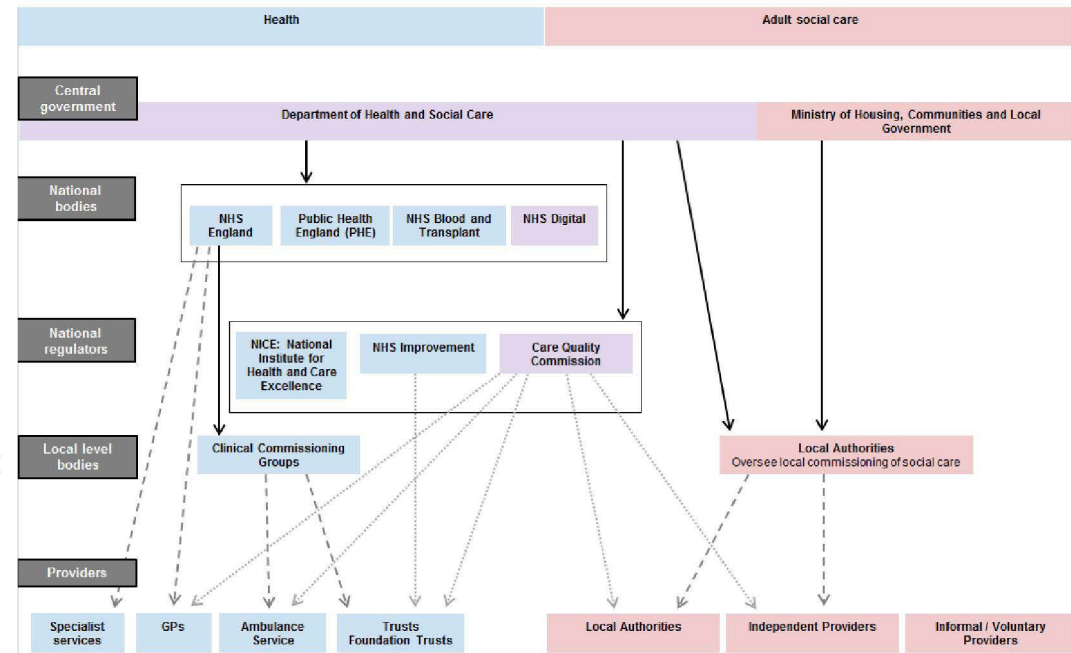
The health sector includes:

- Acute hospitals
- Inpatient mental health facilities
- Outpatient primary care
- Community care
- NHS Blood and Transplant
- Public Health England laboratories
- NHS 111 call centres
- NHS Supply Chain warehouses
- NHS Digital
- Ambulance Services

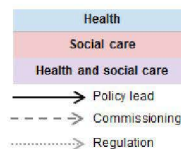
For this review, the Health Sector includes matters under the remit of DHSC, NHS England, Public Health England, NHS Blood and Transplant, and the Ambulance Service.

The social care sector includes:

- Local Authorities
- Independent providers
- Informal / Voluntary providers



### KEY



### Constitutional settlements

As health is a devolved matter, the DHSC HSSRP only covers England. The Devolved Administrations (DAs) of Scotland, Wales and Northern Ireland have their own arrangements for tracking and improving the resilience of their health infrastructure. DHSC has showed the development of the Health and Social Care SSRP with DA colleagues and will continue our ongoing dialogue with them.

## 2a. Sector functions and assets

### Acute care

The acute care sector comprises of care provided in hospitals, including emergency and planned care. NHS hospitals in England are managed by acute Trusts or Foundation Trusts. Foundation Trusts have greater financial and managerial freedom than Trusts. Trusts ensure that hospitals provide high-quality healthcare and check they spend their money efficiently. They also decide how a hospital will develop so services improve. There are 135 acute, non-specialist Trusts and 17 acute, specialist Trusts in England. NHS Improvement support NHS Trusts and Foundation Trusts to provide safe, high quality and financial sustainable care.

A number of acute care providers provide specialist care across the country. These include:

- 27 major trauma centres of which 11 treat both adults and children; 11 only treat adults; and 5 only treat children.
- Specialised burn centres.
- Surge centres.
- One high level isolation unit.
- Three high security mental health trusts.

A recent extensive review of the health Critical National Infrastructure considered the importance and redundancy of these specialist centres. The review concluded that although there would be an impact on service if these centres were affected, none were stand alone so care could be transferred between them.

The majority of acute care is commissioned by Clinical Commissioning Groups (CCGs) who commission most of the hospital and community NHS services in the local areas for which they are responsible. CCGs provide assurance to NHS England, which retains responsibility for commissioning primary care services such as GP and dental services, as well as some specialised hospital services.

### Ambulance Service

The NHS Ambulance sector covers 10 mainland ambulance services in England and a combined hospital and ambulance service on the Isle of Wight. The sector provides the response to 999 emergency calls and those 111 calls that are deemed to require an emergency response. Ambulance services deliver high quality, pre-hospital clinical care in a number of ways. This is delivered in a range of methods from supporting volunteer community first responders through the operational ambulance response to deploying specialist capabilities such as the Hazardous Area Response Teams (HART).

Some NHS ambulance services also provide patient transport services (PTS) for the transport of non-urgent patients to and from hospitals for routine procedures and appointments. Additionally, some NHS ambulance services host 111 services for their regions.

## 2a. Sector functions and assets

### Primary care

The UK is known around the world for the quality of its primary care. Access for all is a central tenet of the National Health Service (NHS). The General Practitioner (the family doctor) and their team is the most commonly used access point into the NHS. Primary care in the UK is the central part of an integrated and comprehensive system which provides continuity and co-ordination whilst acting as the gatekeeper for access to specialist hospital care. Primary care services are developed and delivered through partnership between the NHS and a wide range of companies with expertise across the healthcare spectrum.

### Social care

The social care sector here refers to adult social care only. The Department for Education is the Lead Government Department for child social care. Responsibility for the policy and legislative framework lies with DHSC. The Ministry for Housing, Communities and Local Government (MCHLG) owns the relationship with the 152 Local Authorities (LAs) who are responsible for commissioning social care and meeting various statutory duties. Most social care providers are in the independent and voluntary sector.

The Care Act 2014 modernised legislation to focus on promoting individual well-being and set out the LAs' responsibility to promote the market in care and support services, and to protect people in the event of a provider failure. The Act gives LAs the responsibility to oversee local markets, including for those funding their own care. There is currently wide variation in the capacity and capability of local commissioning, with no regulatory oversight and prices for care (rates) vary significantly as they are negotiated locally and individually.

The social care sector is diverse in the types of activities it includes for both acute and chronic conditions. The vast majority of both residential and domiciliary care is provided by the independent sector through an active and competitive market of independent providers, with the remainder a mixture of public and voluntary provision, including individuals (e.g. family members) providing social care. The market is plural and not dominated by one large provider and parts of the market is split between State and self-funded care. There are currently 6,900 care homes providers running 16,100 homes and 460,000 beds. There are also 5,800 home care providers running 9,000 locations. There is an estimated 1 million people receiving long term social care.

### NHS Blood and Transplant (NHSBT)

NHSBT is responsible for the provision of a safe, reliable and efficient supply of blood components, stem cells and tissues to hospitals in England. This involves collecting, screening, analysing, processing, storing and then transporting the products. NHSBT is also the organ donation organisation for the UK and is responsible for matching and allocating donated organs. As well as these services, NHSBT provides diagnostic services which support the provision of these products, or are allied to the clinical oversight of these disciplines. It is also responsible for the provision of some specialist clinical services. NHSBT depends entirely on the donation of blood, tissues, solid organs and stem cells and therefore facilitates and promotes altruistic donation within England and across the UK. NHSBT operates 24 hours a day, 365 days a year to deliver vital biological products and clinical services to the NHS, often at times of urgent and critical patient need. NHSBT's supply chains operate under specific regulation such as Blood Safety and Quality Regulations and Human Tissue Authority or operate under pharmaceutical industry standards: they are highly regulated.

### Public Health England (PHE)

PHE's role is to protect and improve the nation's health and wellbeing, and reduce health inequalities. PHE's key strategic responsibility is to fulfil the Secretary of State's duty to protect the public's health from infectious diseases and other public health hazards, working with the NHS, local government and other partners in England to protect the public's health.

## 2a. Sector functions and assets

### Critical National Infrastructure (CNI)

CNI is defined as:

Those critical elements of national infrastructure (facilities, systems, sites, property, information, people, networks and processes), the loss or compromise of which would result in major detrimental impact on the availability, delivery or integrity of essential services, leading to severe economic or social consequences or to loss of life.

A small number of health assets across the health sector are classed as CNI. In order to oversee work in this area and share best practice between sub-sectors, DHSC established the CNI health sector working group. The Centre for the Protection of National Infrastructure (CPNI) has continued to provide advice and guidance to those sites deemed as health CNI assets to help inform the security work plans and business continuity plans.

**Irrelevant & Sensitive**

**Irrelevant & Sensitive**

As part of a cross departmental work programme, DHSC has considered the potential impact of future foreign investment to health critical infrastructure. This has also included a consideration of investment in health supply chains. The work concluded that foreign investment is unlikely to impact health services.

**Irrelevant & Sensitive**



# 2a. Sector functions and assets: Emergency Response

Many of the risks in the National Risk Assessment would result in a number of casualties, causing an increased burden on the health sector. A casualty may increase their use of health services following an incident or other individuals may have their access to healthcare services affected by the demands of the response (e.g. cancelled appointments). DHSC leads on the non-contaminated mass casualty planning assumption for the National Resilience Capability Programme, which sets out the level of impact that local and national planners should prepare for.

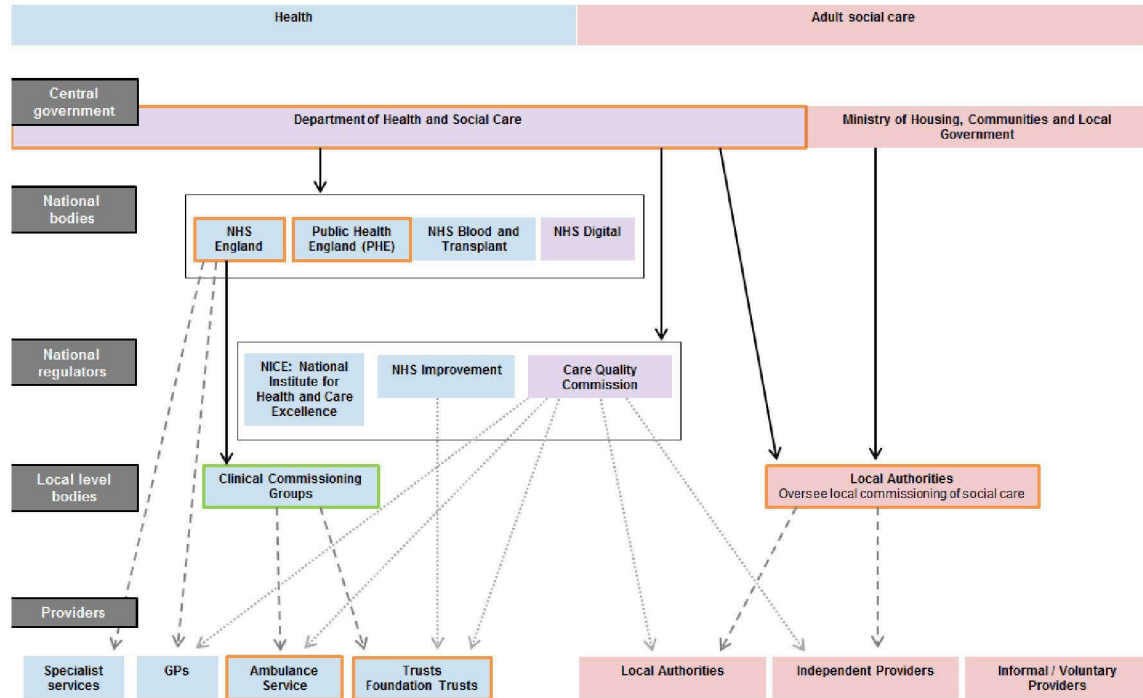
Under the Civil Contingencies Act 2004, parts of the health system have a duty to prepare for and respond to emergencies. Within the health and social care system there are six types of Category 1 responder and two types of Category 2 responders (shown below in orange and green respectively). A number of key organisations within the health and social care landscape continue to prepare for and respond to emergencies but do not have a statutory duty to do so, including: NHS Blood and Transplant, NHS Digital, NHS Improvement and primary care providers.

## Category 1 responders

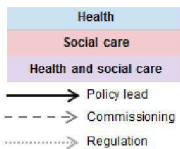
- DHSC on behalf of Secretary of State for Health and Social Care
- NHS England
- NHS Trusts/Foundation Trusts
- Ambulance Service
- Public Health England
- Local Authorities (incl. Directors of Public Health)

## Category 2 responders

- Clinical Commissioning Groups



### KEY



## 2b. Sector Overview: Governance

## 2b. Governance: Department of Health and Social Care

DHSC, as Lead Government Department, oversees the planning and response across the health sector, in conjunction with NHS England and PHE, providing assurance to Ministers about the resilience of the health sector, including public health. In social care, DHSC and the Ministry for Housing, Communities and Local Government (MHCLG) are joint Lead Government Departments. DHSC performs a policy-making role along with high level planning for social care.

Section 253 of the National Health Service Act 2006 and Section 47 of the Health and Social Care Act 2012<sup>1</sup> set out the powers available to the Secretary of State (SoS) for Health and Social Care. When it is appropriate to do so by reason of an emergency, the Secretary of State can give directions to all English NHS bodies, the National Institute for Health and Care Excellence (NICE), NHS Digital and any provider of NHS services; and ensure coordination between bodies in exercising their activities in times of emergency.

### The Secretary of State may direct the body:

- About the exercise of any of its functions;
- To cease to exercise its functions;
- To exercise its functions concurrently with another body; or
- To exercise the functions of another body under the NHS Act

### In relation to providers, the Secretary of State can direct the provider:

- About the provision of NHS services by the provider;
- To cease to provide services or to provide additional services.

Other legislative powers available to ensure resilience are shown in the table below:

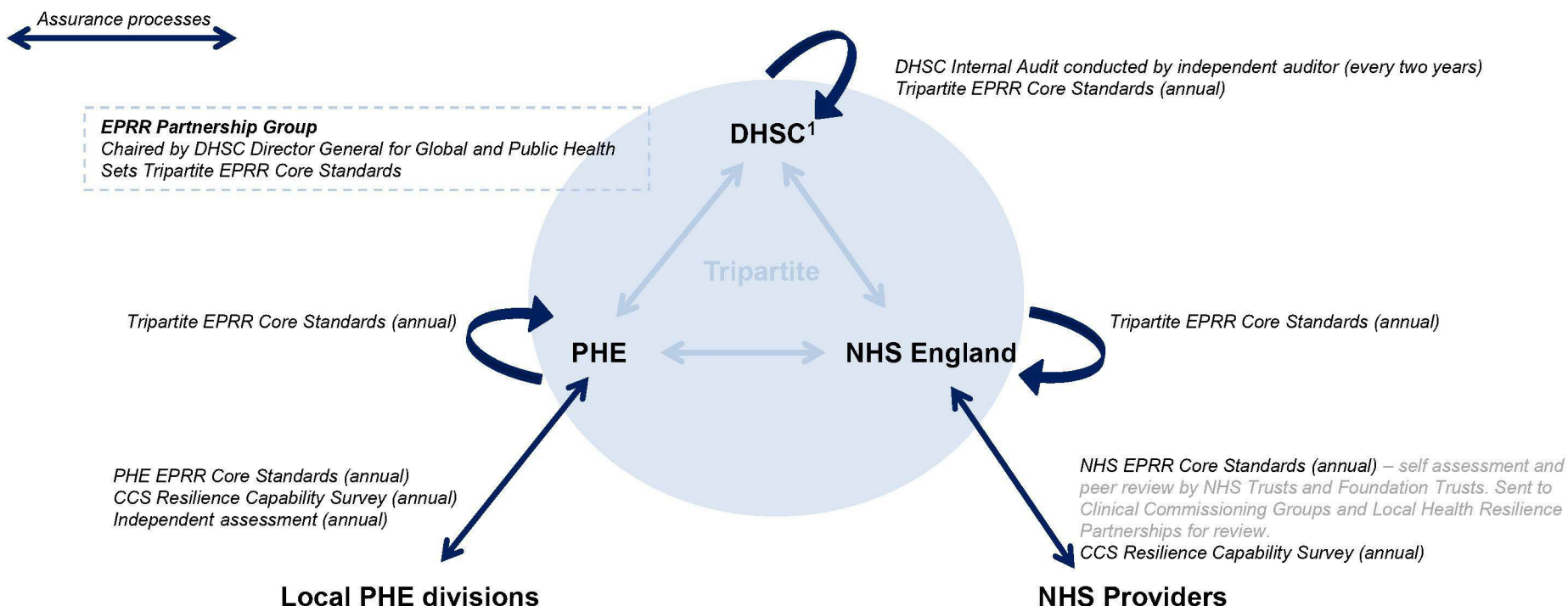
Legislation	Exercised by	Over	Objective
NHS Act 2006 Section 8	SoS	NHS Trusts, special health authorities e.g. NHS Business Services Authority and the NHS Blood and Transplant	SoS may direct these bodies about the exercise of their functions.
Health and Social Care Act 2012 Section 254	SoS	NHS Digital	SoS may direct NHS Digital to establish and operate a system for the collection or analysis of information.
Reg 32 National Institute for Health and Care Excellence (Constitution and Functions) and the Health and Social Care Information Centre (Functions) Regulations 2013/259	SoS & NHS England	NHS Digital	SoS or NHS England may give directions to NHS Digital requiring NHS Digital to exercise such systems delivery functions of the Secretary of State or (as the case may be) the Board as may be specified in the direction.
NHS Act 2006 Section 252A	NHS England	NHS England, Clinical Commissioning Groups (CCG) and NHS service providers	NHS England and CCGs must take appropriate steps for securing that they are properly prepared for dealing with an emergency which might affect them. NHS England must also take such steps as it considers appropriate for securing that each relevant service provider is properly prepared for dealing with an emergency which might affect it.
NHS Act 2006 Section 253	SoS	NHS England, Clinical Commissioning Groups (CCG) and NHS service providers	SoS can direct NHS England to take such steps as it considers appropriate for securing that each relevant service provider is properly prepared for dealing with an emergency which might affect it.

## 2b. Governance: DHSC Emergency Preparedness, Resilience and Response oversight

DHSC, NHS England and PHE work as a tripartite to coordinate Emergency Preparedness, Resilience and Response (EPRR). The Tripartite have an agreed set of EPRR Core Standards, which are used for annual assurance to the EPRR Partnership Group, led by the Director General for Global and Public Health at DHSC. This information is also used to assure Ministers of the sector's resilience.

Separately, the Civil Contingencies Secretariat (CCS) based in the Cabinet Office commissions the annual Resilience Capabilities Survey, which is completed by PHE, NHSBT and NHS Trusts, including the Ambulance Service; providing assurance to Cabinet Office of the health sector resilience at a local level.

The below diagram shows the assurance processes, conducted by the tripartite, using dark blue arrows.



<sup>1</sup>For details of the DHSC EPRR team see ANNEX B

## 2b. Governance: NHS England

NHS England oversees the Emergency Preparedness, Resilience and Response (EPRR) capabilities of NHS organisations and providers of NHS funded care. Their assurance process is carried out using a set of EPRR Core Standards, which are the minimum resilience requirements that organisations must comply with. Under the Civil Contingencies Act, many health care providers are Category 1 responders and have a statutory duty to prepare for emergencies. The NHS EPRR Core Standards hold all NHS organisations or providers, whether categorised or not, to the same standards required by Category 1 responders.

### **NHS England EPRR Core Standards**

The Core Standards are reviewed and updated on an annual basis and incorporate emergency response and business continuity plans. They require providers to consider a range of threats and hazards which may affect them, and the standards include sections on: governance, assessing risk, maintaining plans, command and control, communicating with the public, information sharing, cooperation, and training and exercising. The Core Standards are available on the [NHS England website](#).

NHS England also has risk specific plans including those for Mass Casualties and Surge Guidance. However, it is difficult to plan on a national scale for widespread emergencies, or those that involve lots of interdependencies (e.g. widespread power failure vs hospital only power failure), because emergency planning is conducted at a local level. As part of its annual EPRR assurance process, NHS England requires confirmation of preparedness at the local and regional level.

### **Assurance process**

The EPRR Core Standards are an organisation-led, self-assessment tool with peer review. The organisation's Accountable Emergency Officer provides a board level report on compliance against Core Standards to the local Clinical Commissioning Group (CCG) and Local Health Resilience Partnership (LHRP). The LHRP conducts annual deep dive on a specific subject, such as resilience to flooding. This deep dive and the Core Standards report are taken to regional and then national NHS England Boards, including the NHS England EPRR Oversight Group. In 2017/18 NHS England undertook a review of strategically important assets (Trauma Centre, Burn Centre, High Level Isolation Unit, Surge Centres, and High Security Mental Health Facilities) and this has provided assurance that these organisations are compliant with the core standards.

A statement of compliance with the NHS England Core Standards are taken to the EPRR Partnership Group meeting, chaired by the Director General for Global and Public Health at DHSC.

## 2b. Governance: Public Health England

Public Health England's (PHE) role is to protect and improve the nation's health and wellbeing, and reduce health inequalities. PHE's key strategic responsibility is to fulfil the Secretary of State's duty to protect the public's health from infectious diseases and other public health hazards, working with the NHS, local government and other partners in England to protect the public's health.

The PHE Emergency Preparedness, Resilience and Response (EPRR) Assurance process is comprised of three strands.

**1.** The first strand involves sending out a questionnaire to emergency preparedness leads across PHE which sets out the key service requirements against PHE's EPRR Core Standards. Each component part of PHE completes the questionnaire and is asked to provide a statement of EPRR assurance based on their responses to the Core Standards questionnaire. This evidence provides a means of measuring year-on-year improvement in the organisation's EPRR capability. The EPRR Core Standards and key service requirements cover all elements of the organisation's response to outbreaks and emergencies, namely:

- Leadership and Governance
- Public Health Risk Assessment
- PHE Emergency Plans
- Business Continuity Plans
- Multi-agency Co-operation and Collaboration
- Specialist advice
- Surveillance
- EPRR Training
- Communicate with the Public and Partner Agencies
- Alerting and Communication Systems
- 24/7 Availability in an Emergency
- Sustaining the Response
- Lessons Identified
- Records management

The EPRR assurance standards have been developed as internal standards in line with the Health and Social Care Act and the DHSC standards for Better Health, regulated by CQC. The EPRR assurance report and statement of assurance from this process will be reviewed and endorsed by the PHE EPRR Oversight Group and an annual report on PHE's EPRR capability is presented to the PHE Management Committee and DHSC.

**2.** The second strand is PHE's nation-wide response to the Resilience Capabilities Survey, which is informed by the PHE Core Standards questionnaire.

**3.** The third strand is a peer review process which provides for an independent assessment of quality by experts in the field in order to maintain standards, improve performance and provide credibility in PHE's EPRR capability. This takes place annually in March - April and the assessment is based on agreed protocols.

A statement of compliance with the PHE Core Standards are taken to the EPRR Partnership Group meeting, chaired by the Director General for Global and Public Health at DHSC.

## 2b. Governance: NHS Blood and Transplant

Although NHSBT does not itself have statutory responsibilities under Civil Contingencies Act 2004, as critical supplier to NHS hospitals, NHSBT acts as if the organisation was a Category 1 responder working with the Department, NHS England, PHE and the NHS to ensure support for the effective emergency response plans that are in place, take part in national exercises, and coordinate responses as necessary. NHSBT also holds a number of internal exercises at local and national levels to test organisational response. NHSBT is also certified to ISO22301 Societal security - Business continuity management systems.

In support of this, NHSBT will comply with the terms of its Service Level Agreement (SLA) with the Department on emergency preparedness. In addition, NHSBT will comply with the relevant core standards in NHS England's Core Standards for Emergency Preparedness Resilience and Response and provide an annual statement of compliance to the EPRR Partnership Group.

NHSBT also takes part in the Resilience Capabilities Survey.

From June 2018, a statement of assurance will be taken to the EPRR Partnership Group meeting, chaired by the Director General for Global and Public Health at DHSC.

**Irrelevant & Sensitive**



## 2b. Governance: Social Care oversight

Social care is commissioned by Local Authorities but is largely delivered by the private sector, with some public and voluntary care.

### Local Authorities

Risks in the social care system are held and managed by Local Authorities (LA), who have contingency plans, and respond to emergencies as they arise. They may put requirements into their contracts with social care providers to ensure providers have contingency plans in place. However, LAs often pay providers for social care below the cost of care, meaning that fees need to be topped up by self-funders. This funding imbalance can result in LAs having poor leverage when asking providers to implement mitigation measures.

### Care Quality Commission (CQC) [see section 2d for more information]

CQC regulates the safety and quality of all health and social care providers. Given the number of providers, they are unable to visit all providers and therefore focus on high risk providers. All providers registered with CQC are required to meet the 13 fundamental standards of care, which include certain measures which are applicable to preparing for and responding to emergencies. CQC are aware of the necessity for providers to be able to respond to emergencies and have business continuity plans, however there are very few resilience experts within CQC and the degree to which CQC can scrutinise providers' business continuity arrangements may be limited.

The CQC Market Oversight Team monitors the financial performance of the most difficult to replace care providers and feeds information back to DHSC where possible. The Market Oversight Scheme does not protect providers from financial failure nor does it pre-empt failure through disclosure of information. The scheme currently has approximately 55 corporate providers, covering 400 registered providers delivering services from 4,000 locations (approximately 30% of all care home beds in England).

### DHSC

DHSC oversight of the social care system includes the Social Care Contingency Planning Group, in conjunction with CQC and ADASS (Association for the Directors of Adult Social Services). DHSC is currently focused on the biggest risk to the sector, which is major adult social care provider failure. DHSC have submitted a new risk for the 2018 N(S)RA with the scenario of a short/no-notice collapse of a major provider of domiciliary care. CQC monitors the financial performance of the most 'difficult to replace' care providers and the Department receives data from CQC in order to measure entry and exit to the market, triangulating risks at a national and local level. A ministerial exercise focused on the response to a large scale provider failure is scheduled for 2018.

## **2c. Sector Overview: Impact of EU exit**

## 2c. Impact of EU exit

### The potential implications for the security and resilience of the UK's exiting the EU

The DHSC EU Exit programme is managing the Department's contribution towards a smooth and orderly exit from the EU and agreement of a deep and special partnership, to enable the Government to continue to pursue its short, medium and long term objectives for the health and care system in England. EU Exit programme will deliver the ability of the health and care system to operate within the revised context, captured in the workstream objectives below:

- **Reciprocal Healthcare** - providing certainty to EU citizens in the UK (and UK citizens in the EU) on their rights to access healthcare; to have a system in place, enabled by primary legislation, which ensures those eligible for healthcare receive it with minimum disruption.
- **Public Health** - having systems in place (either at the EU or WHO) which enable effective monitoring of communicable disease outbreaks for the UK; have systems in place to enable the exchange of organs tissues and cells and ensure blood safety; longer term enabling trade through nutrition labelling and tobacco control, and play a greater role on the world stage on public health matters, particularly through WHO.
- **Workforce** - EU and EEA nationals working in the NHS and social care sector to have certainty about their rights and a smooth process for obtaining them; future immigration system takes account of the needs of NHS and social care providers; longer term decisions made on the level of immigration from the EU (and EEA area) for staffing in the health and care system, in line with strategic vision of the future of the NHS.
- **Life Sciences (including Medicines Regulation)** - necessary powers in place for the medicine regulation system to operate on day one (via the Repeal Bill); to develop a medicine regulatory system, either within or outside the EU regulatory framework, giving patients timely access to safe, effective medicines and supporting life sciences sector.
- **Supply Chains** - future trading relationship with the EU taking account of the needs of the health and care system; to ensure that DHSC and the wider health and care system is prepared for potential changes to cross cutting issues such as procurement, intellectual property, etc. as well as customs, tariffs and import controls; longer term embracing potential opportunities for more effective ways of working.
- **Research** - continuing to collaborate with European and worldwide partners, to further the needs of basic and translational research to discover transformative new treatments for patients in the UK.

The areas impacted have been addressed within the body of this presentation and include public health, workforce and supply chain. The analysis work that is needed to better understand the implications of EU Exit on supply chain is to be concluded at the end of April although there is an agreed understanding on the contingency required in some areas, e.g. supply of medical radioisotopes in the event of border issues at ports of entry where shipment by air freight is the proposed alternative to address delays.

There is a reliance on other departments on reaching a right-to-work arrangement that guarantees the rights of EU nationals already here and secures 'flow' of workers from the EU in relevant specialisms. The programme approach to operational readiness has a governance board in place in the structure to ensure that arm's-length bodies have in place what they need to address day one readiness. Included within this board is an agreed approach to communication with the frontline for what needs to be addressed as part of EU Exit and building upon what has been included in mandate and remit letters.

## 2d. Sector Overview: Regulators

## 2d. Regulators: Care Quality Commission

The Care Quality Commission (CQC) is a national regulatory body which assesses the quality and safety of health and social care providers.

All providers registered with CQC are required to meet the 13 fundamental standards of care (shown below), which include certain measures which are applicable to preparing for and responding to emergencies (shown in red). Non-care services (including a wide range of support and personal assistance services) are not regulated and limited information on these providers is held centrally.

CQC are aware of the necessity for providers to be able to respond to emergencies and have business continuity plans, however there are few resilience experts within CQC and the degree to which CQC can scrutinise providers' business continuity arrangements may be limited. CQC are aware of the NHS England EPRR Core Standards and are now requesting copies of the self-assessment/board report when undertaking assessments.

**19(1)(a) Persons employed for the purposes of carrying on a regulated activity must be of good character**

*'When assessing whether an applicant is of good character, providers must have robust processes and make every effort to gather all available information to confirm that the person is of good character. It is not possible to outline every character trait that a person should have, but we would expect to see that the processes followed take account of honesty, trust, reliability and respect.'*

**18(1) Sufficient numbers of suitably qualified, competent, skilled and experienced persons must be deployed in order to meet the requirements of this Part.**

*'There should be procedures to follow in an emergency that make sure sufficient and suitable people are deployed to cover both the emergency and the routine work of the service.'*

**17(2)(b) assess, monitor and mitigate the risks relating to the health, safety and welfare of service users and others who may be at risk which arise from the carrying on of the regulated activity;**

*'Providers must have processes to minimise the likelihood of risks and to minimise the impact of risks on people who use services.'*



**12(2)(e) ensuring that the equipment used by the service provider for providing care or treatment to a service user is safe for such use and used in a safe way;**

*'Providers should have and implement up to date induction and training plans for the safe operation of premises and equipment, including incident reporting and emergency and contingency planning.'*

**12(2)(f) where equipment or medicines are supplied by the service provider, ensuring that there are sufficient quantities of these to ensure the safety of service users and to meet their needs;**

*'Sufficient medication should be available in case of emergencies.'*

**12(2)(h) assessing the risk of, and preventing, detecting and controlling the spread of, infections, including those that are health care associated;**

**12(2)(i) where responsibility for the care and treatment of service users is shared with, or transferred to, other persons, working with such other persons, service users and other appropriate persons to ensure that timely care planning takes place to ensure the health, safety and welfare of the service users.**

*'To make sure that people who use services are safe and any risks to their care and treatment are minimised, providers must be able to respond to and manage major incidents and emergency situations. This includes having plans with other providers or bodies in case of events such as fires, floods, major road traffic accidents or major incidents, and natural disasters such as earth quakes or landslides.'*

### List of providers that CQC regulate

- Ambulance Services
- Care homes
- Children's services
- Clinics
- Community based services
- Dentists
- GPs and doctors
- Hospices
- Hospitals
- Mental health
- Secure settings
- Services at home

## 2d. Regulators: NHS Improvement

NHS Improvement (NHSI) supports NHS Trusts, Foundation Trusts and independent providers that provide NHS-funded care, to provide safe, high quality and financial sustainable care. NHSI's responsibilities cover acute, mental health, community and ambulance services and primary care but do not cover public health or social care. NHSI was formed on 1<sup>st</sup> April 2016, bringing together a number of former regulators, such as Monitor, into one organisation. NHS Improvement is not a categorised responder under the Civil Contingencies Act and work is underway to clarify the role of NHSI in incident response. NHS Improvement has a recently appointed a Head of Business Continuity to take this work forward.

### **Future work**

The recently appointed Head of Business Continuity will develop NHS Improvement's work on security and resilience. In addition, the Department is working with NHS Improvement and NHS England to determine the how best to provide assurance of the security and resilience of NHS estates and how this complements the business continuity work assessed by the NHS England Core Standards for EPRR.

### **Physical security**

NHS Improvement is responsible for NHS Estates and Facilities. At the local level, organisational structures responsible for security are determined by individual Trusts. NHS Protect used to lead on physical security, producing guidance for NHS Trusts and Foundation Trusts. On 1<sup>st</sup> November 2017, NHS Protect was disbanded and became the NHS Counter Fraud Authority, which does not deal with physical security. Further work is required to determine the role of NHS Improvement in supporting the physical security of the NHS estate.

With regards to resilience, NHS Improvement is currently focused on:

- Leading the response to the Grenfell Tower tragedy for the NHS, including data collections and monitoring;
- Representing the NHS as part of the review of building regulations by Dame Judith Hackitt;
- Leading on the policy and operational aspects of backlog maintenance, which will bring the safety and quality of NHS buildings up to current standards, and;
- Reviewing the broader issues of service resilience in relation to staffing, with appropriate skills, and commercial suppliers e.g. Carillion.

### **Guidance on resilience of new build hospitals**

Guidance on the resilience of hospitals is provided to the NHS in "Health Building Note 00-07 Planning for a resilient healthcare estate (2014 edition)". This addresses procuring resilient new facilities and regular risk assessment of existing facilities. In addition, there is also a requirement for every organisation to have a climate change adaptation risk assessment, which addresses elements such as flooding (see Annex D). The guidance document includes an example scenario of loss of telephone communications for up to five days and includes a case study Ysbyty Ystrad Fawr local general hospital built on flood plain floodplain. During the various stages of design, proposals were developed to ensure that the hospital remains in operation during any extreme flood event.

## 2d. Regulators: National Institute for Health and Clinical Excellence

The National Institute for Health and Clinical Excellence (NICE) provides national guidance and advice to improve both health and social care. NICE's role is to improve outcomes for people using the NHS and other public health and social care services.

It does this by:

**Producing** evidence-based guidance and advice for health, public health and social care practitioners;

**Developing** quality standards and performance metrics for those providing and commissioning health, public health and social care services;

**Providing** a range of informational services for commissioners, practitioners and managers across the spectrum of health and social care.

Since 1999, NICE has provided the NHS, and those who rely on it for their care, with an increasing range of advice on effective, good value healthcare, and has gained a reputation for rigour, independence and objectivity. In April 2013 NICE gained new responsibilities for providing guidance for those working in social care.

## 3a. Risk Identification



## 3a. Risk Identification

**Risk identification occurs at both a national and local level:**

### **National level**

The National Risk Assessment (NRA) is an assessment of the most significant risks the UK could face over the next five years, which could result in a civil emergency. It is produced every two years (the first such assessment was carried out in 2005) and is collectively agreed by Ministers. The NRA assesses both 'hazard' and 'threat' risk scenarios, which together cover accidents, natural hazards, disease, malicious attacks (cyber, conventional and unconventional), public disorder and industrial action risks. The risks in the NRA are all 'reasonable worst case scenarios', meaning that they represent a challenging but plausible manifestation of a particular risk, which in turn helps to ensure that Government is preparing for a range of potentially severe consequences and not just routine incidents.

The health sector can be impacted by the majority of risks in the NRA because of its role in managing and treating any resulting casualties that result from the risks occurring. Because of this, it is essential that within the health sector, national planners are planning against the common consequences of these risks as set out in the National Resilience Planning Assumptions (NRPA).

Complementing the NRA, the Cabinet Office produces a quarterly Forward Look which assesses the most significant domestic risks over the coming six month period. DHSC contributes to this Forward Look, bringing together information from across the health and care sector.

**Irrelevant & Sensitive**

### **Local level**

Local Resilience Fora (LRFs) work at a local level to plan and prepare for localised incidents and catastrophic emergencies. They work to identify potential risks, developing Community Risk Registers and produce emergency plans to either prevent or mitigate the impact of any incident on their local communities. LRFs are formed of Category 1 responders (as defined by the Civil Contingencies Act 2004), which includes local NHS Trusts, emergency services including the Ambulance Service and Local Authorities.

As well as LRFs, health organisations within an area covered by an LRF form Local Health Resilience Partnerships (LHRPs). The key responsibilities of the LHRP are to:

- Facilitate the production of local sector-wide health plans to respond to emergencies and contribute to multi agency emergency planning.
- Provide support to the NHS, Public Health England (PHE) and Director of Public Health representatives on the LRF in their role to represent health sector EPRR matters.
- Provide support to NHS Commissioning Board Local Area Team and PHE in assessing and assuring the ability of the health sector to respond in partnership to emergencies at an LRF level.
- Each constituent organisation remains responsible and accountable for their effective response to emergencies in line with their statutory duties and obligations. As with LRFs, the LHRP has no collective role in the delivery of emergency response.

**Irrelevant & Sensitive**

## **3b. Risk Identification, Assessment and Mitigation: Sub-sector assessments**

### Risk identification, assessment and monitoring

NHS England oversees the risk assessment of Acute Trusts using the NHS EPRR Core Standards framework, which are self-assessed and peer reviewed. To comply with these standards, Trusts are required to have emergency response and business continuity plans in place to deal with a range of threats and hazards. There is sometimes variation between Trusts on the scoring of the Core Standards because the framework is self-assessed and evidence for assessment is often based on value judgements. After completing the framework, Trusts are required to take a statement to their public board meeting and to the Local Health Resilience Partnership (LHRP). Organisations failing to meet the core standards will be monitored by the Director of Commissioning Operations (DCO) head of EPRR and will need to provide 6 monthly reports on their compliance to Core Standards to their LHRP.

Further risk assessments are carried out by the Care Quality Commission (CQC) who will assess Trusts for their ability to respond to emergencies and the presence of business continuity plans. However, resilience is not a core competency of the CQC and the degree of scrutiny may be limited. CQC are aware of the NHS England EPRR Core Standards and are now requesting copies of the self-assessment/board report when undertaking assessments.

### Most significant risks to sector

**Irrelevant & Sensitive**

- Pandemic influenza (H23)

*The acute care sector is well prepared for pandemic flu. NHS England have taken on key work streams following NSC THRC.*

**Irrelevant & Sensitive**



### Risk identification, assessment and mitigation

As a category 1 responder and as part of the emergency services, there is a good understanding of the importance of security and resilience within the Ambulance Service and ownership of risks. There are also good networks for both formal and informal knowledge and risk sharing across the Ambulance Service. NHS England has also commissioned the National Ambulance Resilience Unit (NARU) which works nationally on behalf of each NHS Ambulance Trust in England to provide a coordinated approach to emergency preparedness, resilience and response.

Each Ambulance Service has a risk register which is informed by the national risk register, Local Resilience Fora and Local Health Resilience Partnerships' risk registers. Individual Trusts can flag risks directly to NHS England if they feel they are of national importance. Risk identification is also considered by organisations such as the Association of Ambulance Chief Executives and the National Directors of Operations Group.

NHS England oversees the risk assessment of Ambulance Trusts using the NHS EPRR Core Standards framework, which are self-assessed and peer reviewed. Additionally, NHS England conduct a yearly deep dive into a specific area of resilience. Last year's focus was on the specialist capability of HART (Hazardous Area Response Teams), CBRN (Chemical, Biological, Radiological and Nuclear) and MTFA (Marauding Terrorist Firearms Attack) teams.

Further assessments are carried out by the Care Quality Commission (CQC) who assess Trusts for their ability to respond to emergencies and the presence of business continuity plans. However, there are few resilience experts within CQC and the degree of scrutiny may be limited.

### Most significant risks to sector

- Shortage of frontline staff

*Currently, there is difficulty within the sector to train and retain sufficient numbers of staff.*

- Increased demand

*There has been a rising increase in demand on the Ambulance Service including on the 999 service. This is based on multiple factors but is partly due to public change in expectations from the service and struggling social and community care.*

- Industrial action

*There may be an increased threat of industrial action due to the rising tension between reduced staff numbers and growing demand. Discussions on public sector pay may also impact.*



### Risk identification, assessment and monitoring

General Practitioners (GPs) are self employed and their practices can be thought of as separate companies or partnerships. As such, NHS England does not have the same oversight over their security and resilience as for NHS Trusts. Given the number and often close geography of GPs practices, there is a good redundancy in the system, for example patients can access another GP close by if their practice was impacted by a threat or hazard. In the same vein, any threat or hazard which affects a significant proportion of GP services will constitute a larger risk to primary care.

### Most significant risks to the sector

- Workforce shortages

*DHSC is aiming to get to approximately 40,000 GPs (Full Time Equivalent) by 2020. There are currently 33,300 GPs (FTE). Current internal restricted projections predict that this target may not be reached. The consequences of workforce shortages are: less resilience of the system, knock on effects on Emergency Departments and patients being less able to get GP appointments.*

- High workloads

*Workload is an increasing concern for GPs; this was found in the 2015 GP work life survey as there was increased reporting of stress and perceived workload compared to 2012. The recent British Medical Association indicative survey further suggested that workload burden is increasing. The consequences of high GP workloads are: patients being less able to get GP appointments, recruitment and retention issues, low staff morale, impact on patient safety, and knock on effects to other parts of the system.*

- Population demographic changes

*Population demographic changes include an increase in the older population, increase in deprivation and increase in number of people with long term conditions. The consequences of these demographic changes are an increased demand on GP services.*

- Cyber attacks

**Irrelevant & Sensitive**

- Pandemic influenza (H23)

*The consequences of pandemic influenza are: patients being less able to get GP appointments, workforce shortages and an increased demand on GP services.*



### Risk identification, assessment and mitigation

Risks in the social care system are held and managed by Local Authorities (LA), who have contingency plans, and respond to emergencies as they arise. The Care Act places temporary duties on LAs to intervene to protect individuals where their care provider is no longer able to carry on because of business failure, and services cease. A survey in 2015 identified that 95% of LAs have plans in place although LAs are used to dealing with individual, smaller scale provider failure. There are also patients who are exclusively self-funded and may not be in contact with LAs; getting in contact with these vulnerable people during an emergency remains relatively untested.

### Most significant risks to sector

- Major adult social care provider failure (Submitted to be included in 2018 N(S)RA)

*Significant reductions in budgets over previous spending reviews and the financial constraints of local councils has posed delivery risks to social care. A major risk to the social care system is market failure, which can take many forms including; insolvency of very large, hard to replace providers; many smaller providers going out of business in an unsustainable way; and providers handing back contracts or not choosing to bid for contracts in the future. The CQC Market Oversight Team monitors the financial performance of the most difficult to replace care providers (i.e. those that are large and operate nationally or those that are concentrated in a specific region) and feeds information back to DHSC where possible.*

- Risk of provider failure as a result of historic 'sleep-ins' National Minimum Wage (NMW) liabilities

*'Sleep-in' shifts are a feature of care primarily for people with learning or other disabilities who need someone to be present (but permitted to sleep) in case they need assistance in the night. In the past, most adult social care providers have not paid NMW for these shifts, but have paid a flat rate of between £25 and £40. Employment tribunals have clarified that NMW should have been paid on average for all hours worked and slept. HMRC is able to enforce for up to six years back-pay and these liabilities potentially pose a significant threat to providers. On 26 July 2017, BEIS announced that HMRC will be waiving penalties for cases involving sleep-ins liabilities accrued prior to July 2017. On 1 November 2017, BEIS launched a new HMRC approach to the enforcement of sleep-ins back pay. The Social Care Compliance Scheme (SCCS) gives providers until March 2019 to review their own compliance. Market analysis, completed over summer 2017, estimates total liability for the sector as £410m-£690m, however this is based on a small sample size and uncertain extrapolations. Further work is required to better understand the impact liabilities will have on the finances of providers and Frontier Economics and LaingBuisson are carrying out further market analysis, to be completed by April 2018. Work is ongoing to design a range of potential support schemes and assess on the basis of legal risk, effectiveness, value for money and State Aid considerations.*



### Risk identification, assessment and monitoring

Risk identification and assessment in NHSBT is built on departmental risk registers. Each department has regular Senior Management Team board which cover risk and use a risk monitoring dashboard to log risks and actions.

NHSBT undergoes monitoring and auditing from a number of organisations including the Care Quality Commission, Medicines and Healthcare Products Regulatory Agency and the Human Tissues Authority. The Quality Team within NHSBT supports the organisation by ensuring it complies with the guidelines these regulators have in place and support an internal audit process.

NHSBT also has business continuity plan in place, and these are tested using national emergency team exercises and local level exercises.

NHSBT's Assistant Director for Governance & Resilience provides a written, and verbal, report on business continuity at each meeting of the NHSBT Board's Governance and Audit Committee (GAC). Reports are also provided to the NHSBT Board. In addition, the Department's Sponsors for NHSBT attend both the Board and GAC meetings. Risks and issues are regularly discussed between Sponsors and NHSBT, at all levels. The DHSC EPRR team also meets with NHSBT, NHS England and Sponsors every quarter.

### Most significant risks to sector

- Loss of estate

**Irrelevant & Sensitive**

- Core Systems Modernisation (IT system switchover)

**Irrelevant & Sensitive**

- 3<sup>rd</sup> party supplier failure

*A key risk to NHSBT is supplier failure, especially those who provide essential items such as blood bags, diagnostic kits or software. NHSBT send key suppliers business continuity questionnaires and conduct an auditing process. The auditing process is based on the perceived risk to the organisation of a failure of supplier. Suppliers are rated as Gold, Silver or Bronze. This rating determines the level of auditing that NHSBT undertakes:*

*Gold – NHSBT Business Continuity Team go in to audit the supplier themselves (both on a national and international scale)*

*Silver – NHSBT asks for documents from suppliers and NHSBT Business Continuity team assesses their plans*

*Bronze – supplier provides a self-certificate stating they have business continuity plans in place and a score is allocated dependent on response.*

*NHSBT is working specifically to strengthen the action and assurance around this risk.*



## 3b. Sub-sector assessments: Public Health England

### **Risk identification, assessment and mitigation**

Public Health England has good risk identification and assessment processes. It is continually upgrading its levels of resilience and business continuity plans. PHE's business continuity plans include response to disruption from key threats and hazards such as severe weather, loss of electricity, loss of communications and staff shortage. Moreover, PHE has 52 sites and personnel positioned across the country meaning the organisation is resilient to disruption at single sites. Laboratories are all on more than one site.

**Irrelevant & Sensitive**

## **3b. Risk Identification, Assessment and Mitigation:**

### **Other significant risks to the sector**

## 3b. Other significant risks to the sector

As well as sub-sector risks, DHSC prepares for a broader range of other significant risks to the sector, which are described below.

Annex D also provides an assessment of the effect of climate change on infrastructure risk referring to the 2017 Climate Change Risk Assessment.

Other significant risks to the security and resilience of the health and social care sector:

**H41** Widespread power failure

**H23** Pan flu

**H24** New and emerging infections



Medicines supply chain failure



Medical devices supply chain failure

**Irrelevant & Sensitive**

## 3b. Other significant risks to the sector: Pandemic Influenza (H23)

### **H23: Pandemic influenza**

Pandemic influenza would have a significant effect across the whole health and social care sector. During a pandemic all parts of the health and social care sector would be facing staff shortages at the same time as the NHS would have an increased patient demand. Most of this demand would be in access to general practice, pharmacy, intensive care units, acute medical services and Paediatrics. The supply chain and also the ability to transport patients or healthcare workers to places for treatment would also be disrupted if drivers were incapacitated by the pandemic illness. Other key sectors of the economy would face similar strain, and there would be rising demand in certain areas including death management.

### ***A strain with pandemic potential - H7N9***

There are a number of new influenza strains circulating that have pandemic potential. Currently there is a specific focus on the influenza strain H7N9 which had a significant 5th wave of cases in 2016/17. The issue of H7N9 was assessed by NERVTAG (New and Emerging Respiratory Virus Threats Advisory Group) regularly over the past year. At these meetings, it was agreed that there was no current evidence of ongoing, sustained person-to-person spread and that the current risk to UK public health remained low. However, there was also agreement that H7N9 exhibits evolving virological and epidemiological characteristics which give rise to the most concern so far during the 2.5 years that NERVTAG has been meeting. Further monitoring of this risk is ongoing and the UK pandemic preparedness strategy which can be implemented regardless of the strain.

### ***Mitigation measures***

Pandemic influenza is considered to be the most significant risk in the NRA due to its potential impact and likelihood of occurring. Government therefore carries out bespoke planning to prepare for this risk. Within DHSC, governance for the work addressing this risk is at the highest level with the Director General for Global and Public Health chairing the Pandemic Influenza Preparedness Programme Board to which the respective work stream leads report. Across government, this risk was discussed at the National Security Council sub-committee on Threats, Hazards, Resilience and Contingencies in February 2017 and a cross-government group of officials, co-chaired by CCS and DHSC, was convened to raise preparedness. Within the last twelve months substantial work has been undertaken across five core workstreams: health care, community care and adult social care, excess deaths, sector resilience and cross cutting enablers, which has included the drafting of a Draft Pandemic Influenza Bill. This work has been underpinned by engagement with the local-tier including a series of workshops to strengthen the alignment of plans and activities. Further cross-government work will take place over 2018/19 to develop national and local preparedness and resilience.

Decisions would need to be taken with respect to highly specialist services with very limited capacity such as ECMO (extracorporeal membrane oxygenation), on how to flex these services to meet demand, or suspend activity where resources could be better utilised for maximum survival rates. The NHS would also maintain core services for Maternity, Emergency Medicine & Surgery, and Emergency Departments to continue to meet the needs of the population. In addition, services such as antiviral collection and vaccination campaigns would be managed by the health sector and require resourcing.

PHE would step up its surveillance and public health support activities; and social care would potentially need to make more visits to individuals who require more assistance or who perhaps were previously looked after by a family member who is unable to visit due to their own illness.

## 3b. Other significant risks to the sector: Emerging infectious diseases (H24)

### H24: *Emerging infectious diseases*

Over the past 30 years, more than 30 new or newly recognised diseases have been identified. Most of these have been zoonoses, i.e. diseases that are naturally transmissible, directly or indirectly, from animals to humans. It is highly probable that such an infection will arise in another country and possible that it could arrive in the UK before it is identified, but it is also possible that one may arise in the UK.

Currently the main scenario for this risk in the NRA is an emerging infectious disease spread by the respiratory route. The other variations on the NRA risk are emerging infectious diseases transmitted directly between people through the gastro-intestinal or blood routes, or indirectly via vectors, such as insects. The H24 risk is currently being updated for the 2018 N(S)RA with an additional variation: an emerging infectious disease spread by sexual transmission. In developing the 2018 N(S)RA, there was discussion regarding the inclusion of vector-borne emerging infectious disease as a separate risk. However, it was felt that the reasonable worst case scenario was only significant over a 5 year rather than the 2 year view that the N(S)RA considers. Over 2018/19 DHSC will be conducting a capability review to consider the return on investment for mitigation measures which could be taken to prevent vector-borne emerging infectious diseases.

Robust systems are in place for the detection, assessment and reporting of potential threats from new and emerging infections. PHE has a National Situational Awareness Cell (NSAC) that produces a daily report [Mon-Friday] of incidents or situations, taking an all hazards approach, that have the potential to impact upon public health. If a significant threat is detected, it is assessed and reported up the management chain in PHE and to DHSC. Since most emerging infections are zoonoses, any new diseases in animals which might have zoonotic potential or reports of recognised zoonoses in animals are discussed in the Human Animal Infections and Risk Surveillance group – an established cross Government, multidisciplinary horizon scanning group, chaired by the PHE Emerging Infections and Zoonoses section.

NHS England continues to work with health partners to identify new and emerging health risks and ensure that appropriate measures are available to deal with these in all appropriate care settings.

DHSC, NHS England and PHE also focus on High Consequence Infectious Disease and developed a HCID programme following the Ebola outbreak. Over 2017/18, the HCID programmes have worked together to develop an agreed approach to managing the end to end patient pathway for known and unknown HCIDs by developing guidance for clinicians. The patient pathway guidance was successfully tested at a table top exercise in January 2018. Currently work is ongoing to decide the best method to disseminate this guidance to clinical staff.

## 3b. Other significant risks to the sector: Failure of medical supply chains

Failure in the supply chain of medical devices and clinical consumables could severely impact on health and social care provision and patient outcomes. Please note this slide does not cover the medicines supply chain, which is covered on the next slide.

### ***Mitigation measures***

Previous work has identified particular products of concern and DHSC is working with manufacturers and suppliers to improve resilience in the supply chains of these products to prevent supply disruption.

Over 2017/18, DHSC has developed a local provider Supply Resilience Preparedness Checklist tool. This is a self-assessment tool kit, which allows NHS Trusts to assess their exposure to products of concern and supports the development of local mitigation strategies.

The tool was piloted with five NHS Trusts and DHSC has received feedback from four Trusts with meetings for the final trust scheduled for early March 18. In general, DHSC has received positive feedback on the toolkit. Once complete, DHSC will review the consolidated feedback with NHS England to determine the most appropriate means of disseminating this toolkit for use across provider Trusts and how best to regulate use of the tool.

### ***Impact of EU exit***

There is a risk of EU exit impacting the supply of medical products to the NHS. Analysis and preparedness planning for the potential implications of EU Exit is underway as part of the DHSC wider response to EU Exit.

## 3b. Other significant risks to the sector: Failure of medicines supply chain

There are approximately 20,000 medicines licensed and sold in the UK, which are supplied by numerous manufacturers (>1000) ranging from big pharmaceutical companies to small/medium enterprises. Production of medicines is complex and highly regulated, and materials and processes must meet rigorous safety and quality standards. Difficulties in supply can arise for various reasons:

- Malfunctioning equipment on the production line, to packaging materials that fail to meet the required specification.
- Batch failures can occur for no obvious reason, necessitating a thorough investigation to get to the root of the problem.
- Difficulties in obtaining raw materials, or from an imbalance between supply and demand.
- If one manufacturer has a supply problem, it can have a knock on effect on suppliers of other similar products.

The globalisation of the pharmaceutical industry means that medicines are often manufactured in just one or two sites worldwide. Production schedules have to be planned months in advance and this along with the move to "just in time manufacture" to reduce the cost of stockholdings, means that there is little flexibility in the system when problems do arise.

### ***Mitigation measures***

There is a team in DHSC which deals specifically with medicines supply problems. The team works closely with the MHRA (Medicines and Healthcare Regulatory Agency), the pharmaceutical industry, NHS England and others operating in the supply chain to help prevent shortages and to ensure that the risks to patients are minimised when they do arise. The team has a number of ongoing strategies to help prevent and mitigate issues that may arise including:

- Working with MHRA to fast track regulatory decisions if they would help mitigate supply issues.
- Working with clinical groups when shortages arise to develop appropriate clinical advice for the NHS.
- Investigating the availability of products from abroad both in term of asking companies to divert licensed stock destined for another country to the UK and importing in unlicensed products via specialist importer companies.
- If applicable, using medicines from the Essential Medicines Buffer Stock (EMBS) to address supply failures. The EMBS is a 3 month supply of 250-300 essential medicines which are held in the UK as part of pandemic influenza preparedness.
- DHSC is involved in a Pan-European working group, led by the European Medicines Agency which aims to reduce supply failure by improving and standardising manufacturers' internal processes.
- To improve accountability in the system, new DHSC mandatory regulations on shortages and supply issues reporting as part of the wider information regulations are being introduced later this year. This will mean that the pharmaceutical industry are legally obliged to tell DHSC about impending supply issues that may impact on patient care at the point of detection of the issues.

### ***Impact of EU exit***

DHSC is progressing work to assess the impact of EU exit on the supply chain for all medicines used in the NHS. EY have been appointed to do this work and a cross-Government steering group has been established to oversee and contribute to this work. Methodology for the product impact assessment will include reviewing the supply chain for all medicines and considering where the manufacturing, testing and batch release sites are located. DHSC expects the initial phase of work to be concluded in Spring 2018 to inform our approach to EU exit planning and ensure that we have appropriate contingency plans in place to maintain continued access to medicines that we currently source from the EU.



## 4a. Vulnerabilities

# 4a. Overview of sector vulnerabilities









































The level of security and resilience within the health and social care sector is mixed. Security refers to all the measures that are taken to protect a place, or to ensure that only people with permission enter it or leave it. Resilience is the ability of the community, services, area or infrastructure to detect, prevent, and, if necessary to withstand, handle and recover from disruptive challenges. Given the diversity and interconnectedness within the health sector and the extent to which it needs to respond to the consequences of emergencies in other sectors, emergency preparedness, resilience and response planning in the health sector takes an 'All Risks' approach.

Health and social care services, by their function, need to be publically accessible but are not a high priority target for terrorist attacks and health remains a low priority target for terrorists across the globe. Therefore, although the security vulnerability of the sector is fairly high, this is proportional to the low risk.

There is redundancy and resilience within the system to react to the disruption caused by threats and hazards because there are many providers who are used to working together, using mutual aid and surge plans when appropriate. In general, acute care and the ambulance service are more resilient to hazards than primary or social care. Individual providers have business continuity plans but the extent and detail of these plans will vary. Mandated by a standard contract with NHS England, providers in the health sector need to comply with the NHS Core Standards, which include the need to have emergency response and business continuity plans.

Below is a simplified table showing the current, estimated vulnerability rating for different actors within the health and social care system. The vulnerability ratings are based on the Critical National Infrastructure (CNI) vulnerability dashboard rating scale (Annex H), except for:

- Physical security rating. This is not applicable as it is focused on the physical security rating of CNI assets and the health and social care sector has very few CNI assets. Vulnerability ratings are based on the sub-sector evaluation.
- Cyber security rating. Due to its diverse nature, the rating structure is not entirely applicable to the health and social care system. Vulnerability ratings are based on information from sub-sectors and the DHSC cyber security team.

Vulnerability Rating	Physical security	Cyber Security	Personnel Security	Floods Storms & Snow	Loss of Electricity	Loss of Comms	Staff Absence
Low	 		  		  	 	
Medium	 	  		   		  	   
High	 	 	 	 	 		 

**KEY**  Acute Care  Ambulance Services  Primary Care  
 Social Care  NHS BT  CNI

# 4a. Sub-sector vulnerabilities: Acute care



	Vulnerability rating	Additional information
Physical security	Medium	<b>Irrelevant &amp; Sensitive</b>
Cyber Security	High	
Personnel security	Low	
Flood, storms and snow	Medium	
Loss of power	Low	
Loss of comms	Low	
Staff shortage	Medium	

# 4a. Sub-sector vulnerabilities: Ambulance service



	Vulnerability rating	Additional information
Physical security	Low	<p><b>Irrelevant &amp; Sensitive</b></p>
Cyber Security	Medium	
Personnel security	Low	
Flood, storms and snow	Medium	
Loss of power	Low	
Loss of comms	Medium	
Staff shortage	Medium	

# 4a. Sub-sector vulnerabilities: Primary Care



	Vulnerability rating	Additional information
Physical security	High	
Cyber Security	Medium / High	
Personnel security	High	<b>Irrelevant &amp; Sensitive</b>
Flood, storms and snow	High	
Loss of power	High	
Loss of comms	High	
Staff shortage	High	

# 4a. Sub-sector vulnerabilities: Social Care



	Vulnerability rating	Additional information
Physical security	High	<b>Irrelevant &amp; Sensitive</b>
Cyber Security	High	
Personnel security	High	
Flood, storms and snow	High	
Loss of power	High	
Loss of comms	Medium	
Staff shortage	High	

# 4a. Sub-sector vulnerabilities: NHS Blood and Transplant



	Vulnerability rating	Additional information
Physical security	Low	<b>Irrelevant &amp; Sensitive</b>
Cyber Security	Medium	
Personnel security	Medium	
Flood, storms and snow	Medium	
Loss of power	Medium	
Loss of comms	Low	
Staff shortage	Medium	

## **4b. Risk oversight: preparing for emergencies**



**Irrelevant & Sensitive**

## 4b. Prepare: Responding to emergencies

Irrelevant & Sensitive

Irrelevant & Sensitive

### H23: Pandemic Influenza

DHSC and CCS are taking forward a cross Whitehall work programme as endorsed by NSC(THRC) on 21 Feb 2017.



Irrelevant & Sensitive

**Irrelevant & Sensitive**

## **5. Updates on commitments in 2017/18 Sector Security and Resilience Plan**

# 5. Updates on commitments in the 2017/2018 SSRP

The following table outlines the progress made in completing actions described in the 2017/18 HSSRP.

#	Risk addressed	Actions to Achieve Target	Action owner	Completion date	Progress	RAG	Outcome of completed actions
<b>Irrelevant &amp; Sensitive</b>							
4	Pandemic Influenza	DHSC and CCS are taking forward a cross Whitehall work programme as endorsed by NSC(THRC), chaired by the PM on 21 Feb 2017	DHSC and CCS, PHE and NHSE on elements	February 2018	<b>Ongoing</b> Good progress on Year 1 work. Further progress on national preparedness arrangements required including developing the Draft Pandemic Influenza Bill.		Enhanced preparedness at national and local level. Work completed across health care, community and social care, excess deaths and sector resilience.
<b>Irrelevant &amp; Sensitive</b>							
7	Supply chain resilience	Develop and test a local provider Supply Resilience Preparedness Checklist model	DHSC Commercial	March 2018	<b>Ongoing</b> Have piloted checklist in 5 Trusts. Further work to consolidate feedback and review rollout with NHS England.		This project will provide NHS Trusts with a self-assessment toolkit to assess exposure to products of concern and offer mitigation strategies.

## 6. 2018/19 Action Plan

CONTEXT

**Introduction:** There are active work streams seeking to build resilience for responding all types of risk. The common mitigation strategy is around prioritising care provision.

# Irrelevant & Sensitive

**Regulation:** [Section 253 of the National Health Service Act 2006](#) and [Section 47 of the Health and Social Care Act 2012](#) set out the powers available to the [Secretary of State](#) for Health. When it is appropriate to do so by reason of an emergency, SoS can give directions to all English NHS bodies, the National Institute for Health and Care Excellence (NICE), NHS Digital and any provider of NHS services about the exercise of any of its functions.

Resilience is further scrutinised by [Department of Health and Social Care](#) (in particular the EPRR Partnership Group), [NHS England](#) (with its Core Standards and annual assurance process), [Public Health England](#) (through Assurance Standards), plus [NHS Improvement](#), the [Care Quality Commission](#) and the [National Institute for Health and Clinical Excellence](#)

**Constitutional settlement:** Health is devolved. The DHSC HSSRP only covers England. Scotland, Wales and Northern Ireland have their own arrangements for tracking and improving the resilience of their health infrastructure.

KEY RISKS

Irrelevant & Sensitive

ACTIONS AGAINST KEY RISKS

#	Risk addressed	Current vuln.	Target vuln.	Sector	Actions to Achieve Target	Action owner	Completion date	Progress RAG	Target Risk Reduction	Commentary	Devolved status
Irrelevant & Sensitive											
5	Pandemic Influenza (H23)	H	M	All	DHSC and CCS are continuing the cross Whitehall work programme as endorsed by NSC(THRC). This includes finalising national arrangements and preparing products to support the continued enhancement of local arrangements.	DHSC and CCS, PHE and NHSE on elements	February 2019		February 2019	Local arrangements include: - Reviewing and refreshing the 2011 four nation UK Influenza Pandemic Preparedness Strategy; - Developing a pandemic influenza resilience standard	DA input into bill and LA resilience standards.
Irrelevant & Sensitive											

# 7. Public Summary



## 7. Public summary

The health and social care sector is diverse and needs to be resilient to a wide range of risks and disruptive challenges which may affect its ability to deliver services, whilst also ensuring it is able to deal with any resulting casualties. The sector has a wide scope including acute care, ambulance services, primary care, social care, and many arm's-length bodies including Public Health England, NHS Blood and Transplant and NHS Supply Chain.

### **Assessment of existing security and resilience**

The **NHS** and **Public Health England (PHE)** have good levels of resilience and business continuity and an ability to divert resources from non-essential services in order for life-saving treatment to continue; similar principles apply to the resilience of the ambulance service. **NHS Blood & Transplant (NHSBT)** routinely deals with surges in the demand for blood.

Although there is resilience within the system and local arrangements are effective in response, the **social care sector** is more challenging to understand. Continuous further work is being undertaken with local government, the provider and voluntary sector representatives to consider emerging issues regarding emergency planning, communication and information flows.

### **Building Resilience (2018/19 priorities)**

Throughout 2018/19, health organisations in England will continue to ensure that they have their own plans based on national and local risk assessments, and also joint plans and processes related to key dependencies, infrastructure, utilities, the workforce and the supply chain. Lessons identified from real incidents, will be captured and shared.

The Department of Health and Social Care (DHSC) will be working with the sector to review and develop sector resilience to prolonged electricity supply disruption, cyber security and major adult social care provider failure amongst other risks. The Department will also be strengthening its response capability to manage mass casualties.

### **Response to Incidents**

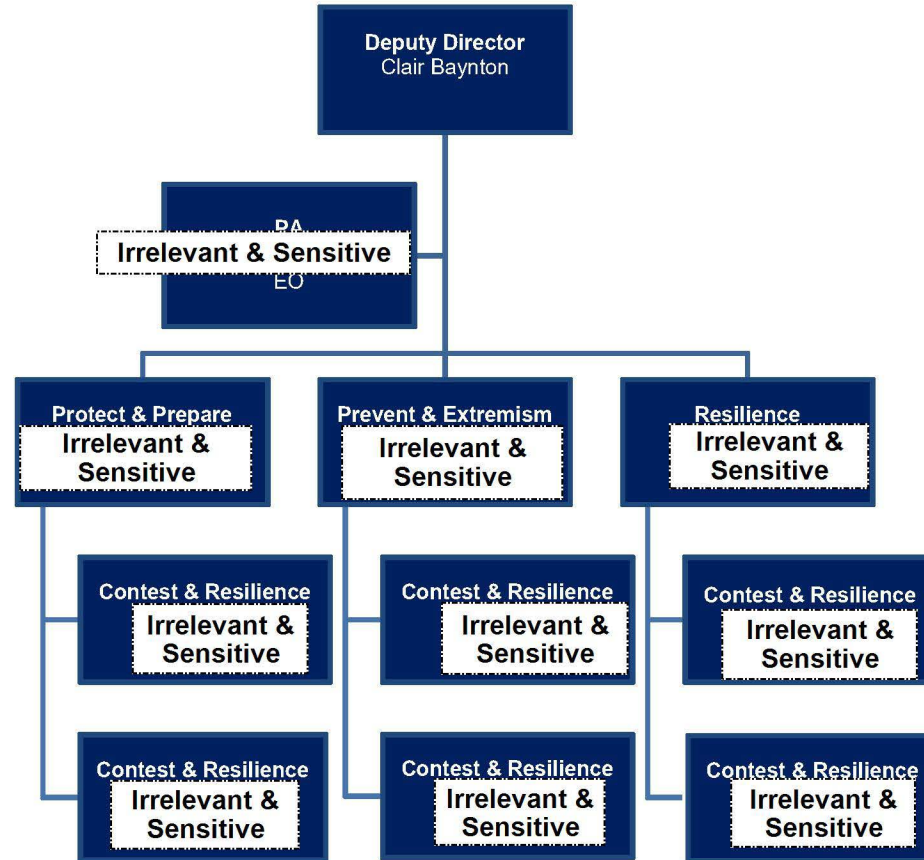
Over the last 12 months, DHSC and the health sector has responded to a number of significant incidents included the fire at Grenfell Tower, terrorist attacks and the WannaCry cyber attack. Following these incidents, the sector has identified key lessons learnt and disseminated this knowledge.

# 8. Annexes

**Irrelevant & Sensitive**

# Annex B: Department of Health and Social Care EPRR team

Department of Health and Social Care Emergency Preparedness, Resilience and Response team:



# Annex C: DHSC Incident Reporting 2017/18

## Major incidents

Incident	Date	Impact
<b>Manchester Arena bombing</b>	May 2017	Bombing at an Ariana Grande concert in Manchester. 22 fatalities and 59 casualties hospitalised. 512 total casualties including those with minor injuries and psychological trauma.
<b>Irrelevant &amp; Sensitive</b>		
<b>London Bridge attack</b>	June 2017	Vehicle Attack on London Bridge followed by knife attack in Borough Market. 7 fatalities and 48 casualties.
<b>Finsbury Park Mosque attack</b>	June 2017	Vehicle Attack outside mosque. 1 fatality and 9 casualties.
<b>Grenfell Tower</b>	June 2017	Major fire at Grenfell Tower. 71 fatalities. Psychosocial screening and support provided to survivors and neighbouring residents. 644 individuals in treatment and 178 completed treatment as of 21.02.2018.
<b>Parsons Green attack</b>	September 2017	Attack at Parsons Green tube. No fatalities and minor casualties reported.
<b>Hurricanes Irma and Maria</b>	September 2017	DHSC and PHE participated in cross-Whitehall Crisis teleconferences meeting to discuss issue. Public Health Support supplied by PHE.
<b>Carillion insolvency</b>	January 2018	Managed by DHSC commercial team and NHS England. Discussions held with private finance initiatives.

## Minor incidents

Incident	Date	Impact
<b>Mosquitos</b>	28.07.2017	Public Health England (PHE) surveillance identified a number of mosquito eggs, and developed larvae, at a truck stop in Ashford that were subsequently identified as the invasive species <i>Aedes albopictus</i> . PHE, working with the local council, carried out a risk assessment and chemically treated a 300m area around the truck stop.
<b>Irrelevant &amp; Sensitive</b>		
<b>Hep B vaccine shortage</b>	07.08.2017	Global supply shortages of hepatitis B vaccine have affected UK supply. CAS alert system used to inform vaccinators of temporary recommendations for Hep B vaccine prioritisation and use during supply constraints.
<b>Irrelevant &amp; Sensitive</b>		

# Annex C: Public Health England Incident Reporting 2017/18 (page 1/4)

Responding to public health incidents is part of the core business of PHE. In 2018/19 PHE responded to the Enhanced and Standard incidents as described in the following tables. Between April and December 2017, PHE responded to 6,319 routine health responses.

## Enhanced incidents

Level	Start Date	Incident	Closed/ De-escalated
Enhanced	27/05/15	Meningococcal Disease: National increase in incidence of meningococcal disease type W. De-escalated to a Standard response on 07/06/17.	On-going as a standard response
Enhanced	11/04/12	National increase in incidence of pertussis. De-escalated to a Standard response on 07/06/17.	On-going as a standard response
Enhanced	06/04/17	Hepatitis A: Report of clusters of men who have sex with men and travel related cases of hepatitis A in England and Northern Ireland. Previously declared a standard incident on 20/12/16. De-escalated to a standard response on 31/01/18.	On-going as a standard response

### Irrelevant & Sensitive

Enhanced	14/06/17	Grenfell Tower: The PHE Response was initially declared as a standard incident following the major tower block fire on 14/06/17 in North Kensington. The response was escalated to enhanced (geographically defined) on 26/06/17 to support PHE London in the multi-agency response to the incident. The incident was de-escalated to standard on 25/08/17.	On-going as a standard response
Enhanced	04/08/17	Hepatitis B Vaccine Shortage: Global shortages of hepatitis B vaccine, including combination hepatitis A/B vaccine has meant the UK supply has been severely impacted. Hep B vaccine supply constraints continue. Controlled stock management and temporary recommendations for risk-based prioritisation of patients remain in place.	On-going
Enhanced	09/09/17	PHE provided support to the UK response to Hurricane Irma, particularly the affected UK Overseas territories. De-escalated to standard on 28/09/17.	26/10/17

### Irrelevant & Sensitive

# Annex C: Public Health England Incident Reporting 2017/18 (page 2/4)

## Standard incidents

Level	Start Date	Incident	Closed/ De-escalated
Standard	04/2016	Acute Hep B clusters in multiple regions HBV A2 clusters in men, characterised by men who identify as heterosexual but likely participate in high risk MSM behaviour	De-escalated to routine on 30/06/17
Standard	14/01/16	Candida auris: investigations in progress to identify potential links between sporadic cases identified in separate hospitals to determine if there have been any transmission events. No cases reported to date in 2018.	On-going
Standard	04/2016	Outbreak of high level azithromycin resistant (HL-AziR) gonorrhoea in England	11/05/17
Standard	02/2016	HCW with HIV working in 2 A&E units and in 3 orthopaedic units during the period September 2010 and February 2016. (Patient notification and patient cross-matching exercise)	09/06/17
Standard	05/2016	Salmonella enteritidis: national outbreak investigation in the UK by NIS, Public Health Wales and Health Protection Scotland in collaboration with FSA and APHA. De-escalated to routine work on 05/01/18.	05/01/18
Standard	23/01/17	Workplace TB Outbreak; cluster of cases linked by WGS in Midlands and East; 4 cases associated with a work place	09/10/17
Standard	24/04/17	Twelve cases of Shiga toxin-producing E. Coli (STEC) serogroup O157 with a previously unseen phage type (PT) have been detected by the PHE Gastrointestinal Bacteria Reference Unit (GBRU).	30/11/17
Standard	10/05/17	CJD Incident Royal National Orthopaedic Hospital (RNOH). NENCL HPT received a notification of a new case of sporadic CJD (sCJD). A public health risk assessment based on national guidelines was conducted and identified that the patient had undergone a high risk procedure during the recommended lookback period of 8 years at RNOH.	26/06/17
Standard	18/05/17	Outbreak of Ebola virus in the Democratic Republic of Congo.	04/07/17
Standard	23/05/17	Manchester Arena Incident: PHE Response to support PHE North West Centre in response and recovery to public health issues in responding to Manchester Arena incident.	30/05/17
Standard	06/07/17	Legionella false positives: A potential deterioration in the performance of Legionella urinary antigen diagnostic tests in local laboratories is being investigated in conjunction with MHRA.	03/11/17
Standard	20/07/17	Fentanyl-adulterated heroin: Highly-potent opioids (Fentanyl) have been found being added to heroin leading to increased deaths.	13/10/17

# Annex C: Public Health England Incident Reporting 2017/18 (page 3/4)

## Standard incidents

Level	Start Date	Incident	Closed/ De-escalated
Standard	20/07/17	Legionella outbreak investigation in a hotel in the West Midlands (Ludlow). Four cases of Legionnaires' disease associated with visit to hotel over period May 2015 to August 2017.	02/11/17
Standard	24/07/17	Cyclospora Infection in travellers to Mexico.	29/09/17
Standard	31/07/17	A. albopictus larvae found in two of the PHE medical entomology department's ovi-traps at Ashford International Truck stop.	10/08/17
Standard	07/09/17	Hereford phosphorous munitions: 24 phosphorous second world war hand grenades discovered by builders excavating old ammunition site.	08/09/17
Standard	15/09/17	Salmonella Typhimurium: PHE investigated a multi-centre 5 Single nucleotide polymorphism (SNP) cluster of Salmonella typhimurium of cases since July 2017. To February 2018 there have been 100 cases in England, Scotland and Wales.	On-going
Standard	19/09/17	Measles exposure within a hospital in the north west of England.	12/10/17
<b>Irrelevant &amp; Sensitive</b>			
Standard	05/10/17	Screening for confirmed Corynebacterium ulcerans (diphtheria) in household.	27/10/17
Standard	06/10/17	Legionella spp in a hotel in Burton upon Trent, Staffordshire.	27/10/17
Standard	16/10/17	Legionnaires' disease associated with travel to Palma, Nova, Mallorca, Spain	21/11/17
Standard	19/10/17	Dentist worked with untreated HIV between 2009 and 2016. Private dental practice offering dental implants, aesthetic dentistry, general dentistry and emergency care.	10/11/17
Standard	25/10/17	Multidrug resistant pseudomonas outbreak at Whiston hospital.	05/01/18
Standard	27/10/17	Cryptosporidium hominis – cases and situation are linked to a Health and Fitness centre as an environmental exposure	01/11/17
Standard	15/11/17	Measles outbreak geographically linked to the south of Liverpool. 04/12/17 – Measles response merged into one national standard incident.	04/12/17 See Below
Standard	16/11/17	Cases of measles at two schools in Leeds 04/12/17 – Measles response merged into one national standard incident.	04/12/17 See Below



# Annex C: Public Health England Incident Reporting 2017/18 (page 4/4)

## Standard incidents

Level	Start Date	Incident	Closed/ De-escalated
Standard	17/11/17	A national outbreak of Salmonella Infantis within 5-SNP cluster in the UK. A total of 67 cases reported. Possible association with consumption of fresh fruit but there is only weak descriptive epidemiological evidence implicating these food vehicles.	On-going
Standard	24/11/17	Outbreak of STEC serogroup O157 PT2 Stx 2a in England. The outbreak was declared over at the IMT meeting on 10/01/18.	02/02/18
Standard	27/11/17	Three confirmed VTEC cases in the Durham area. All PT 54.	25/01/18
Standard	04/12/17	National outbreak of Measles in Leeds, Liverpool and Birmingham. Replaces two Measles standard incidents declared 16/11/2017 and 15/11/2017. The national standard incident response was stood down on 06/02/18 as the outbreaks have resolved in all areas affected apart from Birmingham which will now be managed as a local standard incident. (See below)	06/02/18
Standard	20/12/17	On-site power and water outage PHE Porton site.	21/12/17
Standard	03/01/18	Influenza Like Illness (ILI) and Gastrointestinal Infections (GI) in care homes in the PHE East of England region.	On-going
Standard	11/01/18	Outbreak of avian influenza (H5N6) in a wild bird sanctuary in Dorset, initially recognised on 08/01/18.	On-going
Standard	18/01/18	Outbreak of avian influenza (H5N6) in wild birds at a water reservoir in Warwickshire.	On-going
Standard	27/01/18	Avian influenza: Confirmed H5N6 isolated from a dead tufted duck at a country park in Wakefield. Duck removed from the park by a member of the public with an interest in taxidermy who then rang APHA to report.	15/02/18
Standard	07/02/18	Measles outbreak in Birmingham. The outbreak began in late November. (27/11/17). This was previously managed under the national standard incident response which stood down on 06/02/18.	On-going

**Irrelevant & Sensitive**

# Annex D: Assessment of risks from 2017 Climate Change Risk Assessment

The health and social care sector may be impacted by the PB (People and the built environment) risks from the 2017 Climate Change Risk Assessment. DHSC and the health and social care sector are addressing the following 'More Action Needed' risks:

**PB1: Risks to public health and wellbeing from high temperatures**

**PB4: Risks to health and social care delivery from extreme weather**

NHS England and PHE have created the Heatwave Plan for England<sup>1</sup> and Cold Weather Plan for England<sup>2</sup>. These are frameworks intended to protect the population from harm to health from extreme weather. It aims to prevent the major avoidable effects on health during periods of extreme weather in England by alerting people to the negative effects on health, and enabling them to prepare and respond appropriately.

In the event of either a Heatwave or Cold Weather alert, PHE will notify ministers of alerts when necessary and will lead implementation of the plan with NHS England, keeping DHSC in close contact.

**PB5: Risks to people, communities and buildings to flooding**

The cross-government National Flood Resilience Review (NFRR) was published in September 2016. For this, flooding mapping work was undertaken by DHSC to assess the risk of flooding to hospital and ambulance sites using the PHE owned Strategic Health Asset Planning and Evaluation (SHAPE). It was determined that at sites that were considered to be of national or local significance, there was either little risk of flooding, high levels of protection was provided by EA defences, or significant efforts at mitigation had been undertaken. Some risk of surface flooding remains. Pilgrim and Royal Hull infirmary are deemed still at risk of coastal flooding but mitigation measures are prohibitively expensive.

Figure 3: Urgency scores for each of the 56 individual risks and opportunities identified in the UK Climate Change Risk Assessment 2017 Evidence Report

MORE ACTION NEEDED	RESEARCH PRIORITY	SUSTAIN CURRENT ACTION	WATCHING BRIEF
Ne1: Risks to species and habitats from changing climate space	Ne3: Changes in suitability of land for agriculture & forests	Ne9: Risks to agriculture, forestry, landscapes & wildlife from pests/pathogens/invasive species	Ne14: Risks & opportunities from changes in landscape character
Ne2: Opportunities from new species colonisations	Ne7: Risks to freshwater species from high water temperatures	Ne10: Extreme weather/wildfire risks to farming, forestry, wildlife & heritage	In7: Low/high riverflow risks to hydroelectric generation
Ne4: Risks to soils from increased seasonal aridity and wetness	Ne13: Ocean acidification & higher water temperature risks for marine species, fisheries and marine heritage	Ne11: Saltwater intrusion risks to aquifers, farmland & habitats	In8: Subsidence risks to buried/surface infrastructure
Ne5: Risks to natural carbon stores & carbon sequestration	In5: Risks to bridges and pipelines from high river flows/erosion	In13: Extreme heat risks to rail, road, ICT and energy infrastructure	In10: Risks to electricity generation from drought and low flows
Ne6: Risks to agriculture & wildlife from water scarcity & flooding	In11: Risks to energy, transport & ICT from high winds & lightning	In14: Benefits for infrastructure from reduced extreme cold events	PB3: Opportunities for increased outdoor activity in warmer weather
Ne8: Risks of land management practices exacerbating flood risk	In12: Risks to offshore infrastructure from storms and high waves	PB13: Risks to health from poor water quality	PB12: Risks of food-borne disease cases and outbreaks
Ne12: Risks to habitats & heritage in the coastal zone from sea level rise, loss of natural flood protection	PB2: Risks to passengers from high temperatures on public transport	PB14: Risk of household water supply interruptions	Bu4: Risks to business from reduced access to capital
In1: Risks of cascading infrastructure failures across interdependent networks	PB6: Risks to viability of coastal communities from sea level rise	Bu3: Risks to business operations from water scarcity	Bu7: Business risks /opportunities from changing demand for goods & services
In2: Risks to infrastructure from river, surface/groundwater flooding	PB7: Risks to building fabric from moisture, wind, and driving rain	Bu6: Risks to business from disruption to supply chains	It7: Opportunities from changes in international trade routes
In3: Risks to infrastructure from coastal flooding & erosion	PB8: Risks to culturally valued structures and historic environment		
In4: Risks of sewer flooding due to heavy rainfall	PB10: Risks to health from changes in air quality		
In6: Risks to transport networks from embankment failure	PB11: Risks to health from vector-borne pathogens		
In9: Risks to public water supplies from drought and low river flows	Bu2: Risks to business from loss of coastal locations & infrastructure		
PB1: Risks to public health and wellbeing from high temperatures	Bu5: Employee productivity impacts in heatwaves and from severe weather infrastructure disruption		
PB4: Potential benefits to health & wellbeing from reduced cold	It2: Imported food safety risks		
PB5: Risks to people, communities & buildings from flooding	It3: Long-term changes in global food production		
PB9: Risks to health and social care delivery from extreme weather	It5: Risks to the UK from international violent conflict		
Bu1: Risks to business sites from flooding	It6: Risks to international law and governance		
It1: Weather-related shocks to global food production and trade			
It4: Risks from climate-related international human displacement			

**KEY TO CHAPTERS:**

- Chapter 3: Natural environment and natural assets
- Chapter 4: Infrastructure
- Chapter 5: People and the built environment
- Chapter 6: Business and industry
- Chapter 7: International dimensions

1. <https://www.gov.uk/government/publications/heatwave-plan-for-england>  
 2. <https://www.gov.uk/government/publications/cold-weather-plan-cwp-for-england>

**Irrelevant & Sensitive**

**Irrelevant & Sensitive**

# Annex G: List of exercises completed 2017/18

Exercise	Level	Date	Description
Exercise Salus – NHSE South	Regional	22 June 2017, Reading	NHS England regional table top exercise.
Learning From Westminster conference	National	27 June 2017, London	Conference to learn lessons from the Westminster Bridge terrorist attack.
Exercise Alamein - NHSE Mids & East of England	Regional	6 July 2017, Leicester	NHS England regional table top exercise.
Exercise Seacole 2 - NHSE London	Regional	12 July 2017, London	NHS England regional table top exercise.
Exercise Stonehart - NHSE North	Regional	14 September 2017, Newcastle	NHS England regional table top exercise.
<b>Irrelevant &amp; Sensitive</b>			
PHE/APHA Avian influenza workshop	National	31 October 2017	A joint workshop to look at the response to an outbreak of avian influenza with risk of human transmission.
NHS Major Trauma Conference	National	21 November 2017, Manchester	NHS Major Trauma Conference.
<b>Irrelevant &amp; Sensitive</b>			
Post-incident psychosocial care workshop	National	10 January 2018	Workshop to review the current post-incident psychosocial care guidance and processes following the lessons identified from recent Mass Casualty incidents.
Exercise Broad Street	National	29 January 2018	To test the future High Consequence Infectious Disease service in England.
Exercise Cerberus	National	8 February 2018	Assess PHE's draft revised National Incident Emergency Response Plan.
Post BREXIT workshop	National	27 February 2018	A workshop to look at plans in place for supply resilience.
Exercise Helicoid III	DHSC incident response	7 March 2018	A command post exercise to help to prepare staff for the operation of DHSC's Incident Coordination Centre in its new offices in Victoria Street.
Health EPRR Conference	National	21 March 2018	A conference to look at how lessons learned from significant incidents and exercises can be exploited.

# Annex G: List of exercises planned 2018/19

Exercise	Level	Proposed delivery date	Description
<b>Irrelevant &amp; Sensitive</b>			
<b>2 contingency exercises</b>	Regional /National as required	Q1-2	To be allocated according to need during the year.
<b>2 x Inter-regional Table-top Exercise</b>	Regional	Q2	To explore inter-regional dependencies.
<b>Social Care Provider Failure Table-top Exercise</b>	National	Q2	To explore implications/actions required following failure of a major social care provider.
<b>Irrelevant &amp; Sensitive</b>			
<b>End-of-year EPRR Conference</b>	National	Q3	End of year conference for EPRR staff from across the NHS/DHSC/PHE.
<b>Pandemic Influenza Recovery workshop/exercise</b>	National	Q3	Exercise to look at the recovery from an influenza pandemic.
<b>Irrelevant &amp; Sensitive</b>			
<b>Brexit Table-Top exercise</b>	National	Q4	To explore the impact of Brexit on health.
<b>1 x PHE Exercise</b>	National	Q4	Internal PHE exercise to involve national and regional participation.

**Irrelevant & Sensitive**



# Annex H: Vulnerability Criteria

Irrelevant & Sensitive

## STAFF ABSENCE RISKS:

**High vulnerability:** no business continuity plans are in place for staff absence; or significant disruption to critical services would be expected during a pandemic illness or the 'reasonable worst case scenario' strike action within the sector.

**Medium vulnerability:** some disruption would be expected, even to critical services, during a pandemic illness or 'reasonable worst case scenario' strike action within the sector itself.

**Low vulnerability:** only minimal disruption to critical services would be expected during a pandemic illness or reasonable worst case strike action within the sector.

# Annex I: NHS Employers

NHS Employers remit includes providing advice and guidance on a range of workforce issues to all NHS Trusts and Foundation Trusts in England, including safe recruitment practice in acute, mental health, ambulance and community trusts.

The NHS Employment Check Standards outline the type and level of checks employers must carry out before recruiting staff into NHS positions.

## **6 NHS Employment Check Standards:**

- Identity checks
- Professional registration and qualification checks
- Employment history and reference checks
- Right to work checks
- Work health assessments
- Criminal record checks

They work with the Department of Health and other national bodies in the system such as the Home Office, Care Quality Commission, Disclosure and Barring Service and the health professional regulators to ensure absolute clarity for employers in regard to meeting any legal and regulatory requirements.

## **Personnel security**

NHS Employers focuses on good HR rather than security, however NHS Employers have proactive relationships with NHS Protect (now NHS Counter Fraud Authority) and Centre for the Protection of National Infrastructure (CPNI).