

Serial number: 2024/051

Date: 28/11/2024

Event: Increased norovirus activity and emergence of GII.17 noroviruses in England during 2024

Notified by: Gastrointestinal Infections, Food Safety and One Health (GIFSOH) Division

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Contact:

- <u>NoroOBK@ukhsa.gov.uk</u>: enquiries regarding norovirus surveillance, epidemiology and the Hospital Norovirus Outbreak Reporting System (HNORS)
- <u>stuart.beard@ukhsa.gov.uk</u> or <u>cristina.celma@ukhsa.gov.uk</u> enquiries regarding the submission of norovirus-positive samples to the Enteric Virus Unit (EVU) for genotyping

IRP Level: Routine

Incident Lead: N/A

Instructions for Cascade

- **Devolved Administrations public health agencies** to cascade to Medical Directors and other DA teams as appropriate to their local arrangements
- Regional Deputy Directors UKHSA to cascade to Directors of Public Health
- **Directors of Public Health** to Adult Social Care teams, Directors of Adult Social Care and community Infection Prevention and Control
- UKHSA microbiologists to cascade to non-UKHSA labs (NHS labs and private), to NHS Trust infection leads and to Lead Virology Clinical Scientists in NHS laboratories
- NHS labs/NHS infection leads/NHS microbiologist/NHS infectious disease specialists to cascade to Infection prevention and control, Emergency and Acute medicine
- Royal College of General Practitioners

Summary:

Norovirus outbreaks often occur in closed settings such as nurseries, schools, care homes and hospitals, where they cause considerable disruption and contribute to NHS winter pressures every year.

Norovirus activity has remained high into the start of the 2024/2025 season. While some of the increased reporting may be attributable to changes in health care-seeking behaviour and changes in diagnostic laboratory testing methodology with increased adoption of PCR multiplex technology in frontline testing laboratories,^(4, 5) the usual increase in reporting seen each autumn/winter has started earlier than in previous seasons

In late spring 2024, genogroup 2, genotype 17 (GII.17) norovirus emerged with a concurrent decrease in the GII.4/Sydney/2012 variants which had dominated since the 2012/13 season⁽¹⁾. At present there is no indication that GII.17 causes more severe illness, although investigations are ongoing,



In the context of the unusual activity already occurring it is important to ensure sufficient norovirus-positive samples are referred for further characterisation to enable effective molecular surveillance this autumn/winter.

Background and Interpretation:

Norovirus infection causes acute gastroenteritis and is normally self-limiting, although vulnerable groups such as young children, older adults and immunocompromised people are at higher risk of severe and prolonged illness which can lead to dehydration and may require hospitalisation.

For national norovirus surveillance to be effective, timely reporting of laboratory confirmed norovirus cases and suspected/confirmed norovirus outbreaks across all settings to the relevant national surveillance systems is crucial. Additionally, genotyping of norovirus samples by the Enteric Virus Unit (EVU) enables UKHSA to monitor the diversity of circulating noroviruses, such as GII.17.

So far during the 2024/2025 season, starting in July (week 27, 2024) the weekly count of norovirus laboratory reports has been consistently higher (range: +78.8% to +187.2%) than the 5-season average calculated from the same period during the 5 previous seasons of 2016/2017, 2017/2018, 2018/2019, 2022/2023 and 2023/2024, (excludes seasons impacted by the COVID-19 pandemic). These data are published weekly as the Official Statistic National Norovirus and Rotavirus Report. Norovirus laboratory reports during weeks 45 and 46 of 2024 were 98.6% higher than the 5-season average. The number of suspected and confirmed norovirus outbreaks reported to the Hospital Norovirus Outbreak Reporting System (HNORS) during the 2024/2025 season is also 19.4% higher than the 5-season average.

Standard Infection Prevention and Control (IPC) measures such as those outlined in the NHS National IPC Manual for England⁽²⁾ are effective at limiting the spread of norovirus infection to others and preventing further outbreaks. The Healthcare Infection Society has also published guidelines for the management of norovirus outbreaks in acute and community health and social care settings.⁽³⁾

Implications & Recommendations for UKHSA Regions

We ask UKHSA Health Protection Teams (HPTs) and local IPC leads in health and social care settings to remind colleagues of the importance of following the IPC procedures and ensure all staff are up to date with training.

The standard advice and public health messaging regarding how to limit the spread of infection and avoid dehydration should be shared⁶. For example, UKHSA guidance on how to prevent onward transmission is available here: <u>Norovirus: What to do if you catch it and helping to stop the spread – UK Health Security Agency</u>.

HPTs should continue to investigate and record outbreaks via CIMS according to local procedures and ensure that the sample submission E6 form is annotated with the necessary information to identify community outbreak samples if these are recommended (with the ILOG or CIMS number).

Implications & Recommendations for UKHSA sites and services

UKHSA regional public health laboratories are requested to refer norovirus-positive samples for genotyping at EVU.

UKHSA regional public health laboratories should continue to:

1. Refer up to 3 norovirus-positive faecal or vomit samples associated with any one hospital or community outbreak (e.g. care home, nursery, school etc) - select samples with the highest viral load/titre

AND

2. Refer up to 5 norovirus-positive faecal or vomit samples per week from sporadic norovirus cases- either not associated with a specific outbreak or where it



is unknown if they are associated with a hospital or community outbreak and should be randomly selected.

All samples sent to EVU will be processed free of charge and should be referred with a completed $\underline{E6 \text{ form}}$ including as much information as possible to identify outbreak samples where applicable (i.e. ILOG or CIMs number).

Implications & Recommendations for NHS and Diagnostic laboratories

Frontline clinicians are advised to continue to confirm suspected cases/outbreaks with testing as per local procedures and provide advice for norovirus prevention to patients and visitors in hospitals, especially those in vulnerable groups such as elderly people, infants and anyone who is immunocompromised.

NHS diagnostic laboratories should continue to test for norovirus according to local requirements/ testing algorithms and report positive results to UKHSA's second generation surveillance system (SGSS). UKHSA requests all NHS laboratories currently testing for norovirus to refer up to 2 norovirus-positive samples per week to EVU, Colindale - select samples confirmed by PCR with the highest viral load/titre.

All samples sent to EVU will be processed free of charge, they can be batched and sent monthly (if weekly is not feasible) and should be referred with a completed $\underline{E6}$ form including as much information as possible to identify outbreak samples where applicable (i.e. ILOG or CIMs number).

Suspected and confirmed outbreaks of norovirus should continue to be investigated according to local procedures and IPC leads in Acute NHS Trusts should report outbreaks via the <u>Hospital</u> <u>Norovirus Outbreak Reporting System</u> (HNORS). Please contact GIFSOH at <u>NoroOBK@ukhsa.gov.uk</u> for assistance logging in.

Implications and recommendations for Local Authorities

Local authorities and Environmental Health Teams should continue to report and investigate outbreaks of norovirus as per local procedures.

References/ Sources of information

- Chhabra P, Wong S, Niendorf S, Lederer I, Vennema H, Faber M, Nisavanh A, Jacobsen S, Williams R, Colgan A, Yandle Z, Garvey P, Al-Hello H, Ambert-Balay K, Barclay L, de Graaf M, Celma C, Breuer J, Vinjé J, Douglas A. Increased circulation of GII.17 noroviruses, six European countries and the United States, 2023 to 2024. Euro Surveill. 2024 Sep;29(39):2400625. doi: 10.2807/1560-7917.ES.2024.29.39.2400625.
- 2. NHS England, National infection prevention and control manual (NIPCM) for England available here: <u>https://www.england.nhs.uk/national-infection-prevention-and-control-manual-nipcm-for-england/</u>
- 3. Healthcare Infection Society, Guidelines for the management of norovirus outbreaks in acute and community health and social care settings, available here: <u>Norovirus guidelines</u> <u>| Healthcare Infection Society Healthcare Infection Society</u>
- A. Douglas, F.G. Sandmann, D.J. Allen, C.C. Celma, S. Beard, L. Larkin, Impact of COVID-19 on national surveillance of norovirus in England and potential risk of increased disease activity in 2021, Journal of Hospital Infection, https://doi.org/10.1016/j.jhin.2021.03.006
- 5. O'Reilly KM, Sandman F, Allen D, Jarvis CI, Gimma A, Douglas A, Larkin L, Wong KLM, Baguelin M, Baric RS, Lindesmith LC, Goldstein RA, Breuer J, Edmunds WJ. Predicted norovirus resurgence in 2021-2022 due to the relaxation of nonpharmaceutical interventions associated with COVID-19 restrictions in England: a mathematical modelling study. BMC Med. 2021 Nov 9;19(1):299. doi: 10.1186/s12916-021-02153-8.
- 6. UK Health Security Agency: <u>D and V-Norovirus Google Drive</u>