



Public Health  
England

Protecting and improving the nation's health

# Hospital Norovirus Outbreak Reporting System

## User guidance

Version 1.0, updated October 2019

# About Public Health England

Public Health England exists to protect and improve the nation's health and wellbeing, and reduce health inequalities. We do this through world-leading science, research, knowledge and intelligence, advocacy, partnerships and the delivery of specialist public health services. We are an executive agency of the Department of Health and Social Care, and a distinct delivery organisation with operational autonomy. We provide government, local government, the NHS, Parliament, industry and the public with evidence-based professional, scientific and delivery expertise and support.

Public Health England  
Wellington House  
133-155 Waterloo Road  
London SE1 8UG  
Tel: 020 7654 8000  
[www.gov.uk/phe](http://www.gov.uk/phe)  
Twitter: [@PHE\\_uk](https://twitter.com/PHE_uk)  
Facebook: [www.facebook.com/PublicHealthEngland](https://www.facebook.com/PublicHealthEngland)

Prepared by: Gastrointestinal Infections Department  
For queries relating to this document, please contact: [NoroOBK@phe.gov.uk](mailto:NoroOBK@phe.gov.uk)



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## Introduction

The Hospital Norovirus Outbreak Reporting System (HNORS) is the only surveillance system capturing information on outbreaks of suspected and confirmed norovirus in English hospitals and the disruption and bed days lost throughout the year. It enables assessment and quantification of the impact and burden on hospital resources each winter and also provides context to the detection of mid-summer peaks of norovirus. These data are used in the National Official Statistics Norovirus and Rotavirus report which forms part of the Winter Media Briefing.

Infection control staff in NHS Trusts use the web-based Hospital Norovirus Outbreak Reporting Tool (HNORT) to enter data on outbreaks occurring in their Trust and can download these data for their own use. Each organisation can view summary tables of the number of outbreaks reported each month by region, by organisation in their region. There is also a more detailed summary of the 40 most recent reported outbreaks in their region.

HNORS is maintained by the National Gastrointestinal Infections Team within the Tuberculosis; Acute Respiratory, Gastrointestinal, Emerging /Zoonotic Infections; and Travel Health Division (TARGET) at PHE Colindale but staff in Field Services and all PHE centres with login details can access the system and see information on confirmed or suspected outbreaks of norovirus reported from hospitals in their region.

The system also reports information on the number of norovirus laboratory reports from the Second Generation Surveillance System (SGSS) which is curated by PHE Colindale and provides real-time information both locally and nationally.

The system can be accessed from the web address: <https://hnors.phe.gov.uk/>

To obtain login details, please email to [noroOBK@phe.gov.uk](mailto:noroOBK@phe.gov.uk):

- NHS Trust name
- NHS hospitals in that Trust
- reporter's name
- reporter's NHS email address

Data collected by HNORS is used in the Official Statistics Norovirus and Rotavirus report which is published on a Thursday morning at 09.30am on a weekly basis during the winter and a monthly basis from April to October and can be found in the 'Epidemiology and surveillance' section of the PHE norovirus webpages available at: [www.gov.uk/government/collections/norovirus-guidance-data-and-analysis](http://www.gov.uk/government/collections/norovirus-guidance-data-and-analysis)

# How to log in

1. To login to the Norovirus Outbreak Reporting Tool please select your region from the drop-down menu on the left of the homepage and click 'Log in'.

Public Health England Hospital Norovirus Outbreak Reporting Tool

Home

Navigation

- Home
- Contacts

You are not logged in to the Norovirus Outbreak Reporting Tool. Please select region to begin the login process.

Region:  
Select Region [v]

Log In

### Norovirus Outbreak Reporting Tool

Norovirus is a frequent cause of outbreaks of gastroenteritis in NHS hospitals. Reporting outbreaks through this online surveillance tool will provide:

- a timely estimate of norovirus epidemics
- improved understanding of the burden of disease
- help in the detecting the emergence of new epidemic norovirus variants

Please report all suspected and laboratory confirmed outbreaks on a regular basis. Weekly reporting is recommended.

[Definition of an outbreak](#)

To login to the Norovirus Outbreak Reporting Tool please select your region using the menu to the left and click Login. This will take you to a screen which will ask you to select the name of your NHS trust and enter the password for it. Complete the login process by hitting the **login** button. Once Logged in you can view and edit old reports or create a new one using the **Outbreak Report** links on either the side or top menu areas. Press the **select** button from this screen to create or view/edit a report. This will bring up the report page. The report can be saved at any time using the **Save** button. Any errors will be reported when the report is saved and data will not be saved in the database unless the confirmation screen is displayed.

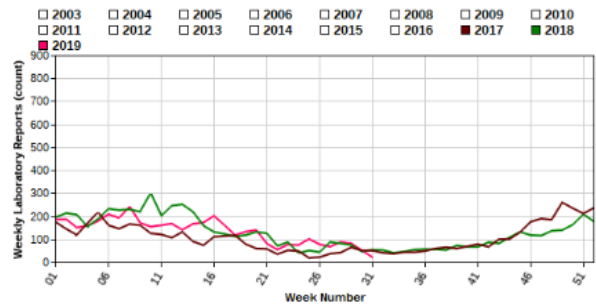
### Guidance

HNORS user guidance:  
[Guidelines for the management of norovirus outbreaks in acute and community health and social care settings](#)

### Reports

For the latest information on norovirus activity please see the "what's new" section on the PHE norovirus page:  
[PHE Norovirus Pages](#)

### Graph of norovirus laboratory reports by reporting Year/Week



2. This will take you to a screen which will ask you to select the name of your organisation from a drop-down menu, enter your password and click 'Log in'.

Public Health England Hospital Norovirus Outbreak Reporting Tool

Home

Navigation

- Home
- Contacts

Logging in to Region: LONDON

### Norovirus Outbreak Reporting Tool

Select the name of your organisation from the select box and enter the password. Click "Login" to proceed.

Organisation  
Select Organisation [v]

Password  
[ ]

Log In

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# Navigating the system

## Creating a new outbreak report

1. Once you have logged in to the system, you can view and edit old reports or create a new one by clicking on the **Outbreak Report Data** links of the menus; on either the left-hand side navigation menu or at the top of the webpage.

Public Health England Hospital Norovirus Outbreak Reporting Tool

Home **Outbreak Report Data**

**Navigation**

- Home
- Outbreak Report Data**
- Outbreaks by region and month
- Outbreaks by organisation and month
- Regional outbreaks
- Download outbreak report data
- Contacts

Logged in as: TRUST NHS Log Out

### Norovirus Outbreak Reporting Tool

**Please note:**  
This website is moving to a new link please update your existing bookmark to the new address  
<http://bioinformatics.phe.org.uk/noroOBK>

Norovirus is a frequent cause of outbreaks of gastroenteritis in NHS hospitals. Reporting outbreaks through this online surveillance tool will provide

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- improved understanding of the burden of disease
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[Definition of an outbreak](#)

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Once Logged in you can view and edit old reports or create a new one using the **Outbreak Report** links on either the side or top menu areas. Press the **select** button from this screen to create or view/edit a report. This will bring up the report page. The report can be saved at any time using the **Save** button.

Any errors will be reported when the report is saved and data will not be saved in the database unless the confirmation screen is displayed.

### Reports

For the latest information on norovirus activity please see the "what's new" section on the PHE norovirus page:  
[PHE Norovirus Pages](#)

2. To create a new outbreak report, click **'Select'** next to **'Begin New Outbreak Report'**.

Public Health England Hospital Norovirus Outbreak Reporting Tool

Home **Outbreak Report Data**

**Navigation**

- Home
- Outbreak Report Data**
- Outbreaks by region and month
- Outbreaks by organisation and month
- Regional outbreaks
- Download outbreak report data
- Contacts

Logged in as: TRUST NHS Log Out

### Norovirus Outbreak Reporting Tool

The table below gives a listing of the hospital outbreaks reported by Organisation: TRUST NHS TRUST

An Excel spreadsheet of the results can be downloaded by clicking on this link: [Download Results](#)

Click on the **Hide** or **Show** buttons to hide or display **ongoing** or **closed** outbreak reports

**Begin New Outbreak Report:**

**Ongoing Outbreaks**

**Closed Outbreaks**

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3. Once the outbreak report sheet is displayed enter the details of your outbreak. There is a **'Definition of an outbreak'** link at the top of this page which may be helpful.

Case definitions and outbreak definitions are included on pages 11 and 12 of this guidance document.

Public Health England Hospital Norovirus Outbreak Reporting Tool

Home Outbreak Report Data

Navigation

- Home
- Outbreak Report Data
- Outbreaks by region and month
- Outbreaks by organisation and month
- Regional outbreaks
- Download outbreak report data
- Contacts

Logged in as: NHS TRUST Log Out

**Norovirus Outbreak Reporting Tool**

Outbreak reported by: NHS TRUST

[Definition of an outbreak](#)

Fields indicated with a red asterisk\* must be completed.

Cells bordered in blue require a date field that must be entered using the Calendar button to the right. Date fields can be deleted by double clicking on the field and responding "OK" to the prompt. Cells bordered in green require a number to be entered.

NHS Trust: NHS TRUST

CFI Reference:

Reporter Name\*

Reporter Email

Hospital Name\*

Select Hospital

Hospital Ward Name\*

Ward Type

Number of Beds on Ward/Bay

Number of Patients Affected

Number of Staff Affected

First Date of Onset\* Click for Calendar

Last Date of Onset Click for Calendar

Ward Closed to Admissions?  Yes  No

Bay Closed to Admissions?  Yes  No

Has the outbreak been confirmed in the Laboratory?  Yes  No

Number of Specimens

Number of Positive Specimens

Ilog (Laboratory Reference)

Is the Outbreak Ongoing?  Yes  No

Comments

Save

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4. The report can be saved at any time using the 'Save' button at the bottom of the reporting sheet.

Public Health England Hospital Norovirus Outbreak Reporting Tool

Home Outbreak Report Data

Navigation

- Home
- Outbreak Report Data
- Outbreaks by region and month
- Outbreaks by organisation and month
- Regional outbreaks
- Download outbreak report data
- Contacts

Logged in as: NHS TRUST Log Out

**Norovirus Outbreak Reporting Tool**

Outbreak reported by: NHS TRUST

[Definition of an outbreak](#)

Fields indicated with a red asterisk\* must be completed.

Cells bordered in blue require a date field that must be entered using the Calendar button to the right. Date fields can be deleted by double clicking on the field and responding "OK" to the prompt. Cells bordered in green require a number to be entered.

NHS Trust: NHS TRUST

CFI Reference:

Reporter Name\*

Reporter Email

Hospital Name\*

Select Hospital

Hospital Ward Name\*

Ward Type

Number of Beds on Ward/Bay

Number of Patients Affected

Number of Staff Affected

First Date of Onset\* Click for Calendar

Last Date of Onset Click for Calendar

Ward Closed to Admissions?  Yes  No

Bay Closed to Admissions?  Yes  No

Has the outbreak been confirmed in the Laboratory?  Yes  No

Number of Specimens

Number of Positive Specimens

Ilog (Laboratory Reference)

Is the Outbreak Ongoing?  Yes  No

Comments

Save

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- Any errors will be highlighted when the report is saved, please correct the data and save again (data will not be saved in the database unless all errors are corrected and the confirmation screen is displayed). Note that you can view and edit any existing reports later, please see page 9 of this document for details.
- Data can be downloaded as an MS Excel spreadsheet by clicking on '**Download outbreak report data**' in the navigation box on the left of the screen.

Public Health England Hospital Norovirus Outbreak Reporting Tool

Home **Outbreak Report Data**

**Navigation**

- Home
- Outbreak Report Data**
- Outbreaks by region and month
- Outbreaks by organisation and month
- Regional Outbreaks
- Download outbreak report data**
- Outbreaks

Logged in as: NHS TRUST Log Out

**Norovirus Outbreak Reporting Tool**

Outbreak reported by: NHS TRUST

Definition of an outbreak

Fields indicated with a red asterisk\* must be completed.  
Cells bordered in blue require a date field that must be entered using the Calendar button to the right.  
Data fields can be deleted by double clicking on the field and responding "OK" to the prompt.  
Cells bordered in green require a number to be entered.

NHS Trust: NHS TRUST

CII Reference:

Reporter Name\*

Reporter Email

Hospital Name\*

Select Hospital

Hospital Ward Name\*

Ward Type

Number of Beds on Ward/Bay

Number of Patients Affected

Number of Staff Affected

First Date of Onset\* Click for Calendar

Last Date of Onset Click for Calendar

Ward Closed to Admissions? Yes No

Bay Closed to Admissions? Yes No

Has the outbreak been confirmed in the Laboratory? Yes No

Number of Specimens

Number of Positive Specimens

Ilog (Laboratory Reference)

Is the Outbreak Ongoing? Yes No

Comments

Save



# View or edit an existing report

## Viewing and closing ongoing outbreak reports

1. Navigate to the 'Outbreak Report Data' page, click '**Show**' under 'Ongoing Outbreaks' and click '**Edit**' for the outbreak you would like to update or close.

The screenshot shows the 'Outbreak Report Data' page. On the left is a navigation menu with 'Outbreak Report Data' selected. The main content area is titled 'Norovirus Outbreak Reporting Tool' and shows a table of ongoing outbreaks. The table has columns for 'Cfl Ref. No.', 'Hospital Name', 'Ward Name', and 'Date of First Onset'. The first row shows a report from 2019-07-25, and the 'Edit' button for this row is highlighted with a red box. Below the table is a 'Closed Outbreaks' section with a 'Show' button.

2. Make the required changes, then to complete the outbreak report select '**No**' for the 'is this outbreak ongoing?' question and save. The outbreak is now considered as being over and the record will be shown as closed.

The screenshot shows the 'Norovirus Outbreak Reporting Tool' form. The form is titled 'Definition of an outbreak' and contains various fields for reporting an outbreak. The 'Is the Outbreak Ongoing?' question is highlighted with a red box, and the 'No' radio button is selected. The 'Save' button at the bottom of the form is also highlighted with a red box.

## Editing closed outbreak reports

1. Navigate to the 'Outbreak Report Data' page, click 'Show' under 'Closed Outbreaks' and click 'Edit' for the outbreak you would like to update.

Public Health England Hospital Norovirus Outbreak Reporting Tool

Home **Outbreak Report Data**

**Navigation**

- Home
- Outbreak Report Data**
- Outbreaks by region and month
- Outbreaks by organisation and month
- Regional outbreaks
- Download outbreak report data
- Contacts

Logged in as: **NHS TRUST** [Log Out](#)

**Norovirus Outbreak Reporting Tool**

The table below gives a listing of the hospital outbreaks reported by Organisation: **NHS TRUST**  
 An Excel spreadsheet of the results can be downloaded by clicking on this link: [Download Results](#)  
 Click on the **Hide** or **Show** buttons to hide or display **ongoing** or **closed** outbreak reports

**Begin New Outbreak Report:**

**Ongoing Outbreaks**

**Closed Outbreaks**

CfI Ref. No.	Hospital Name	Ward Name	Date of First Onset		
2019- [redacted]	[redacted]	Ward [redacted]	2019-04-05	<input type="button" value="Edit"/>	<input type="button" value="Print"/>
2019- [redacted]	[redacted]	Ward [redacted]	2019-04-02	<input type="button" value="Edit"/>	<input type="button" value="Print"/>
2019- [redacted]	[redacted]	[redacted]	2019-04-01	<input type="button" value="Edit"/>	<input type="button" value="Print"/>

2. Make the required changes then save to close the outbreak.

Public Health England Hospital Norovirus Outbreak Reporting Tool

Home **Outbreak Report Data**

**Navigation**

- Home
- Outbreak Report Data**
- Outbreaks by region and month
- Outbreaks by organisation and month
- Regional outbreaks
- Download outbreak report data
- Contacts

Logged in as: **NHS TRUST** [Log Out](#)

**Norovirus Outbreak Reporting Tool**

Outbreak reported by: **NHS TRUST**  
[Definition of an outbreak](#)  
 Fields indicated with a red asterisk\* must be completed.  
 Cells bordered in blue require a date field that must be entered using the Calendar button to the right.  
 Date fields can be deleted by double clicking on the field and responding "OK" to the prompt.  
 Cells bordered in green require a number to be entered.

NHS Trust: **NHS TRUST**  
 CfI Reference: **NHS TRUST**

Reporter Name\*   
 Reporter Email   
 Hospital Name\*

Select Hospital   
 Hospital Ward Name\*   
 Ward Type   
 Number of Beds on Ward/Bay   
 Number of Patients Affected   
 Number of Staff Affected   
 First Date of Onset\*    
 Last Date of Onset    
 Ward Closed to Admissions?  Yes  No  
 Bay Closed to Admissions?  Yes  No  
 Has the outbreak been confirmed in the Laboratory?  Yes  No  
 Number of Specimens   
 Number of Positive Specimens   
 Ilog (Laboratory Reference)   
 Is the Outbreak Ongoing?  Yes  No

Comments

# Definitions

## Case definitions

A **suspected** case of norovirus:

- vomiting - two or more episodes of vomiting of suspected infectious cause\* occurring in a 24-hour period
- diarrhoea - two or more loose stools in a 24-hour period\*
- diarrhoea and vomiting - one or more episodes of both symptoms occurring within a 24-hour period \*

\*not associated with prescribed drugs or treatments and not associated with reaction to anaesthetic or an underlying medical condition or existing illness

A **confirmed** case of norovirus: a, b or c above with microbiological confirmation.

## Outbreak definitions

A **suspected** outbreak:

Two or more cases, as defined above, occurring in a functional care unit (e.g. a ward or bay) within the hospital without laboratory confirmation.

A **confirmed** outbreak:

Two or more cases, as defined above, occurring in a functional care unit (e.g. a ward or bay) within the hospital with laboratory confirmation.

NB: Suspected AND laboratory confirmed norovirus outbreaks should be reported.

**In the absence of laboratory confirmation, the following criteria can be used as a rough indicator of a norovirus outbreak:**

- average duration of illness of 12 to 60 hours
- average incubation period of 24 to 48 hours
- more than 50% of people with vomiting **and**
- no bacterial agent found

If you suspect that an outbreak was caused by norovirus, but it does not strictly meet these criteria, it should still be reported. Please report each affected ward separately, for example, if there are cases on 3 wards or care units report 3 separate outbreaks, unless it concerns transfers of patients suspected or known to be infected with norovirus and no new infections occurred on the ward or unit the symptomatic patients were transferred to. An outbreak is considered over when there have been no new cases for 7 days. For example, if there are a series of cases, then a break for 10 days followed by more cases, please report 2 separate outbreaks.

An outbreak will be considered to be over if there are no new cases arising after 7 days after the last case was considered to be symptom free.

### Bed days lost

The calculation of bed days lost is a simple sum of the number of unused beds for each day when the ward or bay was closed. So, if you have a ward closed for 3 days with 3 empty beds each day of closure that would equate to  $3 \times 3 = 9$  bed days lost.

We understand that it isn't always easy to know how many beds remained empty, in which case just leave it blank.

### Date of onset

Date of onset of symptoms in the first suspected case, whether vomiting or diarrhoea.

### Last date of onset

Date of onset of symptoms in the last suspected case, whether vomiting or diarrhoea.

## FAQs

- 1. What should I do if I am unable to log into HNORS?** If you do not know or have forgotten your password or login details, please email [NoroOBK@phe.gov.uk](mailto:NoroOBK@phe.gov.uk) or contact Amy Douglas on 0208 327 6854.
- 2. Do you require reports from independent hospitals or the private sector?** No thank you, we only collect data from NHS Trusts.
- 3. Do you require reports from care homes?** We do not collect data from care homes, but we do collect data from NHS community hospitals.
- 4. What do I do if the name of my Trust has changed?** Please contact the national Norovirus Surveillance Team ([NoroOBK@phe.gov.uk](mailto:NoroOBK@phe.gov.uk)) with the details of the new Trust name and the hospitals associated with that Trust.
- 5. The hospital I need to enter data for is not on the system?** Please contact the national Norovirus Surveillance Team ([NoroOBK@phe.gov.uk](mailto:NoroOBK@phe.gov.uk)) with the hospital details (hospital name and Trust name) and we will add it onto the system.
- 6. What does 'number of specimens' mean?** This is the total number of specimens (usually stool samples) taken from each symptomatic patient or member of staff and sent for norovirus testing by your own laboratory.
- 7. If there are multiple wards involved in one outbreak, should I report them separately or as one?** Outbreaks of suspected or confirmed norovirus should be reported for each ward individually, unless the outbreak concerns the exact same patients who have been transferred between wards and there is no indication of onward transmission of infection to other patients within the ward to which the patients were transferred.
- 8. How can I download data to carry out my own analyses?** The data you have entered can be downloaded as an excel spreadsheet by clicking on 'Download outbreak report data' in the Navigation box on the left-hand side of the page. If you have any problems downloading the data, please email the national Norovirus Surveillance Team at [noroOBK@phe.gov.uk](mailto:noroOBK@phe.gov.uk).

**9. How can I get an account created?** To receive login details, please email the following to [noroOBK@phe.gov.uk](mailto:noroOBK@phe.gov.uk): NHS Trust name, hospitals within that Trust and reporter's name.

**10. Do all fields have to be completed or are some fields more important than others?**

There are some compulsory fields (Reporter Name, Hospital Ward Name, Hospital Name, Numbers of Patients/Staff Affected, Date of Onset) which have to be completed in order for the report to be saved on the system. These fields constitute the minimum information needed for effective surveillance of suspected or confirmed norovirus outbreaks in hospitals, however we are aiming to record the impact of norovirus outbreaks so additional information is requested and the more complete the data entry is, the more accurate our outputs will be.

Even if some data are not known at the time the report is started, it can always be updated at a later stage, we would rather an outbreak was reported with incomplete data than not being reported at all; so please complete the form with the information you have.

**11. What is meant by 'ward or bay closure'?** If a ward is closed to new admissions this would count as a ward closure. However, not all outbreaks result in total ward closure, if a bay or several bays are closed this can be recorded as bay closure. If bays are closed or re-opened in a staggered approach, the closure date will be the date the first bay was closed, and the re-opening date will be the date the last bay was opened (i.e. the ward is now fully operational).

**12. How many cases constitute an outbreak?** If you have 2 or more cases of diarrhoea and vomiting which are confirmed or suspected to be due to norovirus and the outbreak fits the criteria outlined in the [definitions](#) section above, the outbreak should be reported.

**13. What should I do if my outbreak is not laboratory confirmed?** If you don't have laboratory confirmation this can be added at a later date; any outbreaks of diarrhoea and vomiting suspected to be caused by norovirus ([as described above](#)) should be reported. Any reported outbreak which laboratory results indicate is caused by another infectious organism can be removed from the system at a later date once this confirmation is received.

**14. Do cases need to meet all the suggested symptom or outbreak criteria?** Cases do not have to meet all the suggested [criteria](#) to define an outbreak; these are provided as guidelines only.

**15. How is bed days lost calculated?** Please see our bed days lost [definition](#).

## Suggestions

We are constantly striving to improve the system and its outputs; if you have any suggestions for improving data entry or any other ideas, please email:

[noroOBK@phe.gov.uk](mailto:noroOBK@phe.gov.uk)