



Date: November 22, 2019

To: Colorado School Nurses

From: Colorado Department of Public Health and Environment (CDPHE) - Communicable Disease Branch - (main phone number: 303-692-2700)

Subject: **Increase in reports of gastrointestinal illness in schools**

The Colorado Department of Public Health and Environment (CDPHE) and local public health agencies (LPHAs) have noted an increase in reports of gastrointestinal illness that is consistent with norovirus (vomiting and/or diarrhea lasting 1-2 days) in group settings around the state, including schools and child care facilities. Norovirus is a common cause of gastrointestinal symptoms. This letter contains information about norovirus and outbreak control and prevention measures for schools and child care facilities.

Please work with your LPHA if any schools or child care centers in your district have increases in student illnesses or an outbreak. All outbreaks, regardless of setting, cause, or symptoms, are reportable to public health. Local public health agencies work with affected school districts to recommend prevention and control measures. [Find Your LPHA](#)

General information about norovirus:

Noroviruses cause the “stomach flu,” or “stomach bug,” which is different from influenza. Outbreaks are common (especially in late fall and winter months in group settings), and require immediate attention to prevent spread.

Incubation period (amount of time between being exposed and symptom onset): 12 - 48 hours

Duration of symptoms (amount of time illness lasts): 12 - 60 hours

Symptoms: Sudden onset of nausea, vomiting, diarrhea (not bloody), abdominal cramps, low-grade fever, headache, chills, muscle aches, and/or malaise. Dehydration can occur and can be severe.

Transmission/Communicability: Norovirus is extremely contagious and highly concentrated in diarrhea and vomit of infected people. The virus is spread primarily person-to-person through the fecal-oral route] (infected person does not wash hands properly after using the bathroom and then touches items/food that will be put in someone’s mouth). It can also spread through the air (when someone throws up) and by touching contaminated surfaces/objects and then

touching your mouth or items you put in your mouth (food, cigarettes, gum, etc.). People are most contagious when they begin feeling ill until diarrhea stops, but can be contagious for 48+ hours after feeling better.

Treatment: There is no antiviral medication for treatment or vaccine for prevention. Treatment consists of replacing fluids and electrolytes to prevent dehydration.

General epidemiology of norovirus outbreaks:

On average, around 200 outbreaks of suspected or confirmed norovirus are reported in Colorado each year. There are likely many more outbreaks occurring that are not reported to public health. Outbreak reports increase in November, with peak occurrence in December and January. The majority of these outbreaks occur in group settings, such as health care facilities, schools, and child care centers. Family and group gatherings during the holidays can propagate the spread of the virus.

As of this date, we are not aware of a new strain of norovirus circulating in Colorado or the US.

Control measures for norovirus outbreaks:

- **EXCLUDE ill students:** Work with your local public health agency to determine how long ill students should be excluded. Generally, ill students should be excluded until at least 48 hours after diarrhea and vomiting have ceased, even if they are feeling well sooner.
- **EXCLUDE ill staff:** Work with your local public health agency to determine how long ill staff should be excluded. Generally, ill staff, especially food handlers, should be excluded from work until at least 48 hours after diarrhea and vomiting have ceased, even if they are feeling well sooner.
- **Cleaning and disinfecting:** Noroviruses are very hardy and can survive relatively high levels of chlorine. Increase the frequency of disinfection of restrooms and commonly shared or touched items (tables, door knobs, faucets, chairs, computers, keyboards, toys, etc). To effectively disinfect areas or items, use a solution of household chlorine bleach (one cup of bleach per nine cups of water) or an EPA-approved disinfectant with specific activity against norovirus. A list of EPA-registered disinfectants effective against norovirus is available on the EPA's website under "List G: EPA's Registered Antimicrobial Products Effective Against Norovirus" (<https://www.epa.gov/pesticide-registration/list-g-epas-registered-antimicrobial-products-effective-against-norovirus>). For help mixing disinfectants, refer to the Bleach Dilution Calculator Tool in the online norovirus resources folder: https://drive.google.com/drive/u/0/folders/1Qh5GoMK9akk_y0hOV1SyAKrrz-6840_0. This folder also contains detailed instructions on cleaning up vomiting or diarrheal accidents.

- **Hand washing:** Review the importance of hand washing with students and staff. Remind children and staff to thoroughly wash their hands after using the restroom, before eating, and before handling any food for others. Also, remind everyone that hand washing must be done with soap and warm water, washing all surfaces of the hands for at least 20 seconds; hand sanitizer is not an acceptable substitute for washing hands, but can be used to supplement frequent hand washing.
- **Parent/guardian notification:** Consider sending a letter home to parents/guardians about the situation. Template letters can be found in this folder:
https://drive.google.com/drive/u/0/folders/1Qh5GoMK9akk_y0hOV1SyAKrrz-6840_0

More information/resources:

Contact your [local public health agency](#), or CDPHE at 303-692-2700.

Additional information on norovirus: www.cdc.gov/norovirus

Resources for responding to a norovirus outbreak:

https://drive.google.com/drive/u/0/folders/1Qh5GoMK9akk_y0hOV1SyAKrrz-6840_0

Guidelines on the management of infectious diseases in schools and child care facilities:

<https://www.colorado.gov/pacific/cdphe/infectious-disease-guidelines-schools-and-childcare-settings>