

GP In Hours

Syndromic Surveillance System: England

25 March 2020

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Key messages.

at a glance.

GP practices and

denominator population. National syndromic indicators. Notes and further

information.

Diagnostic indicators

Year: 2020 Week: 12

Key messages

Data to: 22 March 2020

During week 12, GP consultations for all indicators have decreased. However, trends should be interpreted with caution due to changes in advice regarding accessing GP surgeries due to COVID-19, and the development of new codes for COVID-19 diagnoses.

A Cold Watch System operates in England from 1 November to 31 March each year. As part of the Public Health England Cold Weather Plan for England the PHE Real-time Syndromic Surveillance team will be monitoring the impact of cold weather on syndromic surveillance data during this period. Cold weather alert level (current reporting week): Level 1 Winter preparedness http://www.metoffice.gov.uk/weather/uk/coldweatheralert/

Diagnostic indicators at a glance:

Indicator	Trend	Level
Upper respiratory tract infection	decreasing	below baseline levels
Influenza-like illness	decreasing	similar to baseline levels
Pharyngitis	decreasing	below baseline levels
Scarlet fever	decreasing	below baseline levels
Lower respiratory tract infection	decreasing	below baseline levels
Pneumonia	decreasing	below baseline levels
Gastroenteritis	decreasing	below baseline levels
Vomiting	decreasing	below baseline levels
Diarrhoea	decreasing	below baseline levels
Asthma	decreasing	above baseline levels
Conjunctivitis	decreasing	below baseline levels
Mumps	no trend	above baseline levels
Measles	no trend	similar to baseline levels
Rubella	no trend	similar to baseline levels
Pertussis	no trend	similar to baseline levels
Chickenpox	no trend	below baseline levels
Herpes zoster	decreasing	below baseline levels
Cellulitis	decreasing	below baseline levels
Impetigo	decreasing	below baseline levels

* From week 9, this bulletin no longer includes the historic Moving Epidemic Method (MEM) influenza activity threshold (see notes).

GP practices and denominator population:											
	Year	Week	GP Practices Reporting**	Population size**							
	2020	12	4594	41.1 million							

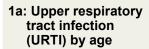
**based on the average number of practices and denominator population in the reporting working week.

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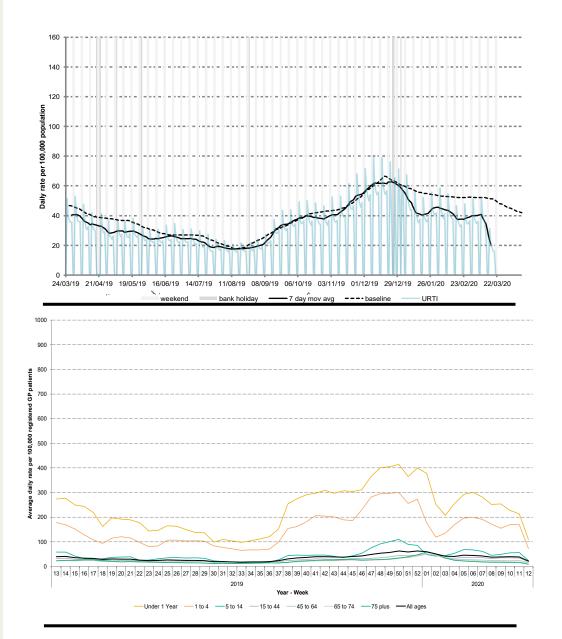
Year: 2020 Week: 12

1: Upper respiratory tract infection (URTI)

Daily incidence rate (and 7-day moving average*) per 100,000 population (all England, all ages).



Average daily incidence rate by week per 100,000 population (all England).



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* 7-day moving average adjusted for bank holidays.

Nublic Health England

25 March 2020

2: Influenza-like illness (ILI)

Daily incidence rates (and 7-day moving average*) per 100,000 population (all England, all ages).

9 8 7 100,000 population 6 Daily rate per 2 0 24/03/19 21/04/19 19/05/19 14/07/19 11/08/19 08/09/19 06/10/19 03/11/19 01/12/19 29/12/19 26/01/20 23/02/20 22/03/20 16/06/19 _ bank holiday - 7 day mov avg Influenza-like illness weekend baseline

2a: Influenza-like illness by age

Average daily incidence rate by week per 100,000 population (all England). 16

14

12

10

8

daily rate per 100,000 registered GP patients

Average (

2

0



Average daily incidence rate by week per 100,000 population (all ages).

* 7-day moving average adjusted for bank holidays.

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Year - Week

2019

GP In Hours

Year: 2020 Week: 12

2020

3: Pharyngitis or scarlet fever

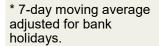
Daily incidence rate (and 7-day moving average*) per 100,000 population (all England, all ages).



Daily incidence rate (and 7-day moving average*) per 100,000 population (all England, based on a denominator population of approximately 5.5 million patients)

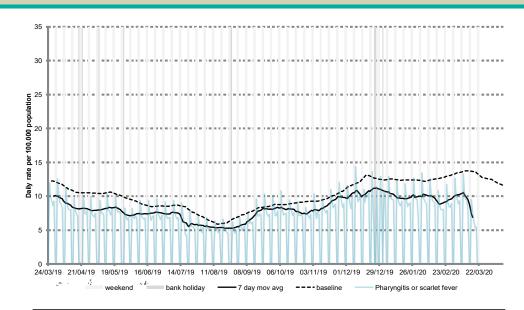


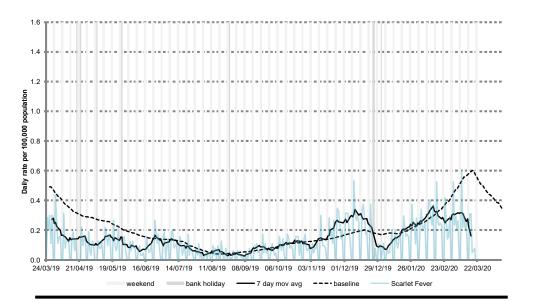
Average daily incidence rate by week per 100,000 population (all England, based on a denominator population of approximately 5.5 million patients).

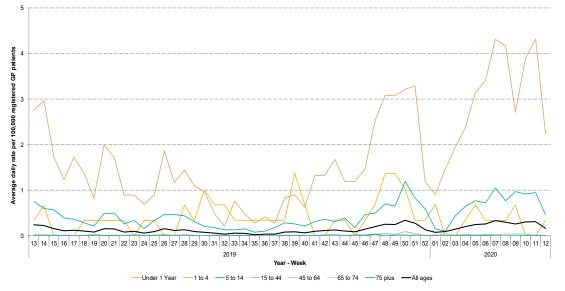




Year: 2020 Week: 12

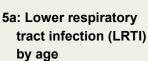




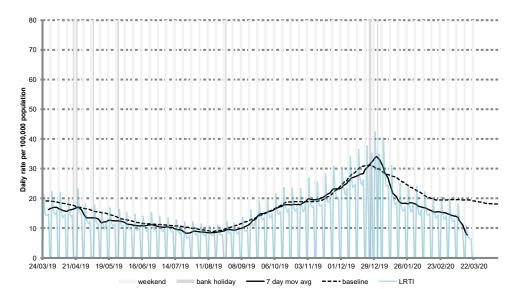


5: Lower respiratory tract infection (LRTI)

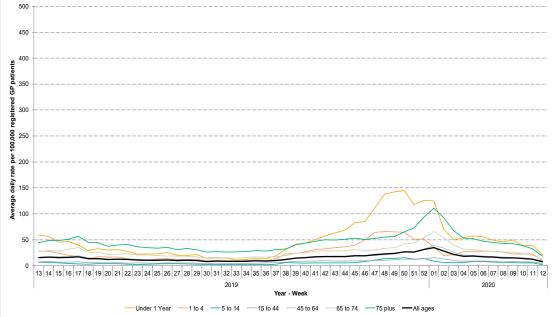
Daily incidence rate (and 7-day moving average*) per 100,000 population (all England, all ages).



Average daily incidence rate by week per 100,000 population (all England).







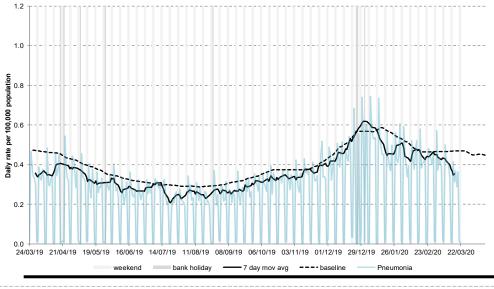
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* 7-day moving average adjusted for bank holidays.

GP In Hours

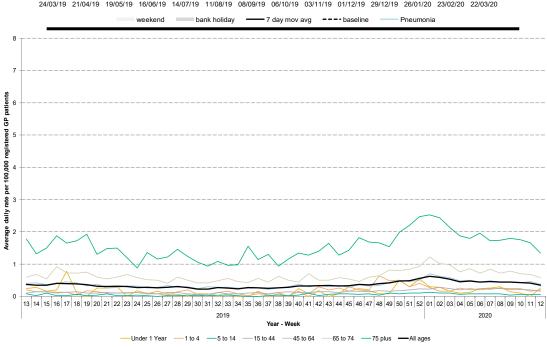
6: Pneumonia

Daily incidence rate (and 7-day moving average*) per 100,000 population (all England, all ages).



6a: Pneumonia by age

Average daily incidence rate by week per 100,000 population (all England).



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GP In Hours

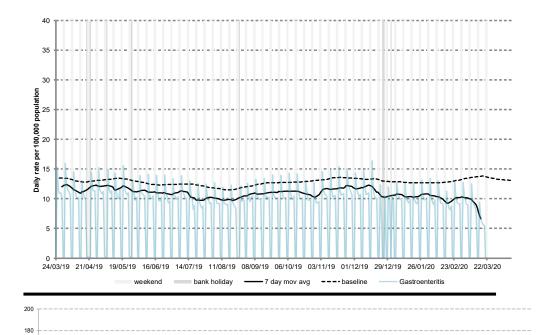
Year: 2020 Week: 12

7: Gastroenteritis

Daily incidence rate (and 7-day moving average*) per 100,000 population (all England, all ages).

7a: Gastroenteritis by age

Average daily incidence rate by week per 100,000 population (all England).



GP In Hours

2020

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— 1 to 4 —

-5 to 14

15 to 44

-45 to 64

65 to 74

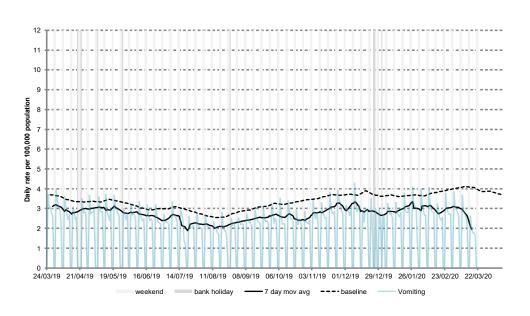
-75 plus

-All age

8: Vomiting

Daily incidence rate (and 7-day moving average*) per 100,000 population (all England, all ages).

* 7-day moving average adjusted for bank holidays.



8a: Vomiting by age

100

90

80

70

GP patients

egistered 60

100,000 r 50 per 40 daily 30 Average 20 10 0

Average daily incidence rate by week per 100,000 population (all England).

13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 43 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 01 02 03 04 05 06 07 08 09 10 11 12 2019 2020

Year - Weel

-45 to 64

65 to 74

-75 plus -All ages

-15 to 44

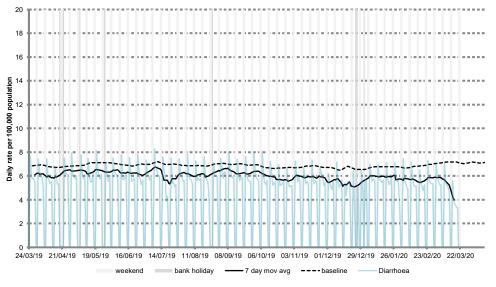
-5 to 14

-1 to 4

Under 1 Year

9: Diarrhoea

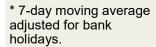
Daily incidence rate (and 7-day moving average*) per 100,000 population (all England, all ages).

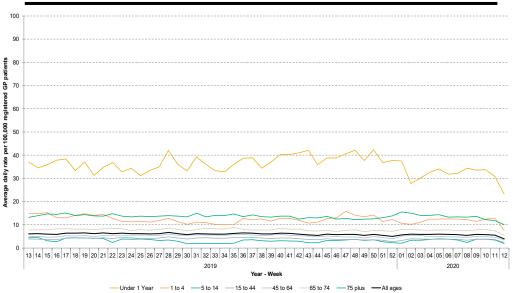


9a. Diarrhoea by age

Average daily incidence rate by week per 100,000 population (all England).

adistered





GP In Hours

10: Asthma

Daily incidence rate (and 7-day moving average*) per 100,000 population (all England, all ages).

5

Daily rate per 100,000 population

0

10a: Asthma by age

Average daily incidence rate by week per 100,000 population (all England).



24/03/19 21/04/19 19/05/19 16/06/19 14/07/19 11/08/19 08/09/19 06/10/19 03/11/19 01/12/19 29/12/19 26/01/20 23/02/20 22/03/20

- 7 day mov avg

---·baseline

Asthma

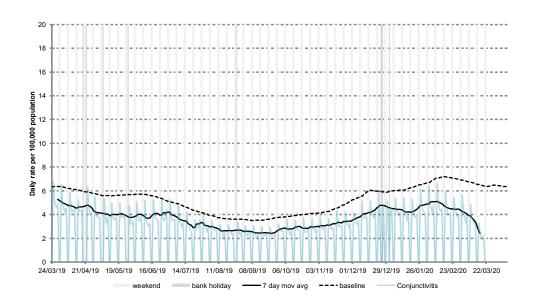
bank holiday

weekend

11: Conjunctivitis

Daily incidence rate (and 7-day moving average*) per 100,000 population (all England, all ages).

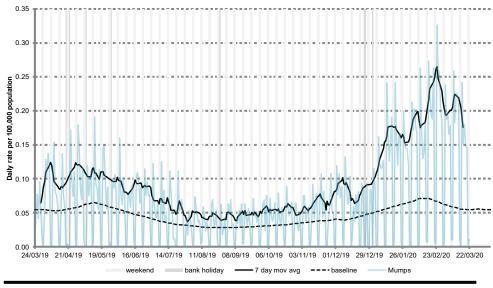
* 7-day moving average adjusted for bank holidays.



Year: 2020 Week: 12

12: Mumps

Daily incidence rate (and 7-day moving average*) per 100,000 population (all England, all ages).



12a: Mumps by age

Average daily incidence rate by week per 100,000 population (all England).

GP

registered

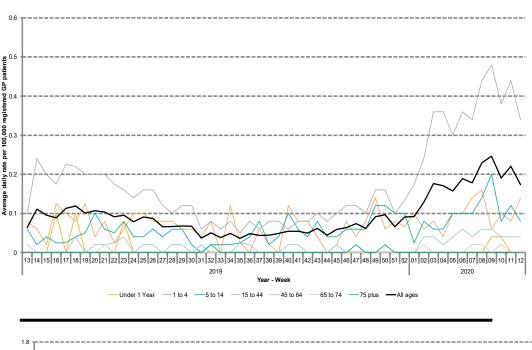
100,000 per daily rate

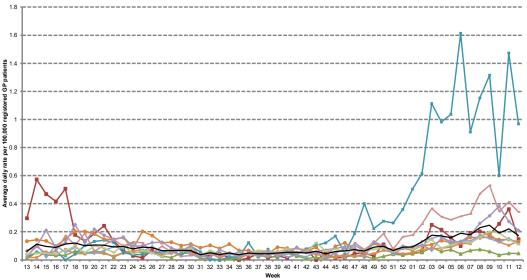
Average 0

12b: Mumps by PHE Centre

Average daily incidence rate by week per 100,000 population (all ages).

* 7-day moving average adjusted for bank holidays.





West Midlands

Yorkshire and Humber

-East Midlands -East of England -Condon -North East -North West -South East -South West

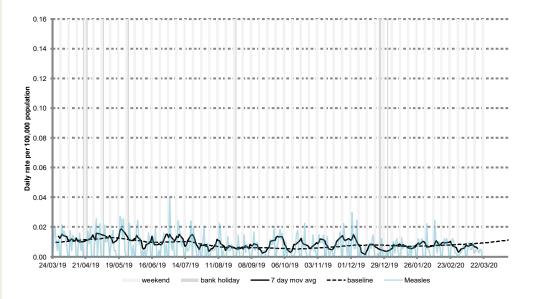
GP In Hours

England

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13: Measles

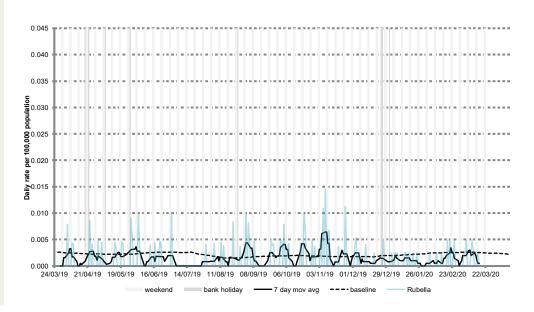
Daily incidence rate (and 7-day moving average*) per 100,000 population (all England, all ages).



14: Rubella

Daily incidence rate (and 7-day moving average*) per 100,000 population (all England, all ages).

* 7-day moving average adjusted for bank holidays.



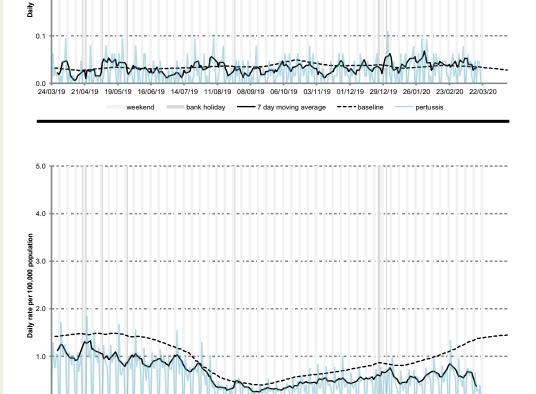
15: Pertussis

Daily incidence rate (and 7-day moving average*) per 100,000 population (all England, based on a denominator population of approximately 5.5 million patients)

0.5

0.4

GP In Hours



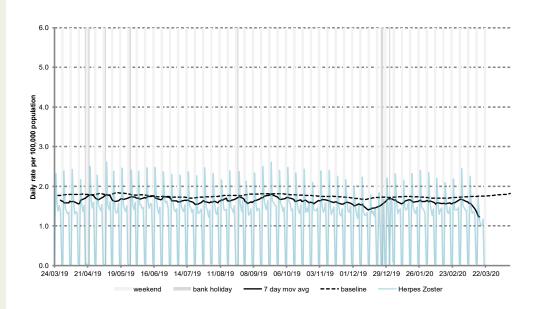
16: Chickenpox

Daily incidence rate (and 7-day moving average*) per 100,000 population (all England, based on a denominator population of approximately 5.5 million patients)

17: Herpes zoster

Daily incidence rate (and 7-day moving average*) per 100,000 population (all England, all ages).

* 7-day moving average adjusted for bank holidays.



0.0 24/03/19 21/04/19 19/05/19 16/06/19 14/07/19 11/08/19 08/09/19 06/10/19 03/11/19 01/12/19 29/12/19 26/01/20 23/02/20 22/03/20

7 day moving average

_ _

baseline

chickenpox

bank holiday

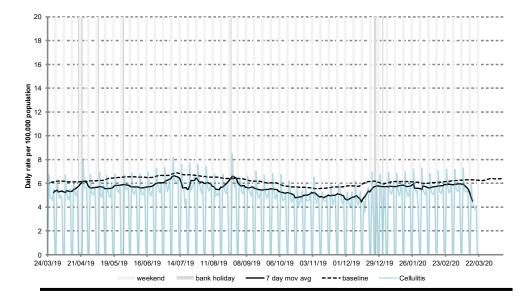
weekend

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Year: 2020 Week: 12

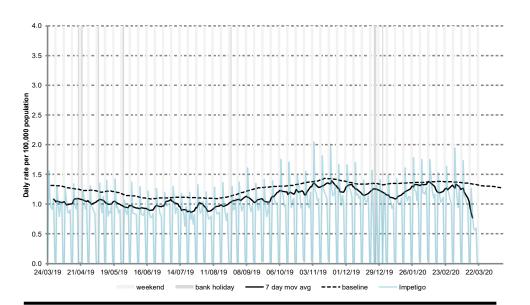
18: Cellulitis

Daily incidence rate (and 7-day moving average*) per 100,000 population (all England, all ages).



19: Impetigo

Daily incidence rate (and 7-day moving average*) per 100,000 population (all England, all ages).



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* 7-day moving average adjusted for bank holidays.

25 March 2020	Year: 2020 Week: 12							
Notes and further information	 The Public Health England GP in hours surveillance system is a syndromic surveillance system monitoring community-based morbidity recorded by GP practices. 							
	• GP consultation data are analysed on a daily basis to identify national and regional trends. A statistical algorithm underpins each system, routinely identifying activity that has increased significantly or is statistically significantly high for the time of year. Results from these daily analyses are assessed by the ReSST, along with analysis by age group, and anything deemed of public health importance is alerted by the team.							
	 This system captures anonymised GP morbidity data from two GP clinical software systems, EMIS, from version 1 of the QSurveillance® database, and TPP SystmOne. 							
	 Baselines represent seasonally expected levels of activity and are constructed from historical data since April 2012. They take into account any known substantial changes in data collection, population coverage or reporting practices. Gastroenteritis, diarrhoea and vomiting baselines also account for changes since the introduction of rotavirus vaccine in July 2013. Baselines are refreshed using the latest data on a regular basis. 							
Moving Epidemic Method:	 During winter we present Moving Epidemic Method (MEM) influenza thresholds on selected indicators. 							
	• The moving epidemic method or MEM is a standard methodology used for setting influenza thresholds across many European nations. ¹							
	• MEM is used for GP ILI thresholds at a national level and at PHE Centre level and stratified by age band.							
	 MEM thresholds should be interpreted using 7 day moving averages rather than daily data. 							
	• MEM thresholds currently use six years of historic data (2013-2019). The thresholds are re -calculated every year.							
	• Baseline ('pre-epidemic') thresholds are used alongside other surveillance systems to identify the start of influenza circulating in the community; 40%, 95% and 97.5% intensity thresholds are used to identify when influenza activity moves from low to medium, high or very high.							
	¹ Vega T et al. Influenza Other Respir Viruses. 2013;7(4):546-58.							
Maps:	 From week 40 2019 the levels of influenza-like illness (ILI) rates are illustrated in the bulletin appendix maps. The ILI intensity levels are calculated using MEM. 							
	• The current ILI thresholds are based upon previous influenza seasons from 2012/13 onwards and therefore illustrate activity levels in relation to previous ILI activity recorded in the GPIH system. IILI thresholds presented in the maps should be interpreted with caution and reference made to other GP surveillance systems incorporating more historical data, which are available in the PHE National Influenza Report.							
	https://www.gov.uk/government/statistics/weekly-national-flu-reports							
	 The ILI thresholds have been calculated separately for each of the nine PHE Centres to allow for differences between areas e.g. background ILI rates are historically higher in London than other areas of England. 							
Acknowledgements:	We thank and acknowledge the University of Oxford, ClinRisk [®] and the contribution of EMIS and EMIS practices. Data source: version 1 of the QSurveillance® database.							
	We thank TPP, ResearchOne and the SystmOne GP practices contributing to this surveillance system.							
Contact ReSST:	GP In Hours Syndromic Surveillance System Bulletin.							
syndromic.surveillance @phe.gov.uk	Produced by: PHE Real-time Syndromic Surveillance Team 1 st Floor, 5 St Philips Place, Birmingham, B3 2PW Tel: 0344 225 3560 > Option 4 > Option 2 Fax: 0121 236 2215							

Web: https://www.gov.uk/government/collections/syndromic-surveillance-systems-and-analyses