

Message

From: Armstrong, Gillian (DoH) [/O=NIGOV/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=AF9E08CD60BB45E8BE5553D2FCE04A80-GILLIAN ARMSTRONG]
Sent: 10/02/2020 11:38:14
To: DoH Health Gold Ops Cell [healthgold.opscell@health-ni.gov.uk]; [NR]@health-ni.gov.uk; Beattie, Carol [carol.beattie@health-ni.gov.uk]; [NR]@health-ni.gov.uk; [NR]@health-ni.gov.uk; Chada, Naresh [naresh.chada@health-ni.gov.uk]; [NR]@health-ni.gov.uk; [NR]@health-ni.gov.uk; Collins, Gerard [gerard.collins@health-ni.gov.uk]; [NR]@health-ni.gov.uk; [NR]@health-ni.gov.uk; DoH Health Gold Chief of Staff [healthgold.chiefstaff@health-ni.gov.uk]; [NR]@health-ni.gov.uk; [NR]@health-ni.gov.uk; [NR]@health-ni.gov.uk; Gordon, David [david.gordon@health-ni.gov.uk]; [NR]@health-ni.gov.uk; [NR]@health-ni.gov.uk; [NR]@health-ni.gov.uk; McBride, Michael [michael.mcbride@health-ni.gov.uk]; [NR]@health-ni.gov.uk; [NR]@health-ni.gov.uk; McMahon, Nigel [nigel.mcmahon@health-ni.gov.uk]; [NR]@health-ni.gov.uk; [NR]@health-ni.gov.uk; Redmond, Liz [liz.redmond@health-ni.gov.uk]; [NR]@health-ni.gov.uk; [NR]@health-ni.gov.uk
Subject: RE: [External] Re: SPI-M-O Novel Coronavirus (confirmed) *official sensitive*
Flag: Flag for follow up

Please note these are preliminary forecasts, and a work in progress. Will be updated as new information emerges.

Other potentially useful piece of information is that epidemic duration estimated at about 3 months.

From: DoH Health Gold Ops Cell
Sent: 10 February 2020 11:35

[See recipients listed above]

Subject: FW: [External] Re: SPI-M-O Novel Coronavirus (confirmed) *official sensitive*

Colleagues – please see advice below

From: Armstrong, Gillian (DoH)
Sent: 10 February 2020 11:32
To: DoH Health Gold Ops Cell <healthgold.opscell@health-ni.gov.uk>; [NR] (DoH); [NR]@health-ni.gov.uk; [NR]@health-ni.gov.uk; [NR]@health-ni.gov.uk; [NR]@health-ni.gov.uk; [NR]@health-ni.gov.uk
Subject: FW: [External] Re: SPI-M-O Novel Coronavirus (confirmed) *official sensitive*

FYI

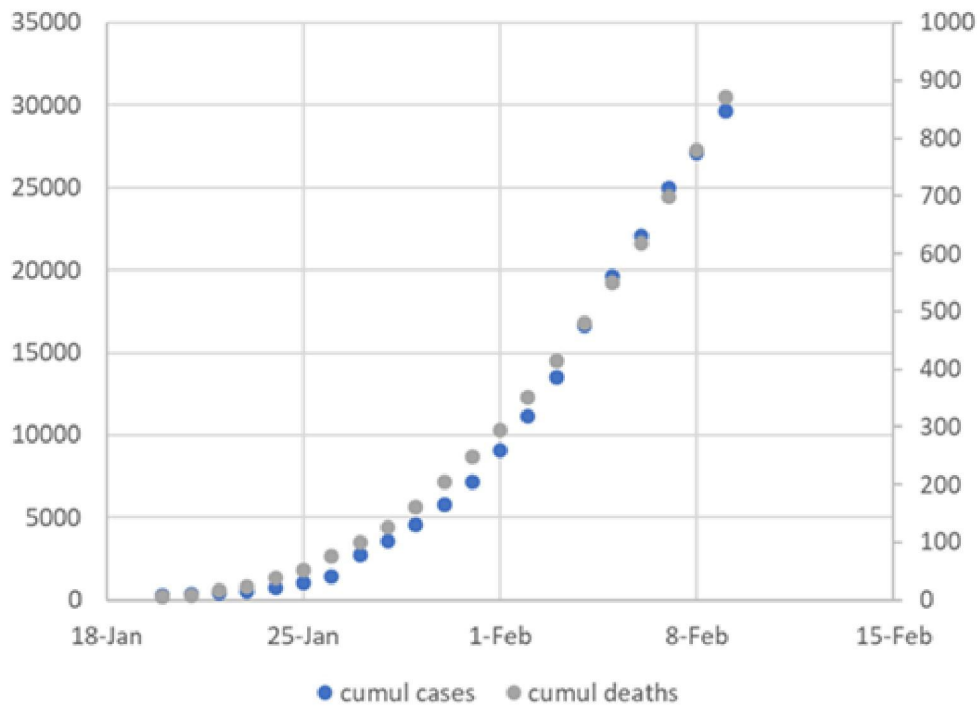
Modelling from SPI-M – estimate epidemic will peak in Wuhan in 2-4 weeks time, rest of China 1 month later, and UK about 2 months later.

i.e. the UK is currently at the same stage as Wuhan was in early December 2019, and nCoV may peak in UK end April/early May.

From: Ferguson, Neil M [<mailto:neil.ferguson@imperial.ac.uk>]
Sent: 10 February 2020 11:27
To: John Edmunds <John.Edmunds@I&S> **I&S** **Name Redacted** <I&S>; Read, Jonathan <jonathan.read@I&S>; SPI-M <SPI-M@dhsc.gov.uk>
Cc: **NR** <@dhsc.gov.uk>; **NR** <@dhsc.gov.uk>; **NR** <@dhsc.gov.uk>; Allen, Paul <Paul.Allen@dhsc.gov.uk>; Van Tam, Jonathan <Jonathan.VanTam@dhsc.gov.uk>; Graham Medley <Graham.Medley@I&S> Keeling, Matt <PD>; Ian Hall <ian.hall@I&S>; **NR** <@phe.gov.uk>; pjb51@I&S Edwin VanLeeuwen <Edwin.VanLeeuwen@phe.gov.uk> **NR** <@phe.gov.uk>; Daniela De Angelis <daniela.deangelis@I&S> **I&S** **Chris.robertson@I&S** **NR** <@phe.gov.uk>; Riley, Steven <s.riley@I&S>; Baguelin, Marc J M <m.baguelin@I&S> **Name Redacted** <@I&S>; **PD** **Name Redacted** <@phe.gov.uk>; Nick Gent <Nick.Gent@phe.gov.uk>; Mark Woolhouse <Mark.Woolhouse@I&S> **I&S** **I&S** Cavanagh, Cheryl <cheryl.cavanagh@dhsc.gov.uk> **NR** <@dhsc.gov.uk>; **NR** <@dhsc.gov.uk>; Dodds, Kevin <Kevin.Dodds@dhsc.gov.uk> **NR** <@dhsc.gov.uk> **NR** <@dhsc.gov.uk>; **NR** <@dhsc.gov.uk> **NR** <@dhsc.gov.uk>; Gillian.Armstrong@health-ni.gsi.gov.uk; Marion.Lyons@gov.wales; **NR** <@gov.scot> **NR** <@nhs.net>; Brett, Stephen <stephen.brett@I&S> **NR** <@dhsc.gov.uk> **NR** <@dhsc.gov.uk>; **NR** <@ggc.scot.nhs.uk> **NR** <@gov.scot>; Susan Hopkins <Susan.Hopkins@phe.gov.uk>; WN-CoVspoc <WN-CoVspoc@dhsc.gov.uk> **NR** <@gov.scot> **NR** <@phe.gov.uk>; David.OConnor@fco.gov.uk; jim.mcmenamin@nhs.net; Julia Gog <jrg20@I&S>
Subject: RE: [External] Re: SPI-M-O Novel Coronavirus (confirmed)

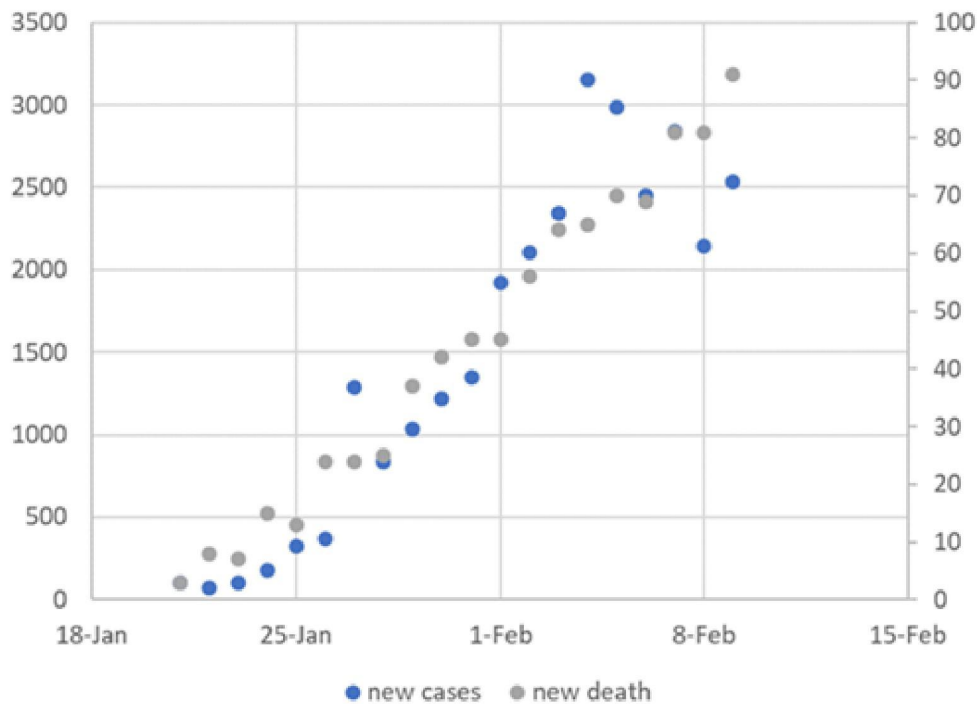
As we circulated to SAGE last week, we come up with similar estimates on peak timing in Wuhan/Hubei to those from LSHTM. Depending on the prevalence/incidence estimate used (repatriation flight prevalence vs traveller incidence), and the uncertainty in generation time and population susceptibility, the epidemic there is likely to peak in 2-4 weeks' time. We estimate the rest of China is around ~1 month behind, and the UK perhaps 2 months. i.e. the UK is currently at the same stage as Wuhan was in early December 2019.

As for Chinese official reports, this shows cumulative cases and deaths by report date in Hubei:



Remarkably constant crude CFR. From which we can either conclude (a) the epidemic isn't slowing (otherwise crude CFR would increase), or (b) reported deaths and/or cases are not terribly reliable.

New cases and deaths show more variability (so rather amazing the crude CFR based on cumulative numbers track so well!):



I suspect flattening of new cases (and a linear growth in cases overall) reflects saturation of testing/hospital capacity more than epidemic dynamics. But hard to be sure.

Neil

From: John Edmunds <John.Edmunds@I&S>

Sent: 10 February 2020 09:20

To: Chris Jewell <c.jewell@I&S>; Read, Jonathan <jonathan.read@I&S> SPI-M <SPI-M@dhsc.gov.uk>

Cc: [See recipients listed above]

[See recipients listed above]

Subject: Re: [External] Re: SPI-M-O Novel Coronavirus (confirmed)

On the subject of timing and size of peak in Wuhan, Adam Kucharski and **NR** have produced some estimates. See Fig 1F https://cmmid.github.io/ncov/wuhan_early_dynamics/index.html

According to their model, the peak should be pretty soon. According to the data, it might have already happened. Not sure which I believe more.

John

From: Chris Jewell <c.jewell@I&S>

Date: Monday, 10 February 2020 at 08:54

To: "Read, Jonathan" <jonathan.read@I&S>, SPI-M <SPI-M@dhsc.gov.uk>

Cc: [See recipients listed above]

[See recipients listed above]

[See recipients listed above]

Subject: Re: [External] Re: SPI-M-O Novel Coronavirus (confirmed)

Thanks for forwarding, Jon!

Chris

On 10/02/2020 08:07, Read, Jonathan wrote:

>
> Please find attached preliminary epidemic forecasts within China, and
> possible importation risks to UK (and elsewhere).
>
> As a reminder, our task was:
>
> SPI-M-O to produce projections of the timing of when the epidemic will
> peak as well as overall duration of outbreak in 1. Wuhan, 2. China and
> 3. UK – if we get sustained person-to-person transmission. In
> addition, SPI-M to advise on countries that may be most affected.
>
> Best wishes,
>
> Jon.

>
> *From:* Keeling, Matt [Personal Data]
> *Sent:* 10 February 2020 07:57
> *To:* SPI-M <SPI-M@dhsc.gov.uk>
> *Cc:* [See recipients listed above]

[See recipients listed above]

[See recipients listed above]

> *Subject: * [External] Re: SPI-M-O Novel Coronavirus (confirmed)

>

> *This email originated outside the University. Check before clicking
> links or attachments.*

>

> Dear All,

>

> Two things:

>

> 1) I was asked to look at the impact of temperature / climate. Brief
> summary document is attached. In essence, (from a quick literature
> search on SARS) there is insufficient evidence to generate
> quantitative predictions on the impact of temperature (or other
> climatic features); although there are notable trends of less
> transmission (and shorter viral survival) in hotter temperatures. In
> my opinion - if any group has time - it would be worth considering a
> more in depth epidemiological analysis of the SARS data.

>

> 2) Secondly, attached is an early (draft) plot from work with Leon
> Danon & Ellen Brooks-Pollock. Looking at timing of a potential
> (uncontrolled) UK outbreak. This strongly suggests a relatively
> synchronised peak across the UK.

>

> Yours

>

> Matt

>

>

>

> On 9 Feb 2020, at 22:02, Prof. Julia Gog <jrg20@I&S

> <<mailto:jrg20@I&S>>> wrote:

>

> Dear All,

>
> For item 2 on the agenda, please find 4 files attached (all with
> names starting SC for School Closures). One is a briefing document
> intended to help focus our school closure discussions tomorrow,
> the other three are contributions from SPI-M folk - all
> unpublished work which may help us here.

>
> Julia

>
> -----
>

> Prof. Julia Gog
> David N. Moore Fellow in Mathematics, Queens' College
> Professor of Mathematical Biology, DAMTP, University of Cambridge

> **I&S**

>
> **I&S**

>
> On 7 Feb 2020, at 16:31, SPI-M wrote:

>
> Dear all,
>
> Please find attached the material for Mondays meeting:
>
> ·the proposed agenda;
>
> ·paper on the peak time estimates for UK put together by
> Daniela De Angelis;
>
> ·a graphic giving the framework of language that SAGE use when
> discussing probabilities;
>
> ·the latest version of the consensus statement for reference.

>
> All the best,

>
> **NR**

>
> <cid:image001.png@01D45A56.173B0C20>

>
>
>
> **NR**

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> Operational Research Analyst
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> Global and Public Health Analytical Branch,
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> E: NR@dhsc.gov.uk <NR@dhsc.gov.uk>

> T: I&S

>

> Follow us on Twitter @DHSCgovuk

>

> -----Original Appointment-----

> *From: NR On Behalf Of *SPI-M

> *Sent:* 07 February 2020 16:04

> *To:* SPI-M, NR

> Allen, Paul; Van Tam, Jonathan; graham.medley@I&S

> <<mailto:graham.medley@I&S>>; john.edmunds@I&S

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> **Personal Data**; Jamie.LopezBernal2@phe.gov.uk

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> <<mailto:jonathan.read@I&S>

> c.jewell@I&S <<mailto:c.jewell@I&S>

> Nick.Gent@phe.gov.uk <<mailto:NR@phe.gov.uk>>;

> Mark.Woolhouse@I&S <<mailto:Mark.Woolhouse@I&S>

> I&S

> Cavanagh, Cheryl; NR; Dodds,

> Kevin NR

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> <<mailto:NR@phe.gov.uk>>; 'David.OConnor@fco.gov.uk'
> <<mailto:David.OConnor@fco.gov.uk>>; NR@nhs.net
> <NR@nhs.net>
> *Subject:* SPI-M-O Novel Coronavirus (confirmed)
> *When:* 10 February 2020 10:30-12:30 (UTC+00:00) Dublin,
> Edinburgh, Lisbon, London.
> *Where:* Skype Meeting
>
> Dear all,
>
> The next meeting of SPI-M-O is now confirmed for Monday 10th
> February 10:30 – 12:30.
>
> The Skype link for the meeting is below and dial in details
> are as follows: Tel: [I&S](tel:I&S) conference ID: [I&S](tel:I&S)
>
> If you experienced a poor Skype connection in the last meeting
> I would recommend you dial in.
>
> Agenda and meeting material to follow separately.
> Unfortunately, we have only been able to secure a small
> meeting room so please let me know if you are planning on
> attending in person.
>
> All the best,
>
> NR
>
> <cid:image001.png@01D45A56.173B0C20>
>
>
>
> NR
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> Operational Research Analyst
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> Global and Public Health Analytical Branch,
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>
> Follow us on Twitter @DHSCgovuk
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>
> Join Skype Meeting
> [I&S](tel:I&S)
>

> Trouble Joining? _Try Skype Web App

> **I&S**

> Join by phone

> UK: **I&S** (United Kingdom (UK))

> English (United Kingdom)

> _Find a local number

I&S

> Conference ID: **I&S**

> Forgot your dial-in PIN?

I&S

> _[!OC([1033])!]

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> <SC baguelin.docx><SC briefing for 10th feb meeting.pdf><SC
> pellis.pptx><SC vanleeuwijn.pdf>

> Prof. Matt Keeling

> Director of Zeeman Institute: SBIDER

I&S

>
> (Systems Biology &
>
> Infectious Disease Epidemiology Research)
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NR

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