**Diarrhoea and vomiting in educational settings in Cumbria during periods of COVID-19 transmission.**

Viral infections that cause diarrhoea and vomiting, such as Norovirus, are extremely common in children and young people. Norovirus commonly causes outbreaks in educational settings, especially over the winter months.

Diarrhoea, nausea and vomiting can also be symptoms of COVID-19 (although this is not common). This can sometimes make it difficult to differentiate COVID-19 infection from other common viral infections, such as Norovirus, especially when local case rates of COVID-19 are high.

This document provides information for schools about Norovirus, and about the approach that should be taken if an outbreak of diarrhoea and vomiting is suspected within an educational setting.

**What is Norovirus?**

Norovirus is a common stomach bug that causes vomiting and diarrhoea. It is sometimes known as the "winter vomiting bug” because it is more common in winter. However, you can catch the virus at any time of the year.

**What are the symptoms of Norovirus?**

The symptoms of Norovirus begin around 12-48 hours after becoming infected. The main symptoms are nausea, vomiting (which can be forceful or projectile) and diarrhoea, but symptoms can also include a high temperature, abdominal pain, a headache, and aching limbs. It can be unpleasant, but it is usually a mild illness. Symptoms usually last for between one and three days.

**How does Norovirus spread?**

Norovirus is highly infectious and is easily transmitted through:

* close contact with someone with norovirus,
* touching surfaces or objects that have the virus on them, then touching your mouth,
* eating food that's been prepared or handled by someone with norovirus.

People are generally infectious until they are symptom-free for at least 48 hours.

**How can infection with Norovirus be prevented?**

Children and adults with diarrhoea or vomiting should stay off school or work until 48 hours after symptoms have stopped and they are well enough to return.

Good hygiene measures are central to preventing the spread of Norovirus. These include:

* Frequent handwashing with soap and water, especially after using the toilet (or changing nappies), before eating, preparing, or handling food and after touching pets and animals. Note that alcohol hand gels do not kill norovirus.
* Regular cleaning of surfaces.
* Prompt washing and disinfection of areas or items (such as clothes and toys) contaminated by faeces or vomit.

**How can Norovirus be treated?**

People with Norovirus can usually treat themselves at home. The most important thing is to rest and have lots of fluids to avoid dehydration. People will usually start to feel better in one to three days.

General advice about how to treat the symptoms of diarrhoea and vomiting is available from the nhs.uk webpages: <https://www.nhs.uk/conditions/diarrhoea-and-vomiting/>. The webpage also contains advice about when to seek further medical advice or attention.

**What action should be taken if an outbreak of diarrhoea and vomiting is suspected in an educational setting?**

An outbreak or incident can be defined as:

* an incident in which 2 or more people experiencing a similar illness are linked in time or place
* a greater than expected rate of infection compared with the usual background rate for the place and time where the outbreak has occurred

This would include 2 or more people (e.g., staff or pupils) with diarrhoea or vomiting who share the same classroom, communal areas or who take part in the same activities.

If an outbreak is suspected, you should consult the national guidance ([Health protection in schools and other childcare facilities - GOV.UK (www.gov.uk)](https://www.gov.uk/government/publications/health-protection-in-schools-and-other-childcare-facilities), and inform your local Health Protection team. A checklist for initial actions that should be considered in educational settings can be found in Appendix 1 for information. These should be discussed with the Health Protection team.

Please contact the Health Protection team (Cumbria and Lancashire) on 0344 225 0562 or email cl.hpt@phe.gov.uk.

**Should people with diarrhoea and vomiting be tested for COVID-19?**

Anyone who has one or more of the 3 main symptoms of COVID-19 (a high temperature, continuous cough, changes / loss of sense of taste or smell), should arrange to have a COVID-19 PCR test and stay at home until the result is known.

If the pupil or staff member has diarrhoea or vomiting, but **none** of the 3 main symptoms of COVID-19, **and** the setting has reached the threshold for extra action outlined in the national [Contingency Framework](https://www.gov.uk/government/publications/coronavirus-covid-19-local-restrictions-in-education-and-childcare-settings/contingency-framework-education-and-childcare-settings)[[1]](#footnote-1), the following questions should be asked:

* Within 10 days of the symptoms starting, has the symptomatic person been a known close contact of a positive case of COVID-19?
* Within 10 days of the symptoms starting, has the symptomatic person been a member of a class or group where there have been multiple cases of COVID-19?

If the answer to either of these questions is ‘yes’, the risk of COVID-19 infection should be considered high, and affected pupils (aged 5 years and over) or staff members could be asked to obtain a PCR test (and isolate pending the result). It may be sensible to delay the PCR test until after any nausea or vomiting has passed to avoid making the symptoms worse.

The following groups are exempt from this advice and should **not** have a PCR test, unless they develop any new symptoms of COVID-19 (a high temperature, continuous cough, changes / loss of sense of taste or smell):

* Children and staff who have already tested positive for COVID-19 in the past 90 days
* Children aged 4 years and under.

A flow chart is included in Appendix 2. However, if educational settings require support or advice about this, they should contact the Education IPC team at the usual email address (EducationIPC@cumbria.gov.uk). Special education needs schools and residential schools can also contact the local Health Protection team for additional advice about issues relating to COVID-19 on 0344 225 0562 (option 0 then option 2).

**Further information**

Further information about Norovirus can be found on the NHS website: [Norovirus (vomiting bug) - NHS (www.nhs.uk)](https://www.nhs.uk/conditions/norovirus/).

Further information for affected staff and pupils about how to self-treat diarrhoea and vomiting, and when to seek further medical support, can be found here: [Diarrhoea and vomiting - NHS (www.nhs.uk)](https://www.nhs.uk/conditions/diarrhoea-and-vomiting/).

Further information on managing infectious diseases (including diarrhoea and vomiting) in schools and other childcare settings can be found here: <https://www.gov.uk/government/publications/health-protection-in-schools-and-other-childcare-facilities>

**Appendix 1: Diarrhoea and vomiting outbreak: initial checklist for educational settings[[2]](#footnote-2)**

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| If an outbreak is suspected, consult the national guidance ([Health protection in schools and other childcare facilities - GOV.UK (www.gov.uk)](https://www.gov.uk/government/publications/health-protection-in-schools-and-other-childcare-facilities), and inform your local Health Protection team. Inform your school nurse and OFSTED if applicable. |  |
| Children and adults with diarrhoea or vomiting should be excluded until 48 hours after symptoms have stopped and they are well enough to return. |  |
| Ensure that liquid soap and paper hand towels are available |  |
| Good hand hygiene should be recommended for all pupils and staff. Frequent hand washing should be encouraged, especially at the start of the school day, after using the toilet (or changing nappies), before and after eating, and after touching pets and animals. Hands should be washed with soap and warm water (note that alcohol hand gels don’t kill norovirus) and dried with disposable paper towels. |  |
| Introduce regular surface cleaning (twice daily as a minimum) and follow through with an appropriate disinfectant (such as a 0.1% sodium hypochlorite (bleach based) solution, used in accordance with manufacturer’s instructions). Special attention should be given to toilets, frequently touched surfaces e.g., handles and taps and any special equipment and play areas. Ensure that all staff/contractors involved in cleaning are aware of, and are following, the guidance. |  |
| Disposable aprons and gloves should be available (i.e., non-powdered latex/synthetic vinyl gloves & aprons). These should be worn when staff are in contact with people who are unwell, when changing nappies or toileting a child and during cleaning. Staff should wash their hands after the removal of gloves or aprons.  |  |
| An appropriate waste disposal system should be in place for dealing with infectious waste. |  |
| All spillages of faeces and vomit should be cleaned up immediately, wearing appropriate PPE. The area should then be closed/sealed off for a minimum of two hours after the incident if possible.Paper towels can be used initially to soak up the spillage, and then the area should be washed with a detergent solution. This should be followed through with an appropriate disinfectant in accordance with the manufacturer’s instructions. Contaminated items not suitable for chemical disinfection should be laundered in a hot wash (60oC) with detergent for the maximum cycle. Carpets and furnishings that cannot be laundered should be cleaned with detergent and warm water and then steam cleaned.  |  |
| Contaminated clothing should be placed in a plastic bag and sent home with the child with advice for the parent on how to launder it. The clothing should be washed separately in a washing machine on a hot wash (60oC). |  |
| Clean and disinfect hard toys daily (with detergent and water followed by an appropriate disinfectant). Limit and stock rotate toys. |  |
| Suspend use of soft toys plus water/sand play and cookery activities during outbreak |  |
| Segregate infected linen (and use dissolvable laundry bags where possible) |  |
| Visitors to the school should be postponed. If their visit is necessary, then they should be informed of the outbreak and any control measures in place. |  |
| New children should not join the institution during the outbreak. |  |
| Keep staff working in dedicated areas (restrict food handling if possible). Inform the Health Protection team of any affected food handlers. Staff movements between classrooms and joint class activities in school, e.g., assembly, should be restricted where possible. |  |
| If agency staff are working within the setting, inform the agency of the outbreak. Staff should be advised against working in other settings during the outbreak. |  |
| Discuss any planned events with your local Health Protection team |  |

**Appendix 2: Flowchart for managing diarrhoea and vomiting in educational settings when the threshold for extra action has been met (see above)**

**START**

Individual should follow [stay at home guidance](https://www.gov.uk/government/publications/covid-19-stay-at-home-guidance/stay-at-home-guidance-for-households-with-possible-coronavirus-covid-19-infection)and arrange [**PCR** testing](https://www.gov.uk/get-coronavirus-test).

Follow guidance for managing confirmed and suspected cases of COVID-19

Individual is aged 5 years or older, AND has not tested positive for COVID-19 in the past 90 days

Individual is under 5 years old OR has tested positive for COVID-19 in the past 90 days

High risk of COVID-19

Ask individual to consider a PCR test (once nausea and vomiting have stopped if applicable) and to isolate pending the results.

PCR test negative

PCR test positive.

Return to school if all the following criteria are met:

* The individual has not had diarrhoea or vomiting for 48 hours AND
* They have not developed one or more of the 3 main symptoms of COVID-19 AND
* They feel well enough

Individual should follow the [stay at home guidance](https://www.gov.uk/government/publications/covid-19-stay-at-home-guidance/stay-at-home-guidance-for-households-with-possible-coronavirus-covid-19-infection)and complete their 10-day isolation period.

Educational settings should follow the guidance and flowchart for managing cases of COVID-19.

**If an outbreak of an infection other than COVID-19 (such as Norovirus) is suspected, contact your local Health Protection team.**

Low risk of COVID-19

Identify if the individual is at high risk of having COVID-19

Person also has any of:

* a new continuous cough,
* a high temperature,
* a loss of, or change in their normal sense of taste or smell.

Person (pupil or staff member) has symptoms of diarrhoea or vomiting

1. Advise exclusion from the setting until 48 hours after the diarrhoea and vomiting has stopped and the individual feels well enough to return.
2. Identify whether they have tested positive for COVID-19 within the past 90 days

NO

YES

1. 5 children, pupils, students, or staff, who are likely to have mixed closely, test positive for COVID-19 within a 10-day period OR 10% of children, pupils, students or staff who are likely to have mixed closely test positive for COVID-19 within a 10-day period. For special schools, residential settings, and settings that operate with 20 or fewer children, pupils, students, and staff at any one time: 2 children, pupils, students and staff, who are likely to have mixed closely, test positive for COVID-19 within a 10-day period. [↑](#footnote-ref-1)
2. These measures should be implemented in addition to any required COVID-19 infection control measures [↑](#footnote-ref-2)