

# **GP In Hours**

Syndromic Surveillance System: England

16 June 2021

Year: 2021 Week: 23

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#### Key messages

data to

13/06/2021

During week 23, COVID-19-like consultations decreased slightly (figure 1). Consultations for both upper and lower respiratory tract infections have started to decrease in children aged under 5 years (figures 2a & 6a). Consultations for conjunctivitis and allergic rhinitis increased during week 23 (figures 12 and 21) in line with recent warm weather and seasonal grass pollen activity.

Baselines have been remodelled to account for changes due to COVID-19 and additional, new modelled lines have been added to the charts to represent expected levels if COVID-19 had not occurred.

Please see 'notes and caveats' for information about the COVID-19-like GPIH syndromic indicator including important caveats around the interpretation of this indicator.

A Heat-Health Watch system operates in England from 1 June to 15 September each year. As part of the Heatwave Plan for England, the PHE Real-time Syndromic Surveillance team will be routinely monitoring the public health impact of hot weather using syndromic surveillance data during this period.

Heat-health watch level (current reporting week): Level 1 Summer preparedness

http://www.metoffice.gov.uk/weather/uk/heathealth/

#### Diagnostic indicators at a glance:

Indicator	Trend	Level
COVID-19-like	decreasing	above baseline levels
Upper respiratory tract infection	no trend	above baseline levels
Influenza-like illness	no trend	similar to baseline levels
Pharyngitis	no trend	above baseline levels
Scarlet fever	no trend	similar to baseline levels
Lower respiratory tract infection	decreasing	above baseline levels
Pneumonia	increasing	above baseline levels
Gastroenteritis	no trend	above baseline levels
Vomiting	no trend	above baseline levels
Diarrhoea	no trend	above baseline levels
Asthma	decreasing	above baseline levels
Conjunctivitis	increasing	above baseline levels
Mumps	no trend	similar to baseline levels
Measles	no trend	similar to baseline levels
Whooping cough	no trend	similar to baseline levels
Chickenpox	increasing	similar to baseline levels
Herpes zoster	no trend	similar to baseline levels
Cellulitis	no trend	similar to baseline levels
Impetigo	no trend	similar to baseline levels
Allergic rhinitis	increasing	above baseline levels
Heat/sunstroke	decreasing	above baseline levels

#### GP practices and denominator population:

Year	Week	GP Practices Reporting**	Population size**
2021	23	678	6.7 million

<sup>\*\*</sup>based on the average number of practices and denominator population in the reporting working week.



## 1. COVID-19-like consultations

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

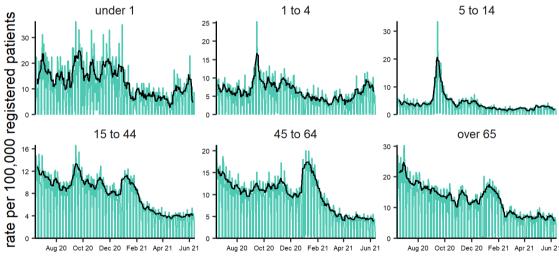
# Covid-19-like 14/06/2020 - 13/06/2021 All ages Aug 20 Oct 20 Dec 20 Feb 21 Apr 21 Jun 21

#### Black line is 7 day moving average adjusted for bank holidays. Black dotted line is baseline. Orange dotted line is expected pre-covid-19 level. Grey columns show weekends and bank holidays.

# 1a: COVID-19-like consultations by age group

Daily incidence rate (and 7-day moving average\*) by age group per 100,000 pop ulation (all England).

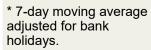
#### Covid-19-like by age group (years) 14/06/2020 - 13/06/2021



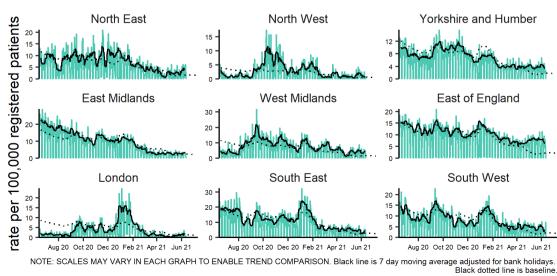
NOTE: SCALES MAY VARY IN EACH GRAPH TO ENABLE TREND COMPARISON. Black line is 7 day moving average adjusted for bank holidays.

# 1b: COVID-19-like consultations by PHE Centre

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



#### Covid-19-like by PHE centre 14/06/2020 - 13/06/2021

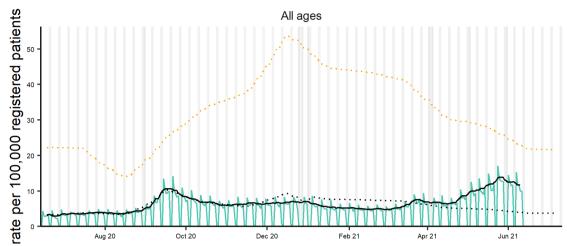




# 2: Upper respiratory tract infection (URTI)

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

#### Upper respiratory tract infection 14/06/2020 - 13/06/2021

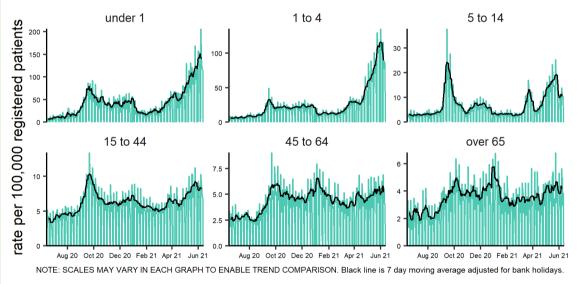


Black line is 7 day moving average adjusted for bank holidays. Black dotted line is baseline. Orange dotted line is expected pre-covid-19 level. Grey columns show weekends and bank holidays.

# 2a: Upper respiratory tract infection (URTI) by age

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

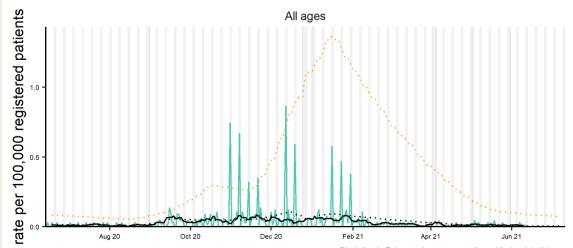
#### Upper respiratory tract infection by age group (years) 14/06/2020 - 13/06/2021



## 3: Influenza-like illness (ILI)

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

#### Influenza-like illness 14/06/2020 - 13/06/2021

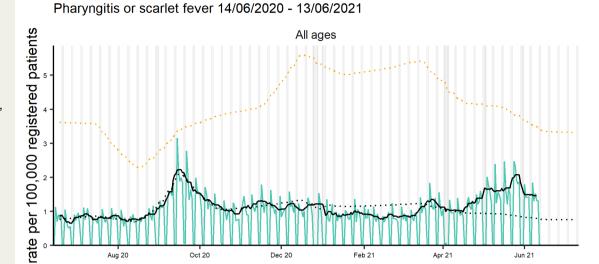


 \* 7-day moving average adjusted for bank holidays.

Black line is 7 day moving average adjusted for bank holidays. Black dotted line is baseline. Orange dotted line is expected pre-covid-19 level. Grey columns show weekends and bank holidays.

#### 4: Pharyngitis or scarlet fever

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



Dec 20

Black line is 7 day moving average adjusted for bank holidays. Black dotted line is baseline. Orange dotted line is expected pre-covid-19 level.

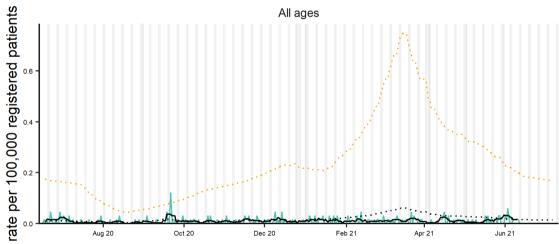
Grey columns show weekends and bank holidays.

#### 5: Scarlet fever

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

#### Scarlet fever 14/06/2020 - 13/06/2021

Aug 20



Black line is 7 day moving average adjusted for bank holidays. Black dotted line is baseline. Orange dotted line is expected pre-covid-19 level. Grey columns show weekends and bank holidays.

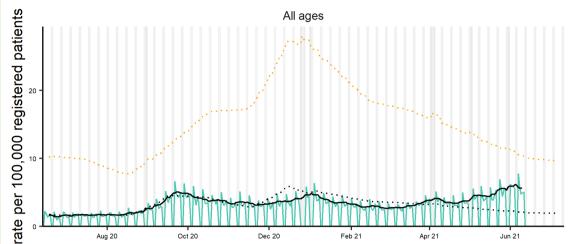
<sup>\* 7-</sup>day moving average adjusted for bank holidays.



## 6: Lower respiratory tract infection (LRTI)

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

#### Lower respiratory tract infection 14/06/2020 - 13/06/2021

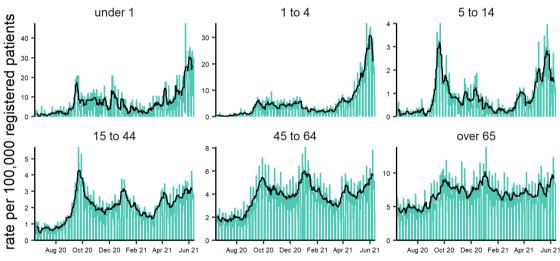


Black line is 7 day moving average adjusted for bank holidays. Black dotted line is baseline. Orange dotted line is expected pre-covid-19 level. Grey columns show weekends and bank holidays.

# 6a: Lower respiratory tract infection (LRTI) by age

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

#### Lower respiratory tract infection by age group (years) 14/06/2020 - 13/06/2021

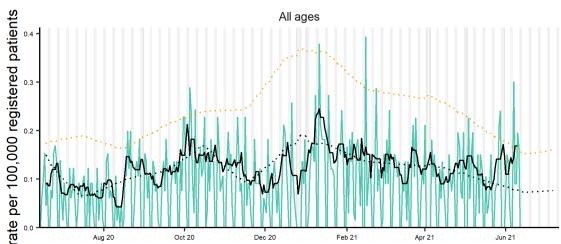


NOTE: SCALES MAY VARY IN EACH GRAPH TO ENABLE TREND COMPARISON. Black line is 7 day moving average adjusted for bank holidays.

#### 7: Pneumonia

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

#### Pneumonia 14/06/2020 - 13/06/2021



Black line is 7 day moving average adjusted for bank holidays. Black dotted line is baseline. Orange dotted line is expected pre-covid-19 level. Grey columns show weekends and bank holidays.

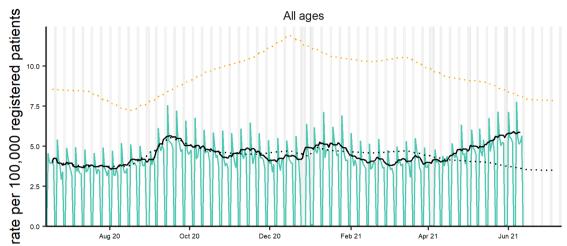
<sup>\* 7-</sup>day moving average adjusted for bank holidays.



#### 8: Gastroenteritis

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

#### Gastroenteritis 14/06/2020 - 13/06/2021



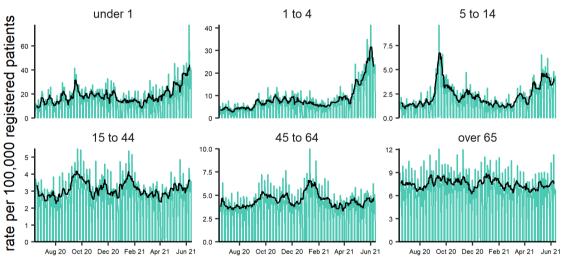
Black line is 7 day moving average adjusted for bank holidays. Black dotted line is baseline. Orange dotted line is expected pre-covid-19 level.

Grey columns show weekends and bank holidays.

## 8a: Gastroenteritis by age

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

#### Gastroenteritis by age group (years) 14/06/2020 - 13/06/2021



NOTE: SCALES MAY VARY IN EACH GRAPH TO ENABLE TREND COMPARISON. Black line is 7 day moving average adjusted for bank holidays.

#### 9: Vomiting

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

#### Vomiting 14/06/2020 - 13/06/2021



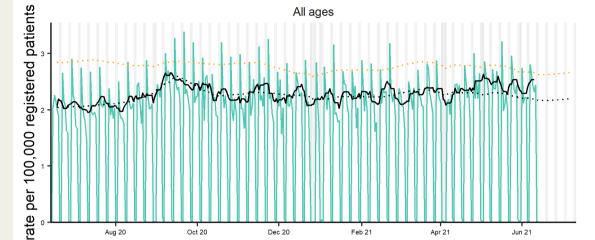
\* 7-day moving average adjusted for bank holidays.

Black line is 7 day moving average adjusted for bank holidays. Black dotted line is baseline. Orange dotted line is expected pre-covid-19 level. Grey columns show weekends and bank holidays

Diarrhoea 14/06/2020 - 13/06/2021

#### 10: Diarrhoea

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



Black line is 7 day moving average adjusted for bank holidays. Black dotted line is baseline. Orange dotted line is expected pre-covid-19 level. Grey columns show weekends and bank holidays.

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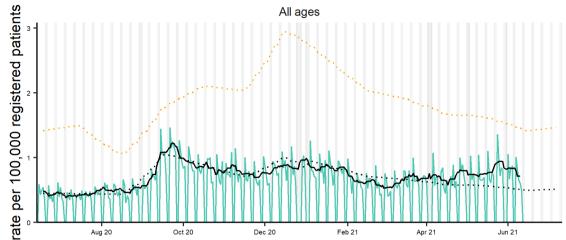
<sup>\* 7-</sup>day moving average adjusted for bank holidays.



#### 11: Asthma

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

#### Acute presenting asthma 14/06/2020 - 13/06/2021

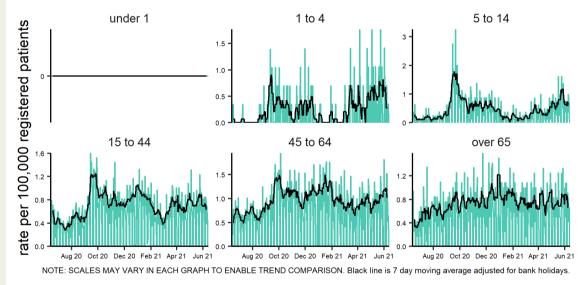


Black line is 7 day moving average adjusted for bank holidays. Black dotted line is baseline. Orange dotted line is expected pre-covid-19 level. Grey columns show weekends and bank holidays.

#### 11a: Asthma by age

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

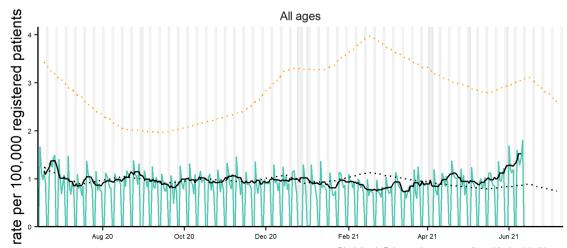
#### Acute presenting asthma by age group (years) 14/06/2020 - 13/06/2021



#### 12: Conjunctivitis

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

#### Conjunctivitis 14/06/2020 - 13/06/2021



\* 7-day moving average adjusted for bank holidays.

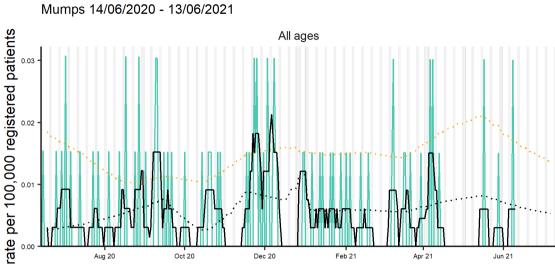
Black line is 7 day moving average adjusted for bank holidays.

Black dotted line is baseline. Orange dotted line is expected pre-covid-19 level.

Grey columns show weekends and bank holidays.

#### 13: Mumps

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



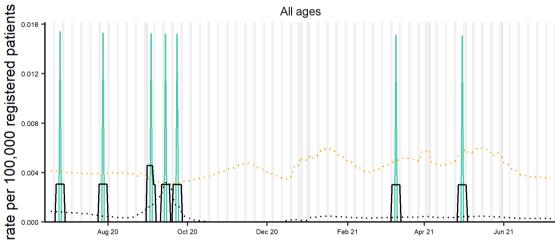
Black line is 7 day moving average adjusted for bank holidays. Black dotted line is baseline. Orange dotted line is expected pre-covid-19 level.

Grey columns show weekends and bank holidays.

#### 14: Measles

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

#### Measles 14/06/2020 - 13/06/2021



Black line is 7 day moving average adjusted for bank holidays. Black dotted line is baseline. Orange dotted line is expected pre-covid-19 level. Grey columns show weekends and bank holidays.

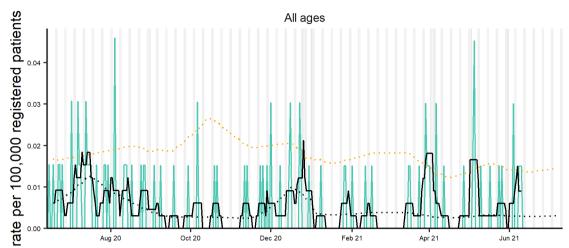
<sup>\* 7-</sup>day moving average adjusted for bank holidays.



#### 16: Whooping cough

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

#### Whooping cough 14/06/2020 - 13/06/2021

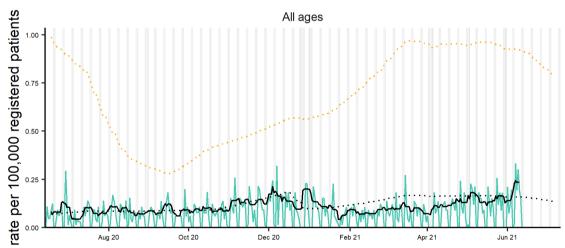


Black line is 7 day moving average adjusted for bank holidays. Black dotted line is baseline. Orange dotted line is expected pre-covid-19 level. Grey columns show weekends and bank holidays.

#### 17: Chickenpox

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

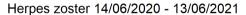
#### Chickenpox 14/06/2020 - 13/06/2021

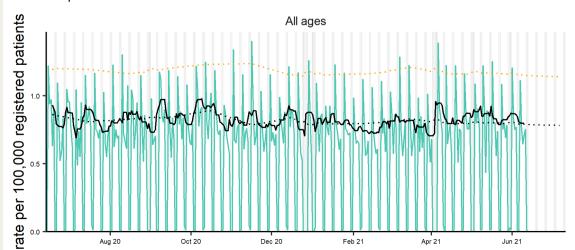


Black line is 7 day moving average adjusted for bank holidays. Black dotted line is baseline. Orange dotted line is expected pre-covid-19 level. Grey columns show weekends and bank holidays.

#### 18: Herpes zoster

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





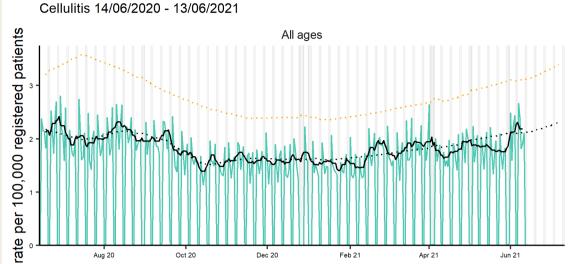
\* 7-day moving average adjusted for bank holidays.

Black line is 7 day moving average adjusted for bank holidays. Black dotted line is baseline. Orange dotted line is expected pre-covid-19 level. Grey columns show weekends and bank holidays.



#### 19 Cellulitis

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



Black line is 7 day moving average adjusted for bank holidays. Black dotted line is baseline. Orange dotted line is expected pre-covid-19 level.

Grey columns show weekends and bank holidays.

#### 20: Impetigo

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

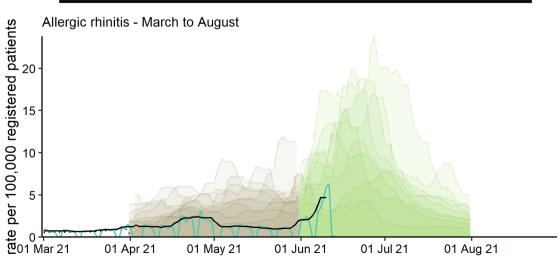
#### Impetigo 14/06/2020 - 13/06/2021



Black line is 7 day moving average adjusted for bank holidays. Black dotted line is baseline. Orange dotted line is expected pre-covid-19 level. Grey columns show weekends and bank holidays.

#### 21: Allergic Rhinitis

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



Black line is 7 day moving average adjusted for bank holidays, dotted line is out-of-season baseline. Shading shows historical 7 day moving averages,

\* 7-day moving average adjusted for bank holidays.

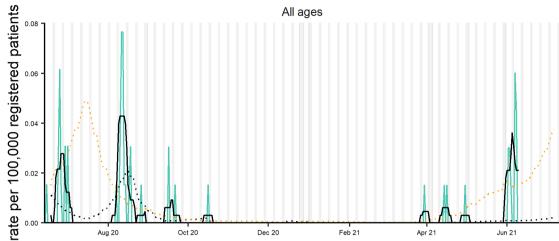
lightest shades are peaks seen once since 2012, darkest shades show levels reached every year since 2012.

April-May (brown) is associated with tree pollen peaks, June-July (green) with grass pollen.

#### 22 Heat/sunstroke

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

#### Heat or sunstroke 14/06/2020 - 13/06/2021



Black line is 7 day moving average adjusted for bank holidays. Black dotted line is baseline. Orange dotted line is expected pre-covid-19 level.

Grey columns show weekends and bank holidays.

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<sup>\* 7-</sup>day moving average adjusted for bank holidays.



### Notes and further information

- The PHE GP in hours surveillance system monitors the number of visits to general practitioners (GP) during regular surgery hours for known clinical indicators.
- This system captures anonymised GP morbidity data TPP SystmOneGP clinical software system including approximately 12% of the England population.
- Baselines are modelled from historical data to give current seasonally expected levels. Baselines have been remodelled to account for changes due to COVID-19 and the orange dotted lines are counter-factual models showing seasonally expected levels if covid-19 had not occurred.
- Each day, syndromic surveillance data are interrogated by a statistical algorithm to
  detect statistically significant exceedances (compared to baselines derived from
  historical data) in syndromic signals e.g. 'influenza-like illness GP consultations in
  London'. Each statistical exceedance is risk assessed by the ReSST using a
  published framework. Following the risk assessment, any exceedances requiring
  further action are communicated to relevant PHE colleagues for investigation.
  Further information about the methodology is available:
  - Morbey RA et al. The application of a novel rising activity, multi-level mixed effects, indicator emphasis' (RAMMIE) method for syndromic surveillance in England. Bioinformatics 2015;31: 3660-3665. 10.1093/bioinformatics/btv418
  - Smith GE et al. Novel public health risk assessment process developed to support syndromic surveillance for the 2012 Olympic and Paralympic Games. Journal of Public Health (Oxford) 2017;39: e111-e117. 10.1093/pubmed/fdw054

## COVID-19 consultations

- A collection of new COVID-19 Snomed codes were released in March 2020 to facilitate the recording of patients presenting to primary care services with symptoms of COVID-19. The GPIH surveillance system monitors the use of these codes in a selection of TPP practices across England:
  - However, patients presenting with COVID-19 symptoms may be diagnosed using other clinical codes used by the GP.
  - Therefore, the COVID-19-like indicator presented in this report is primarily for monitoring trends in GP consultations, and it must be interpreted in context with the other respiratory syndromic indicators presented in this report. The number/ rate of COVID-19-like consultations should therefore not be used as an absolute count of those patients with COVID-19.
- All indicator trends reported here should be interpreted with caution due to current national advice and guidance regarding access to GP surgeries and changes in clinical coding for COVID-19.

#### Acknowledgements:

We thank TPP, ResearchOne and the SystmOne GP practices contributing to this surveillance system.

Contact ReSST: syndromic.surveillance @phe.gov.uk

#### **GP In Hours Syndromic Surveillance System Bulletin.**

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