Ambulance Syndromic Surveillance System Bulletin (England)

2023 Week 39

Key messages

Data reported to: 1 October 2023

During week 39, daily ambulance calls for difficulty breathing remained stable nationally but above baseline levels. Please note that due to technical issues during week 39, data were missing from two ambulance trusts and therefore the data and trends presented in this report should be interpreted with some caution.

Syndromic indicators at a glance

Table 1: The current trend (based on previous weeks, not only the current week) and the level (compared to the expected baseline) of each indicator included in this bulletin.

Indicator	Trend	Level
Difficulty breathing (**Figure 1**)	No trend	Above baseline
Chest pain (**Figure 2**)	Decreasing	Above baseline
Cardiac or respiratory arrest (**Figure 3**)	No trend	Below baseline
Impact of heat or cold (**Figure 4**)	Decreasing	Below baseline
Headache (**Figure 5**)	No trend	Similar to baseline
Unconscious or passing out (**Figure 6**)	No trend	Similar to baseline
Collapsed with unknown problem (**Figure 7**)	No trend	Similar to baseline
Allergic reactions (**Figure 8**)	No trend	Similar to baseline
Injuries (**Figure 9**)	No trend	Similar to baseline
Overdose or ingestion or poisoning (**Figure 10**)	Decreasing	Below baseline

System coverage

Table 2: The number of ambulance Trusts included in surveillance each day during the most recent week.

Date	Number of ambulance Trusts[1]
25 September 2023	8
26 September 2023	8
27 September 2023	8
28 September 2023	9
29 September 2023	9
30 September 2023	8
1 October 2023	9

[1] maximum 10 Trusts in England

Contents

About this syndromic surveillance system

This bulletin presents data from the UK Health Security Agency (UKHSA) ambulance syndromic surveillance system.

Syndromic surveillance can be used to:
- assess current trends
- assess current trends and levels compared to historical baselines
- compare trends between age groups/areas

Syndromic surveillance should not be used to:
- estimate total burden or number of 'cases' of a condition (see **Notes and caveats**)
- compare levels between age groups/areas

Fully anonymised, daily ambulance call data are analysed and reported here, to identify and describe trends for a variety of syndromic indicators:
- syndromic indicators include groupings such as difficulty breathing, chest pain and injuries
- syndromic indicators are based on:
    - information gathered during the initial call
    - signs/symptoms and may not be laboratory confirmed
- **Key messages** describes any notable trends nationally (England), and/or by geographical area (based on UKHSA Regions)
- the full list of syndromic indicators reported here, along with their current level and trend, are summarised in **Table 1**
- charts are provided for each syndromic indicator, on a national basis, by geographical area (UKHSA Region). Each chart includes a year of data with:
    - 7-day moving averages (adjusted for weekends and bank holidays) to aid in the identification of trend
    - statistical baselines (where available) to aid in the assessment of level compared to historical expectations

For further information please see the **Notes and caveats** section.

Previous weekly bulletins from this system are available here.

Data quality issues of note this week

Due to ongoing technical problems, call data from North West Ambulance Service are currently not available to be included in this bulletin. Due to a technical issue call data from Yorkshire Ambulance Service were not available for 25, 26, 27 and 30 September. Interpretation of trends in this report should therefore be done with some caution.

See **Table 2** for the number of Trusts included in the most recent week, indicating where data has not arrived at the time of this report production. All historical data are complete.

Respiratory conditions

Difficulty breathing

Figure 1: Daily number of difficulty breathing ambulance service calls (and 7-day moving average adjusted for bank holidays), England (a) nationally, (b) by UKHSA Region. Please note there is minimal usage of this syndromic indicator by the East Midlands Ambulance Service before 26th June 2023.

(a)

NASSS: difficulty breathing 02/10/2022 to 01/10/2023

Black line is 7 day moving average adjusted for bank holidays.
Black dotted line is baseline. Grey columns show weekends and bank holidays.

(b)

NASSS: difficulty breathing by UKHSA region 02/10/2022 to 01/10/2023

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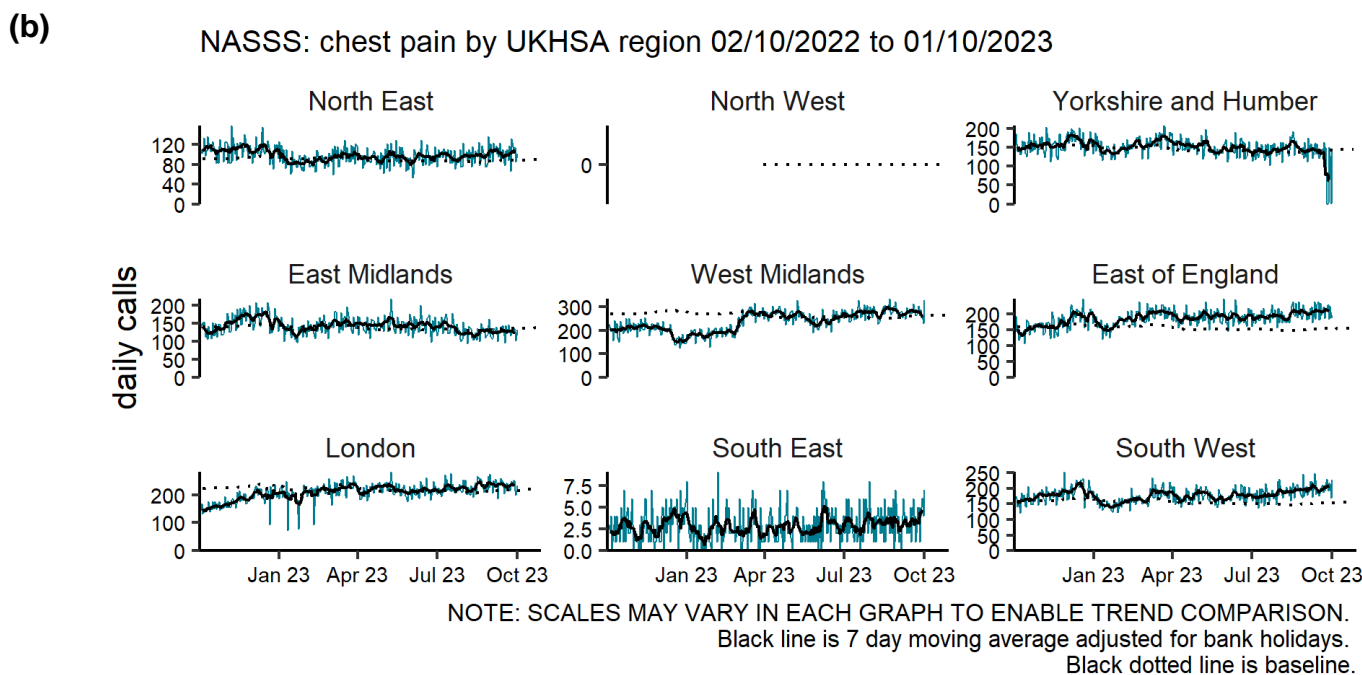Black dotted line is baseline.
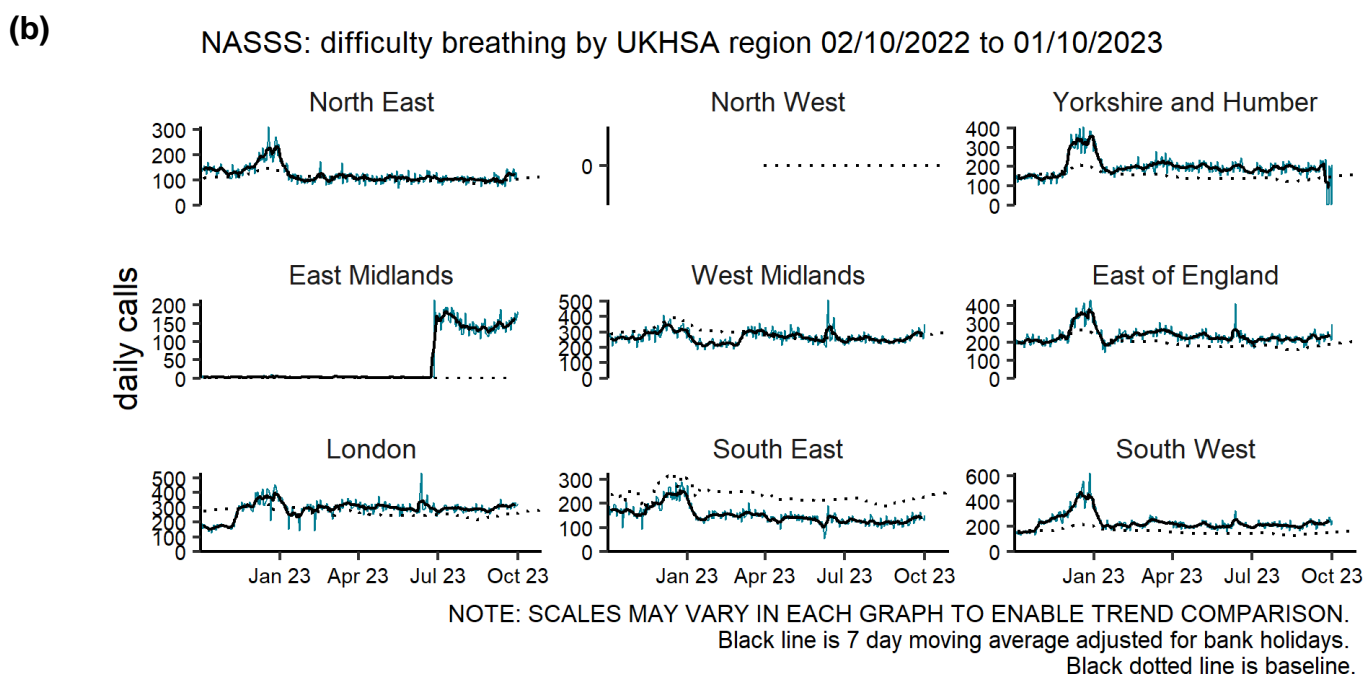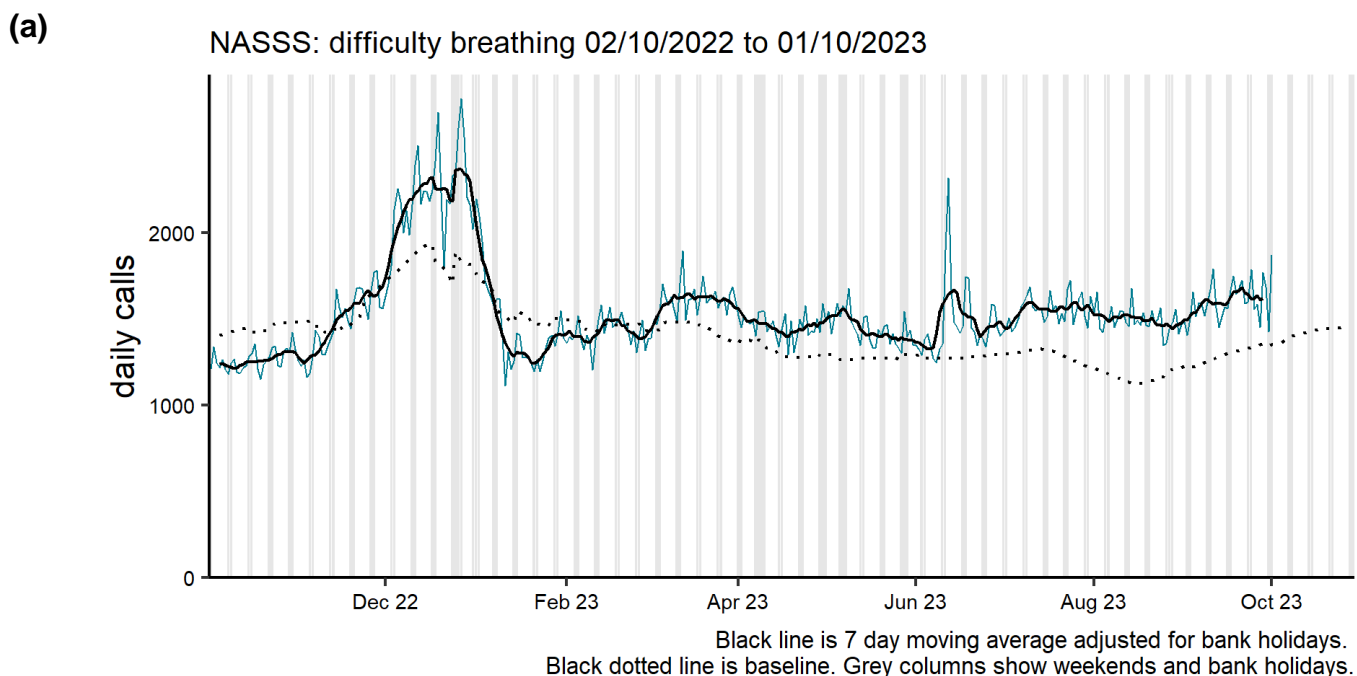
Cardiac conditions

Chest pain

Figure 2: Daily number of chest pain ambulance service calls (and 7-day moving average adjusted for bank holidays), England (a) nationally, (b) by UKHSA Region.

(a)

NASSS: chest pain 02/10/2022 to 01/10/2023

Black line is 7 day moving average adjusted for bank holidays.
Black dotted line is baseline. Grey columns show weekends and bank holidays.

(b)

NASSS: chest pain by UKHSA region 02/10/2022 to 01/10/2023

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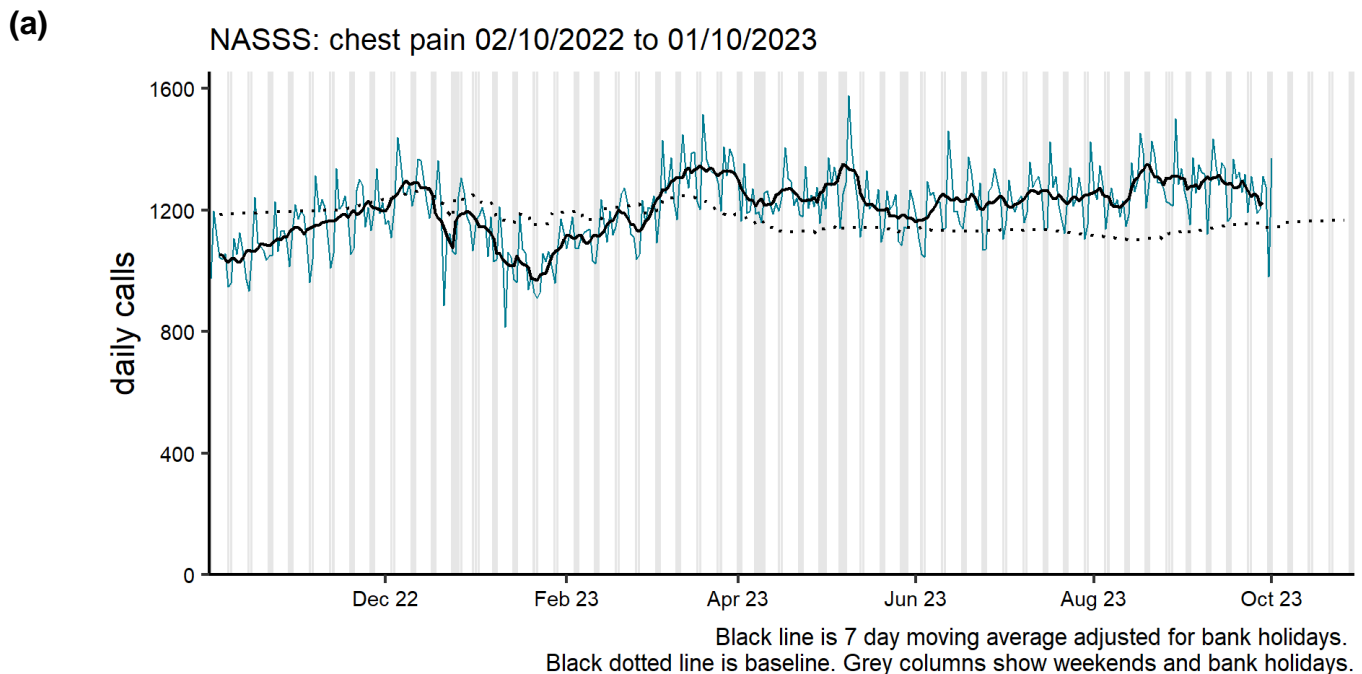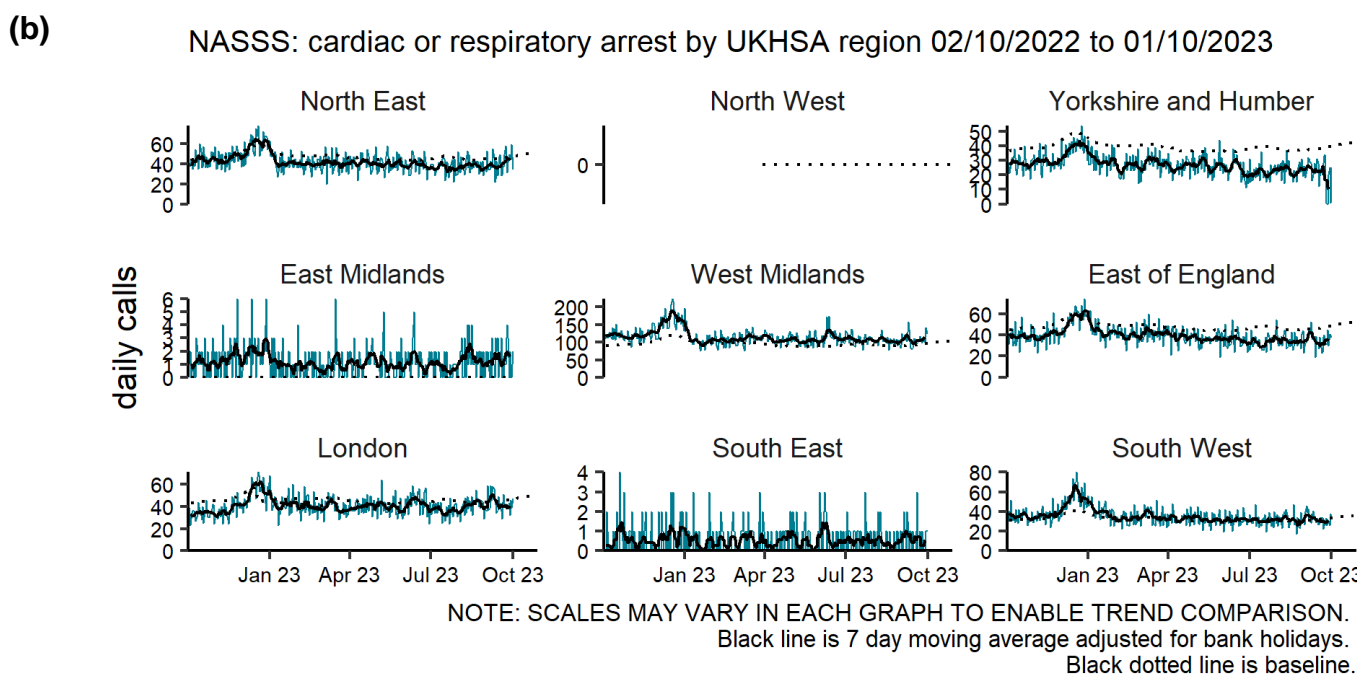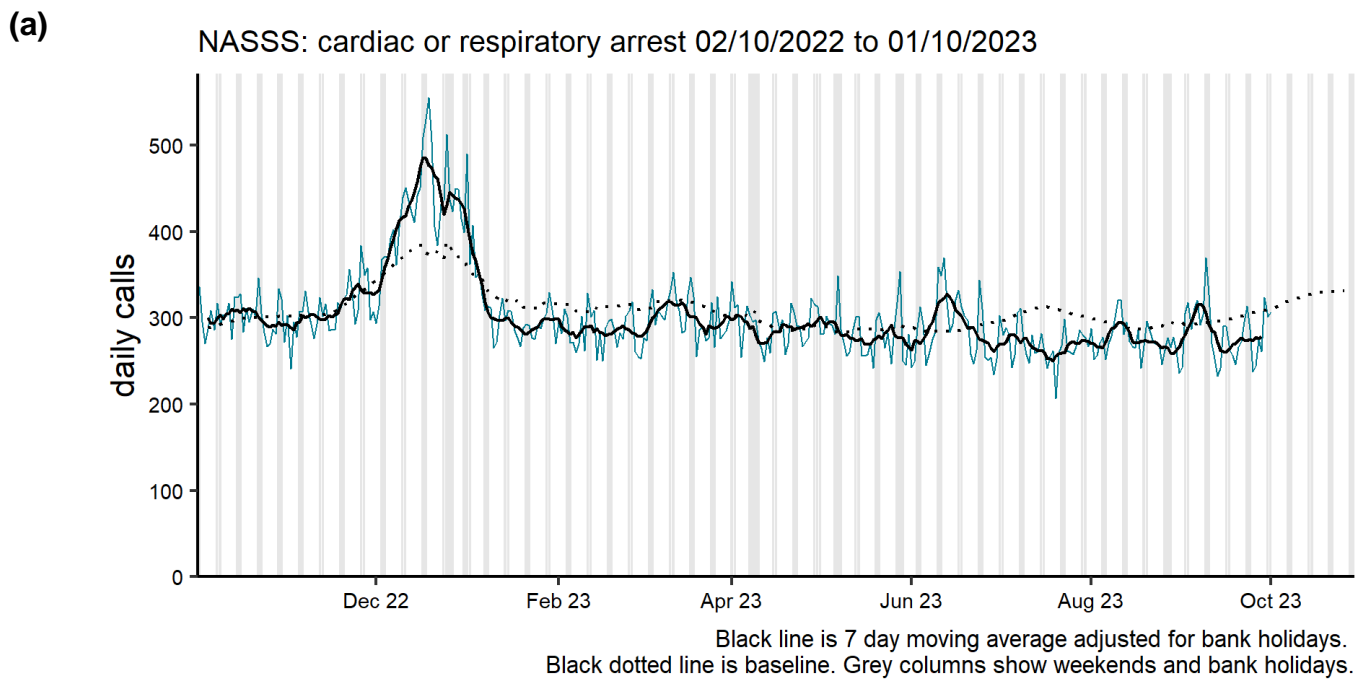
Cardiac or respiratory arrest

Figure 3: Daily number of cardiac or respiratory arrest ambulance service calls (and 7-day moving average adjusted for bank holidays), England (a) nationally, (b) by UKHSA Region. Please note there is minimal usage of this syndromic indicator by the East Midlands Ambulance Service.

(a)

NASSS: cardiac or respiratory arrest 02/10/2022 to 01/10/2023

Black line is 7 day moving average adjusted for bank holidays.
Black dotted line is baseline. Grey columns show weekends and bank holidays.

(b)

NASSS: cardiac or respiratory arrest by UKHSA region 02/10/2022 to 01/10/2023

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

Seasonal or environmental conditions

UKHSA and the Met Office operate a weather-health alert system that includes both heat and cold weather alert periods. Syndromic indicators are used to monitor the impact of both extreme hot and cold weather in England during these periods and will be included below (where an appropriate syndromic indicator is available).

Cold weather alert period: 1 November to 31 March
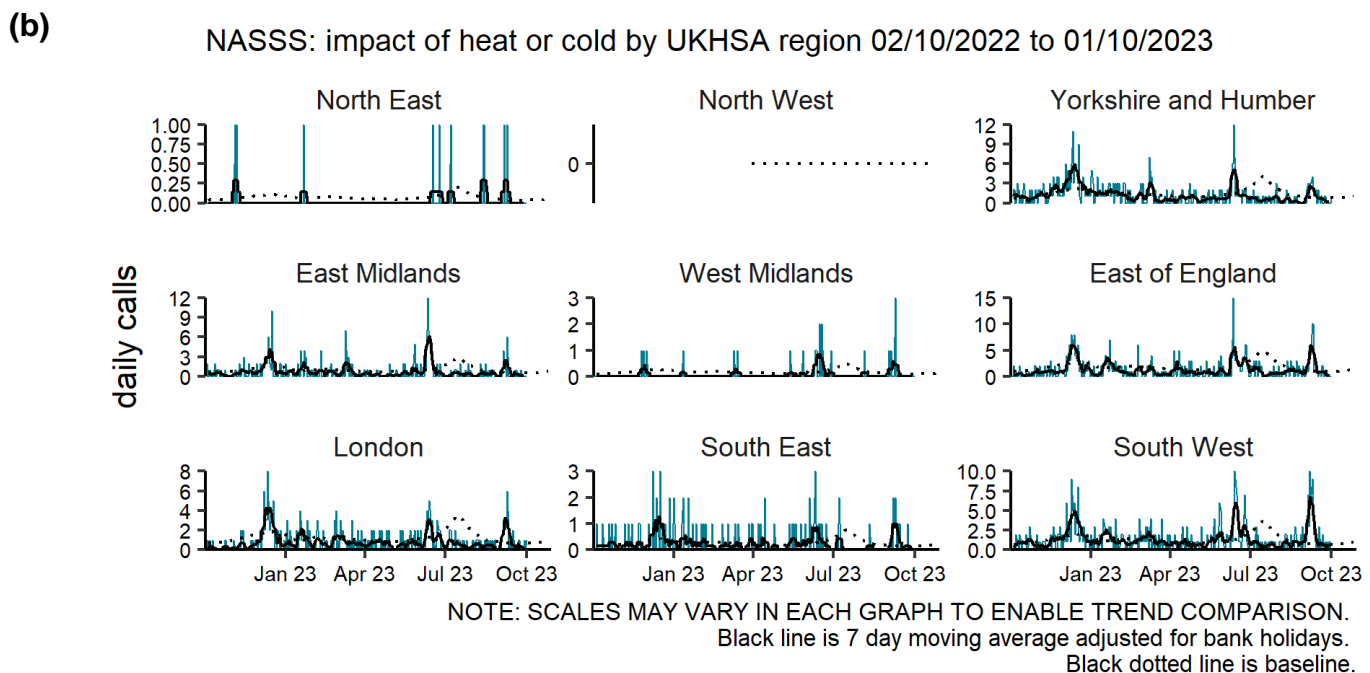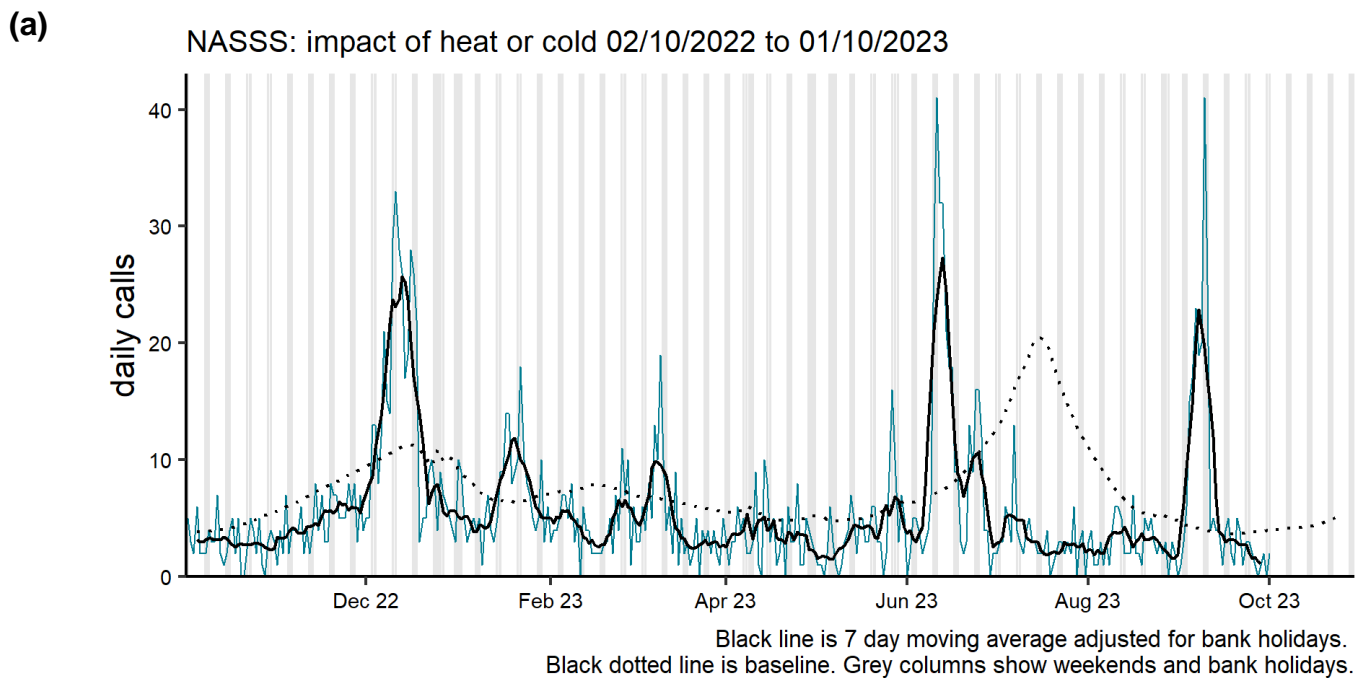
Heat-Health Alert period: 1 June to 30 September

Highest weather alert during the current reporting week:

 Level Green – Summer preparedness

Heat-Health Alerts in place

Impact of heat or cold

Figure 4: Daily number of heat or cold related ambulance service calls (and 7-day moving average adjusted for bank holidays), England (a) nationally, (b) by UKHSA Region.

(a)

NASSS: impact of heat or cold 02/10/2022 to 01/10/2023

Black line is 7 day moving average adjusted for bank holidays.
Black dotted line is baseline. Grey columns show weekends and bank holidays.

(b)

NASSS: impact of heat or cold by UKHSA region 02/10/2022 to 01/10/2023

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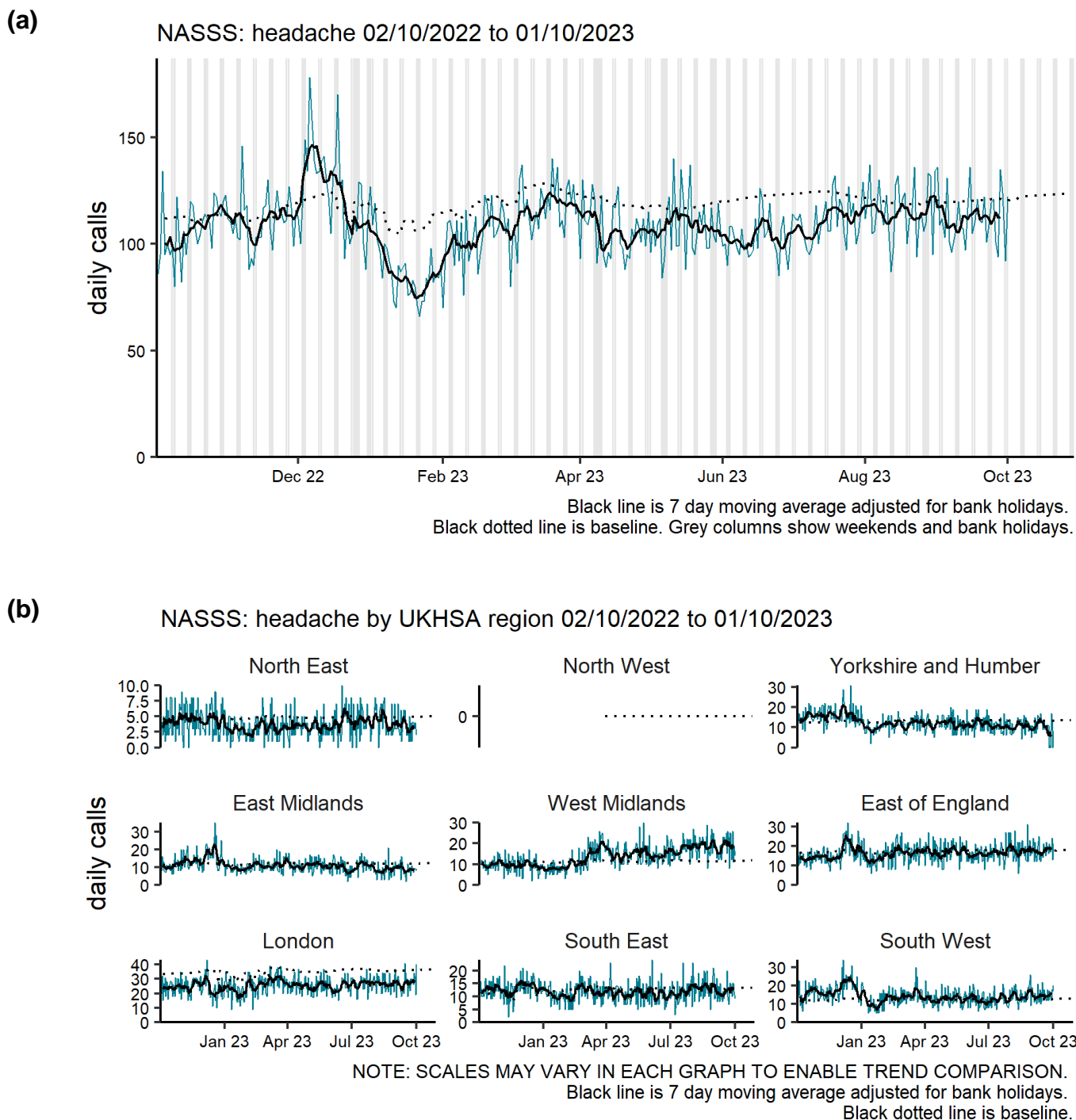Black dotted line is baseline.
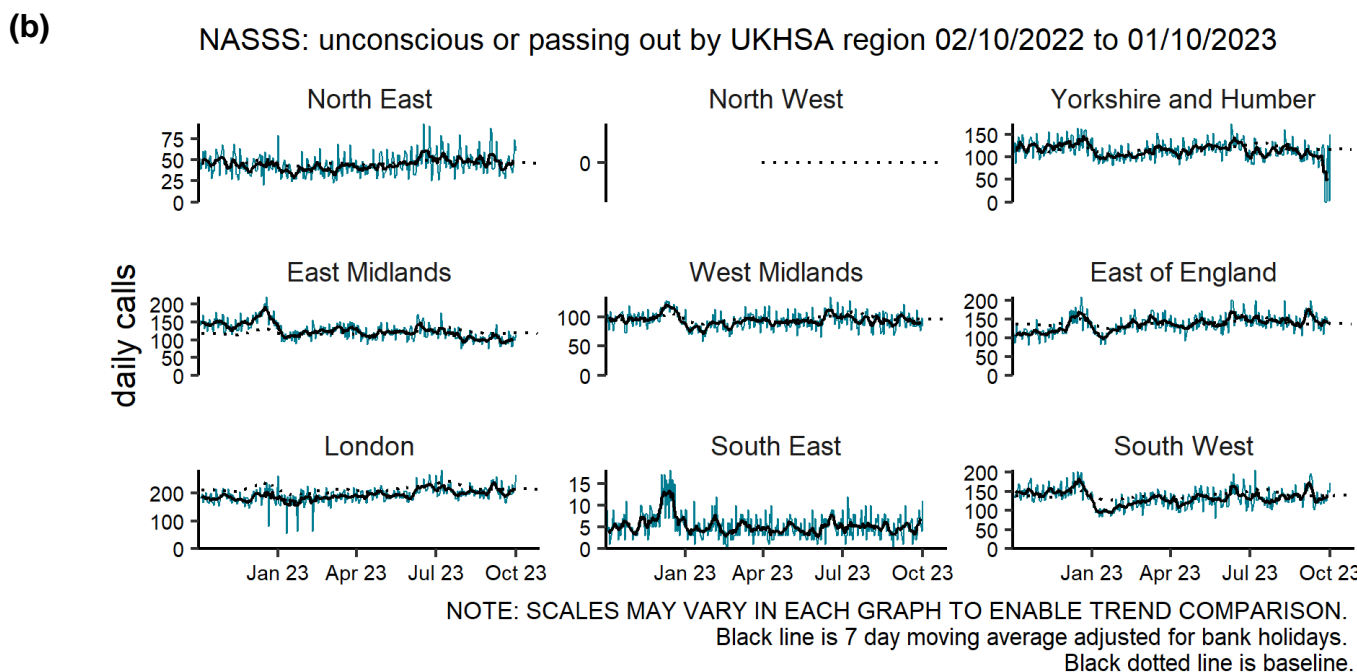
Other conditions

Headache

Figure 5: Daily number of headache ambulance service calls (and 7-day moving average adjusted for bank holidays), England (a) nationally, (b) by UKHSA Region.

(a)

NASSS: headache 02/10/2022 to 01/10/2023

Black line is 7 day moving average adjusted for bank holidays.
Black dotted line is baseline. Grey columns show weekends and bank holidays.

(b)

NASSS: headache by UKHSA region 02/10/2022 to 01/10/2023

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

Unconscious or passing out

Figure 6: Daily number of unconscious or passing out ambulance service calls (and 7-day moving average adjusted for bank holidays), England (a) nationally, (b) by UKHSA Region.

(a)

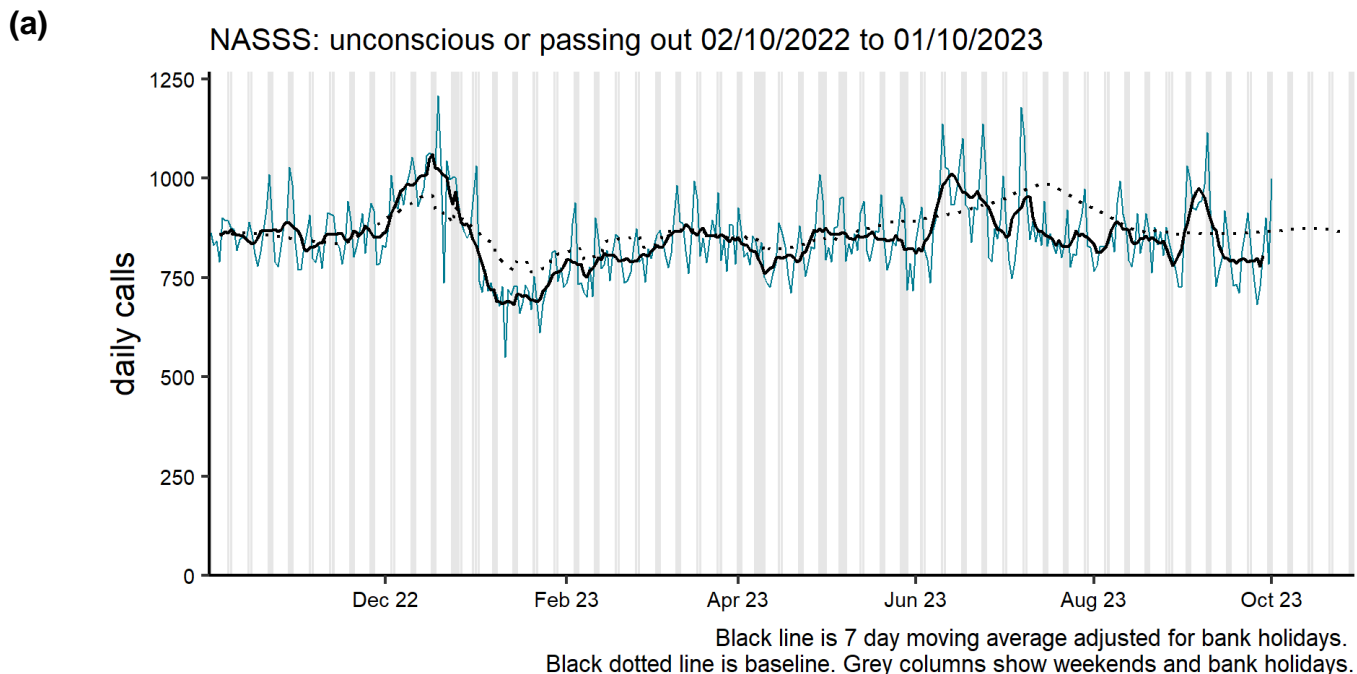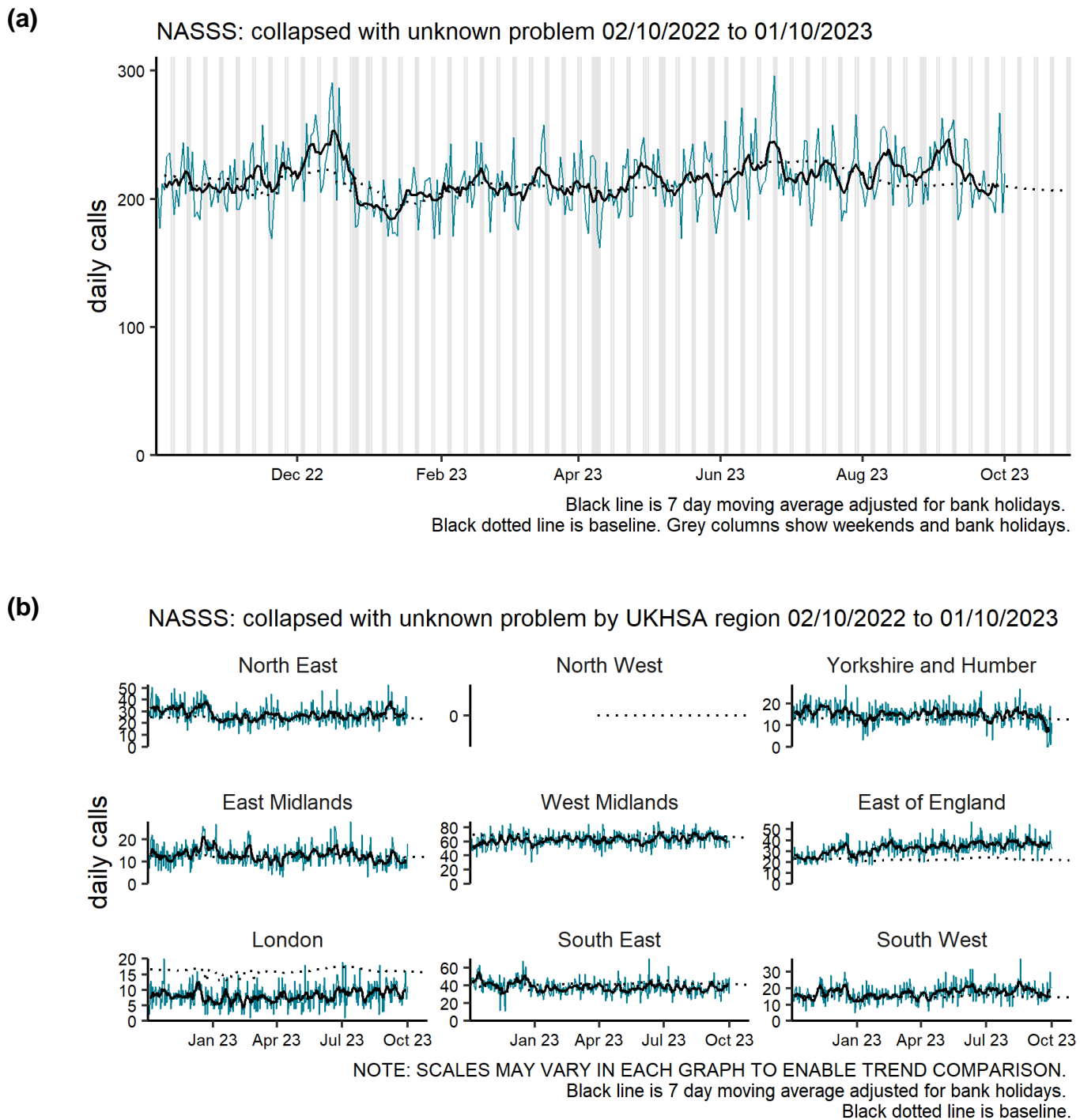NASSS: unconscious or passing out 02/10/2022 to 01/10/2023

Black line is 7 day moving average adjusted for bank holidays.
Black dotted line is baseline. Grey columns show weekends and bank holidays.

(b)

NASSS: unconscious or passing out by UKHSA region 02/10/2022 to 01/10/2023

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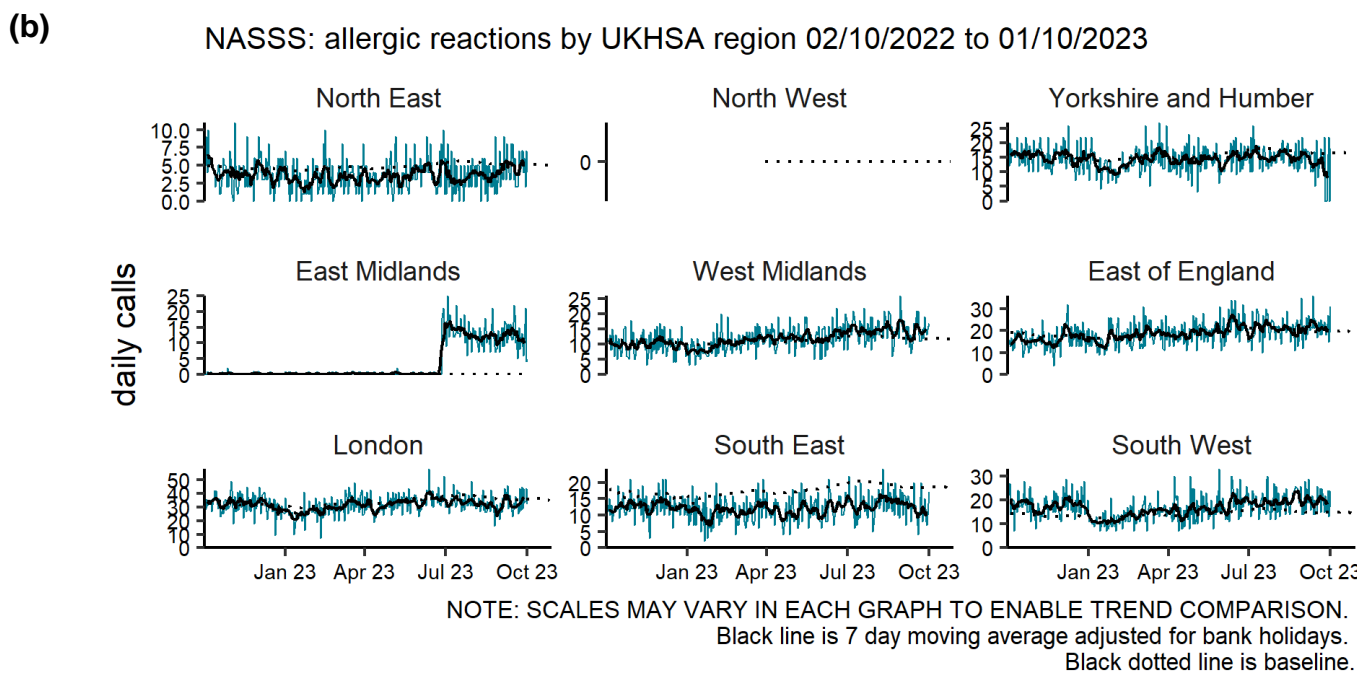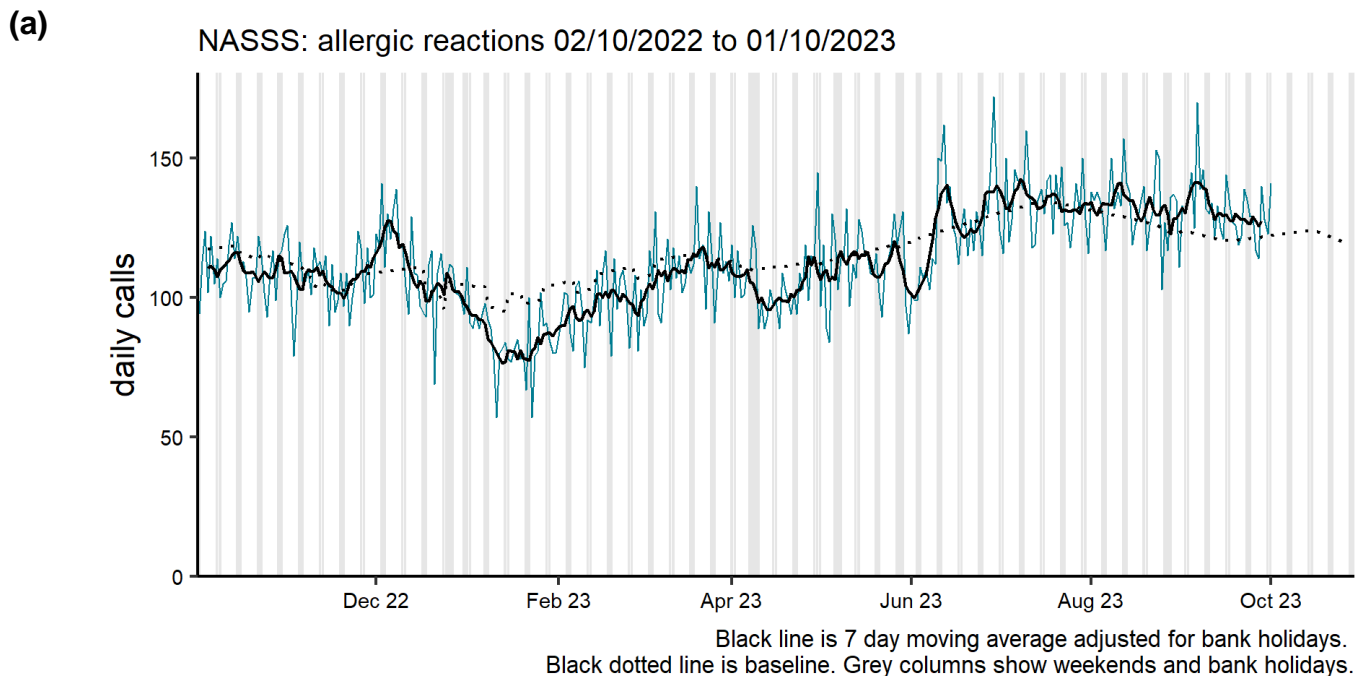Black dotted line is baseline.

Collapsed with unknown problem

Figure 7: Daily number of collapsed with unknown problem ambulance service calls (and 7-day moving average adjusted for bank holidays), England (a) nationally, (b) by UKHSA Region.
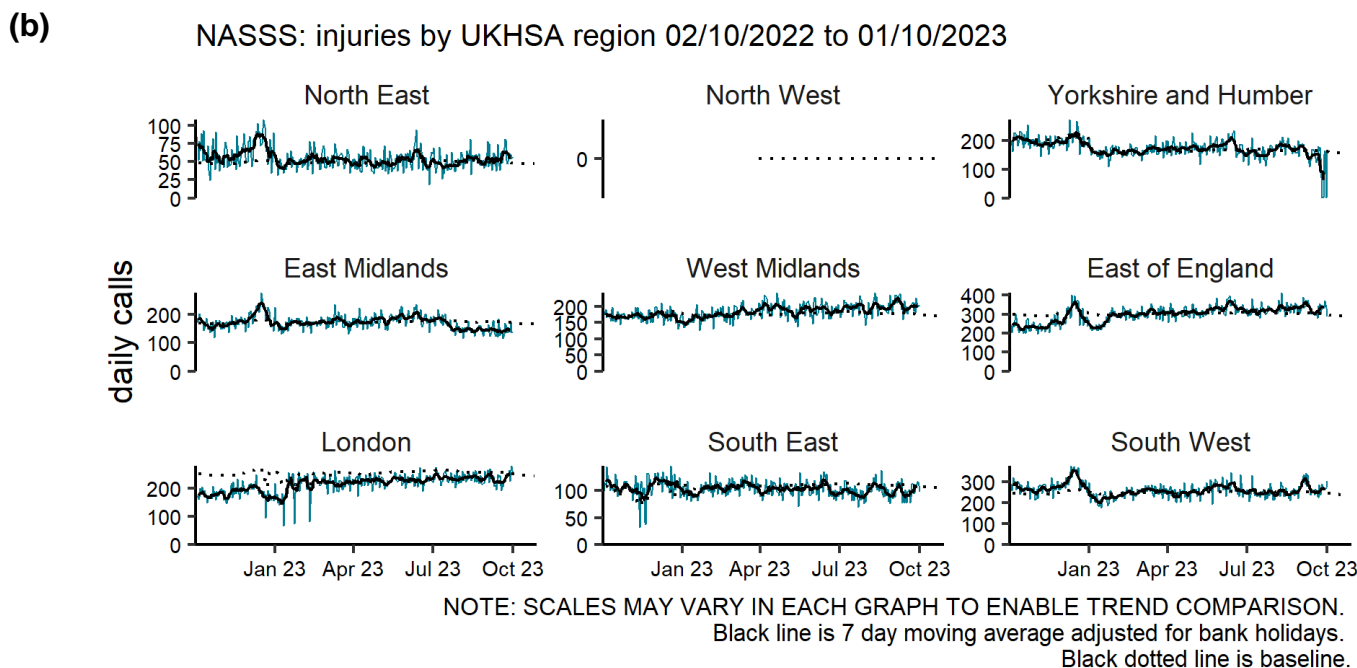
(a)

NASSS: collapsed with unknown problem 02/10/2022 to 01/10/2023

Black line is 7 day moving average adjusted for bank holidays.
Black dotted line is baseline. Grey columns show weekends and bank holidays.

(b)

NASSS: collapsed with unknown problem by UKHSA region 02/10/2022 to 01/10/2023

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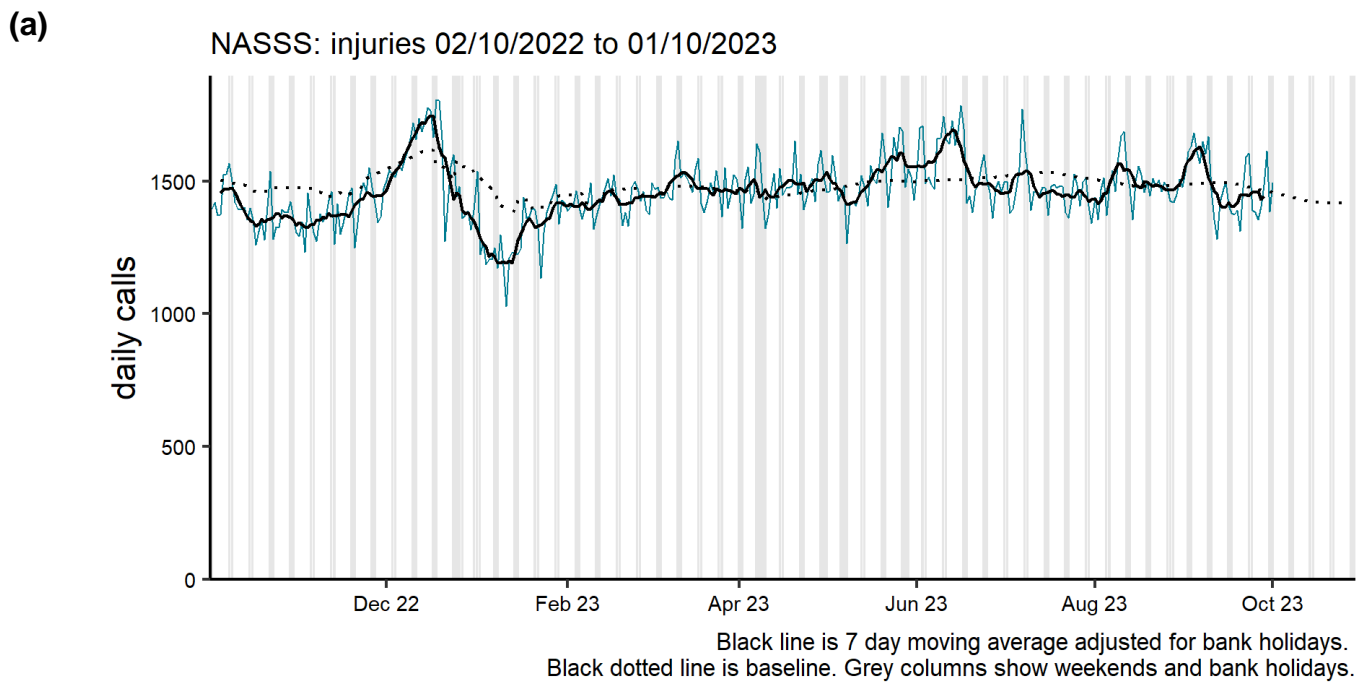Black dotted line is baseline.

Allergic reactions

Figure 8: Daily number of allergic reactions ambulance service calls (and 7-day moving average adjusted for bank holidays), England (a) nationally, (b) by UKHSA Region. Please note there was minimal usage of this syndromic indicator by the East Midlands Ambulance Service before 26th June 2023.
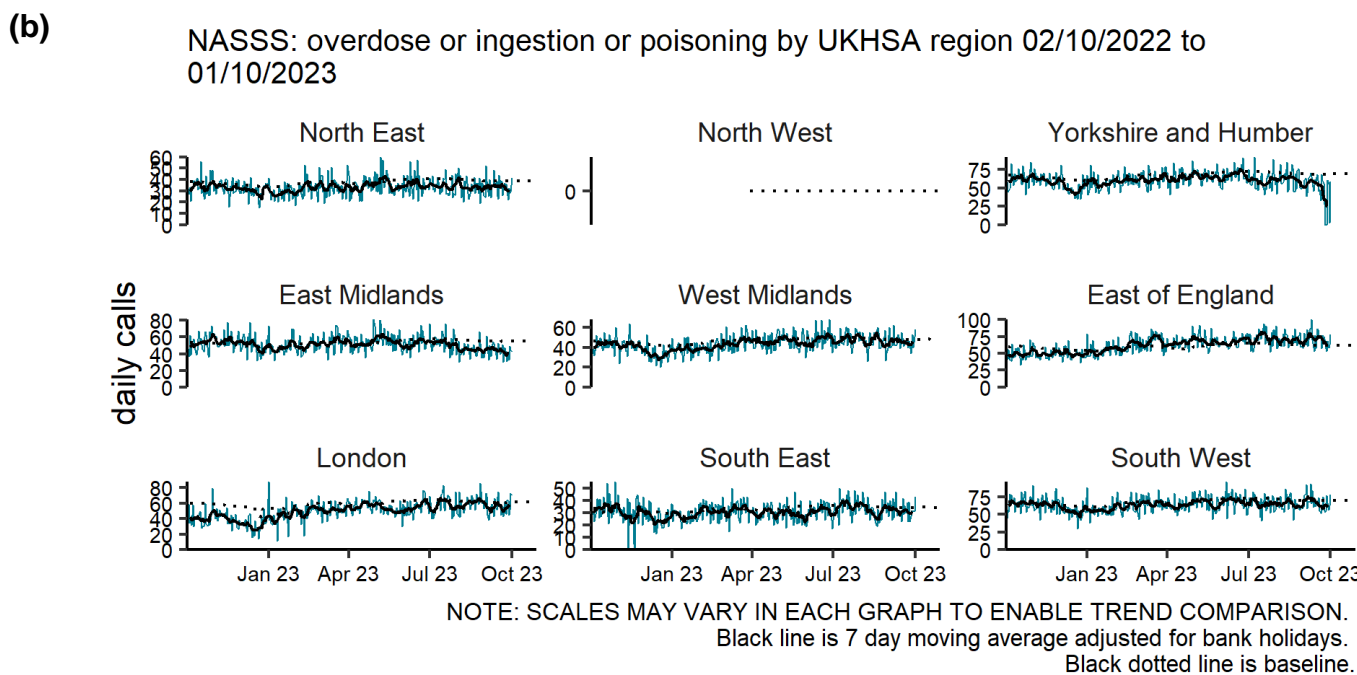
(a)

NASSS: allergic reactions 02/10/2022 to 01/10/2023

Black line is 7 day moving average adjusted for bank holidays.
Black dotted line is baseline. Grey columns show weekends and bank holidays.

(b)

NASSS: allergic reactions by UKHSA region 02/10/2022 to 01/10/2023

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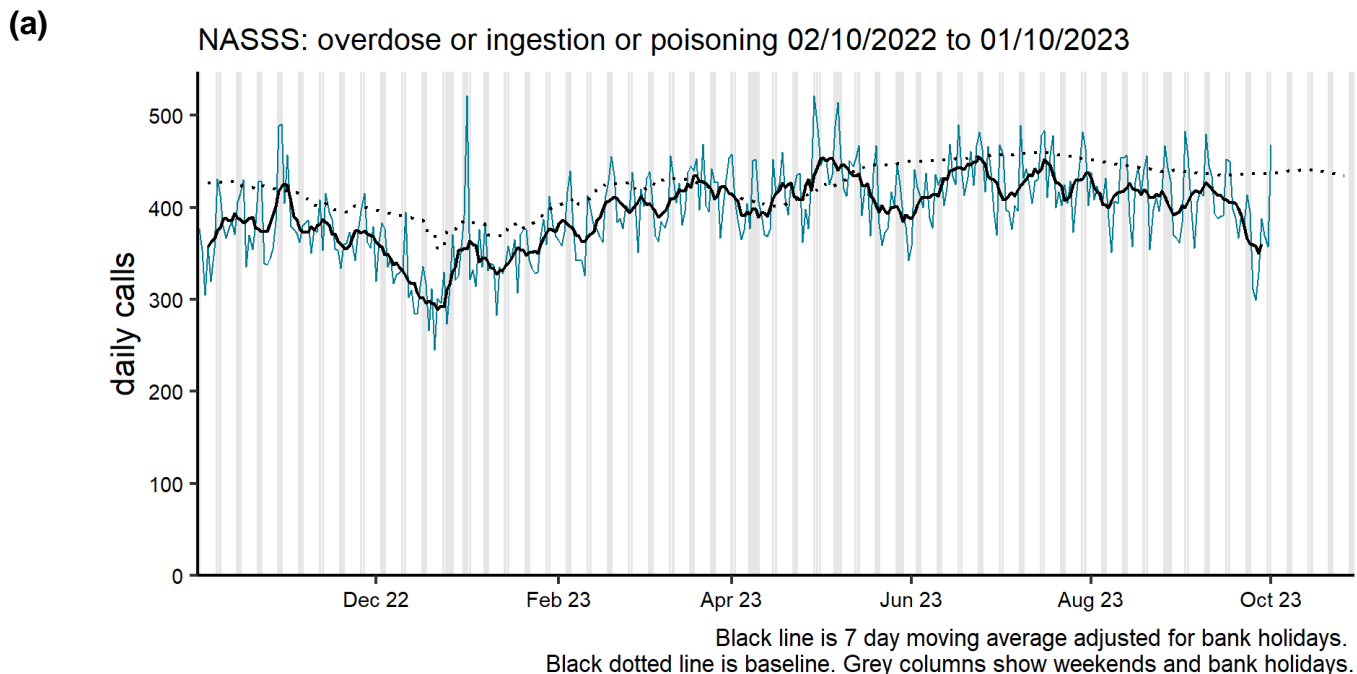Black dotted line is baseline.

Injuries

Figure 9: Daily number of injury ambulance service calls (and 7-day moving average adjusted for bank holidays), England (a) nationally, (b) by UKHSA Region.

(a)

NASSS: injuries 02/10/2022 to 01/10/2023

Black line is 7 day moving average adjusted for bank holidays.
Black dotted line is baseline. Grey columns show weekends and bank holidays.

(b)

NASSS: injuries by UKHSA region 02/10/2022 to 01/10/2023

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

Overdose or poisoning

Figure 10: Daily number of overdose or poisoning ambulance service calls (and 7-day moving average adjusted for bank holidays), England (a) nationally, (b) by UKHSA Region.

(a)

NASSS: overdose or ingestion or poisoning 02/10/2022 to 01/10/2023

Black line is 7 day moving average adjusted for bank holidays.
Black dotted line is baseline. Grey columns show weekends and bank holidays.

(b)

NASSS: overdose or ingestion or poisoning by UKHSA region 02/10/2022 to 01/10/2023

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

Notes and caveats

The following additional caveats apply to the UKHSA ambulance syndromic surveillance system
- the data presented are based on a national syndromic surveillance system:
    - the 10 ambulance trusts in mainland England are included
    - the number of Trusts included each day of the most recent week is included in **Table 2**
    - indicating where data has not arrived at the time of this report production. All historical data is complete
- the signs/symptoms related to each call may be recorded differently by each ambulance Trust
    - there may be minimal usage of some syndromic indicators by some ambulance Trusts
    - the title for each set of syndromic indicator charts will describe which Trusts (if any) are affected
- baselines:
    - were last remodelled May 2023
    - are constructed from historical data since January 2019
    - represent seasonally expected levels of activity
    - take account of any known substantial changes in data collection, population coverage or reporting practices:
        - the COVID-19 pandemic period is excluded, to show seasonally expected levels if COVID-19 had not occurred
    - may be remodelled to include the impacts seen during periods of the COVID-19 pandemic if/when appropriate due to introduction of large scale public health interventions which may affect call levels

Acknowledgements

About the UK Health Security Agency

UKHSA is responsible for protecting every member of every community from the impact of infectious diseases, chemical, biological, radiological and nuclear incidents and other health threats. We provide intellectual, scientific and operational leadership at national and local level, as well as on the global stage, to make the nation heath secure.

UKHSA is an executive agency, sponsored by the Department of Health and Social Care.

www.gov.uk/government/organisations/uk-health-security-agency

OGL

Corporate member of
Plain English Campaign
Committed to clearer
communication
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UKHSA supports the UN
Sustainable Development Goals

SUSTAINABLE DEVELOPMENT GOALS