



<http://www.cdhd.wa.gov>

January 2014

CHELAN-DOUGLAS PUBLIC HEALTH

Current Conditions of Interest

TO REPORT A NOTIFIABLE CONDITION:

Phone (509) 886-6400

Fax (509) 886-6478

After hours call:

(509) 886-6499

"Always Working for a Safer and Healthier Community"

Norovirus

<http://www.cdc.gov/norovirus/hcp/clinical-overview.html>

Noroviruses were previously called Norwalk-like viruses. They are a group of non-enveloped, single-stranded RNA viruses that cause acute gastroenteritis. Noroviruses belong to the family Caliciviridae that includes sapoviruses, which also causes acute gastroenteritis.

Currently, there are six recognized norovirus genogroups. Three of the genogroups (GI, GII, and GIV) affect humans. More than 25 different genotypes have been identified within these three genogroups.

Since 2002, variants of the GII.4 genotype have been the most common cause of norovirus outbreaks.

Symptoms

A person usually develops symptoms of gastroenteritis 12 to 48 hours after being exposed to norovirus.

Typical symptoms—

- acute-onset of vomiting
- watery, non-bloody diarrhea with abdominal cramps
- nausea

Some people may have low-grade fever, headaches, and myalgias (body aches).

Dehydration is the most common complication, especially in young children and the older adults, that may require medical care.

Symptoms of gastroenteritis usually last 24 to 72 hours. People usually recover completely without any serious long-term problems. But, norovirus illness can be serious, especially for young children, older adults, and people with compromised immune systems. This can lead to severe dehydration, hospitalization, and death.

Not everyone who is exposed to norovirus will get infected. Some people who get norovirus infection may not have symptoms, but they may still shed the virus in their stool.

Immunity

Since there are many different types of noroviruses, people can get infected many times during their lifetime. It is possible to develop immunity to specific types. But, it is not known how long immunity lasts. This may explain why so many people of all ages get infected during norovirus outbreaks. Also, whether someone is susceptible to norovirus infection or not may be determined in part by his or her genes.

In the last two months, The Chelan-Douglas Health District has received reports of GI illness outbreaks from 2 separate nursing facilities.



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Norovirus cont.

Transmission

Noroviruses are highly contagious. A person with norovirus infection can shed billions of norovirus particles. But, it only takes as few as 18 viral particles to infect another person.

Primarily, noroviruses are spread through—

- close personal contact with an infected person, or
- fecal-oral route when a person consumes contaminated food or water.

The virus can also spread through touching contaminated surfaces, objects, or substances.

It is possible for norovirus to spread through aerosolized vomit that lands on surfaces or enters a person's mouth then he or she swallows it. There is no evidence showing that people can get infected by breathing in the virus.

During outbreaks, norovirus can spread in several different ways. For example, a person who is infected by eating contaminated food can spread the virus to household members through direct contact or by touching and contaminating objects and surfaces.

It is possible for an infected person to shed norovirus before they have symptoms. However, people usually begin shedding the virus once they have symptoms. This may continue for 2 weeks or more after they recover. But, it is not known whether they are still contagious.

More norovirus information for health care providers

[Laboratory Diagnosis & Treatment](#)

[Preventing Norovirus Infection](#)

Resources and Related Pages

[CDC Expert Commentary: Norovirus - Protecting the Vulnerable](#)  (Video 4:26) Nearly two-thirds of norovirus outbreaks occur in nursing homes. Watch this video and learn how to help protect your most vulnerable patients.

[Guideline for the Prevention and Control of Norovirus Gastroenteritis Outbreaks in Healthcare Settings, 2011](#)

[Norovirus in Healthcare Settings](#)

[Reporting and Surveillance for Norovirus](#)

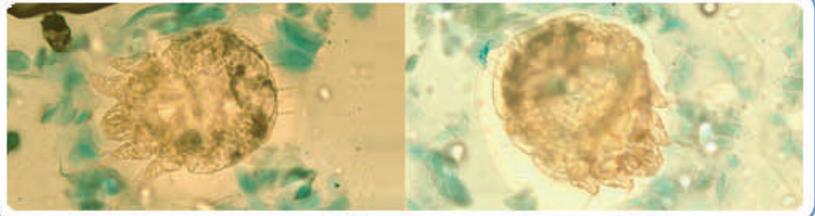
[Responding to Norovirus Outbreaks](#)



Scabies

<http://www.cdc.gov/parasites/scabies/index.html>

Human scabies is caused by an infestation of the skin by the human itch mite (*Sarcoptes scabiei* var. *hominis*). The adult female scabies mites burrow into the upper layer of the skin (epidermis) where they live and deposit their eggs. The microscopic scabies mite almost always is passed by direct, prolonged, skin-to-skin contact with a person who already is infested. An infested person can spread scabies even if he or she has no symptoms. Humans are the source of infestation; animals do not spread human scabies.



Scabies is a common condition found worldwide; it affects people of all races and social classes. Scabies can spread easily under crowded conditions where close body and skin contact is common. Institutions such as nursing homes, extended-care facilities, and prisons are often sites of scabies outbreaks. Child care facilities also are a common site of scabies infestations.

When a person is infested with scabies mites the first time, symptoms usually do not appear for up to two months (2-6 weeks) after being infested; however, an infested person still can spread scabies during this time even though he/she does not have symptoms.

If a person has had scabies before, symptoms appear much sooner (1-4 days) after exposure. An infested person can transmit scabies, even if they do not have symptoms, until they are successfully treated and the mites and eggs are destroyed.

Diagnosis of a scabies infestation usually is made based upon the customary appearance and distribution of the the rash and the presence of burrows.

Whenever possible, the diagnosis of scabies should be confirmed by identifying the mite or mite eggs or fecal matter (scybala). This can be done by carefully removing the mite from the end of its burrow using the tip of a needle or by obtaining a skin scraping to examine under a microscope for mites, eggs, or mite fecal matter (scybala). However, a person can still be infested even if mites, eggs, or fecal matter cannot be found; fewer than 10-15 mites may be present on an infested person who is otherwise healthy.

Resources for Health Professionals

[Medications](#)

[Institutional Settings](#)