



# How to Control NOROVIRUS Outbreaks in the Workplace

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## How the NOROVIRUS is Spread

According to the U.S. *Centers for Disease Control and Prevention* (CDC), NOROVIRUSES (genus NOROVIRUS, family Caliciviridae) are a group of related, single-stranded RNA, non-enveloped viruses that cause acute gastroenteritis in humans. NOROVIRUS was recently approved as the official genus name for the group of viruses provisionally described as "Norwalk-like viruses" (NLV). Currently, human NOROVIRUS belong to one of three NOROVIRUS genogroups (GI, GII, or GIV), each of which is further divided into >25 genetic clusters.

Infections related to the NOROVIRUS are typically spread from person to person through touching, kissing, hugging, sneezing and coughing. However, disease causing organisms can also be passed along by deposits left [by infected persons] on environmental *shared-contact* surfaces, such as doorknobs, keyboards, pens, touch-pads, faucet handles and the like. Once these deposits are picked-up, disease-causing organisms can be introduced to the body by the touching of eyes, nose and mouth. In addition, aerosols (in the form large and small droplets) created by coughing or sneezing can be discharged into the air (traveling up to six feet) where they are inhaled or settle-out on shared-contact surfaces.

NOROVIRUS infections result in severe intestinal distress. The average incubation period for NOROVIRUS-associated gastroenteritis is 12 to 48 hours, with a median of approximately 33 hours. Illness is characterized by acute-onset vomiting; watery, non-bloody diarrhea with abdominal cramps, and nausea. In addition, myalgia, malaise, and headache are commonly reported. Low-grade fever is present in about half of cases. Dehydration is the most common complication and may require intravenous replacement fluids. Symptoms usually last 24 to 60 hours. Volunteer studies suggest that up to 30% of infections may be asymptomatic.

Remember, when it comes to health and safety, there is no substitute for sound medical advice; if you are ill, call your doctor!

## Basic Recommendations

- If you're sick, stay home. If you suspect someone else is sick, suggest they go home. Policies related to infection control in the workplace should be created before their need arises.
- Wash your hands with soap and hot water after each bathroom use.



- Cover your mouth when you cough or nose when you sneeze. If you see someone else cough or sneeze without covering-up, politely remind them that they could be spreading disease. If you use a tissue to blow your nose, dispose of it immediately in the trash. Think about others and always wash your hands and face after *cover-up* coughing and sneezing or blowing your nose. If you are ill and must go out in public, wear a surgical mask or bandana to prevent yourself from accidentally discharging aerosols when you cough or sneeze.
- Wash or sanitize your hands often. Markets and pharmacies sell sanitizing skin gels and wipes that you should always keep handy. Use them regularly! It is also a good idea for employers to have these personal hygiene products strategically placed and readily available for their employees to use.
- Keep shared-contact surfaces such as doorknobs, faucet handles, phone handsets and keypads, desktops, break-tables, chairs, countertops, coffee pot handles, copy machine control panels, etc. clean. Keep sanitizing wipes and spray cleaners (with disposable towels) readily available and encourage their proactive use on shared-contact surfaces.
- Don't share food, drinks or personal items (including pens). Don't let sick children share their toys with other children.
- Keep small containers of sanitizing skin gel handy for use while out in public and running errands.
- Try to avoid crowds during times of heightened alert. Increase the spatial distance between workers and minimize the need to congregate in small areas for meetings and breaks.
- If you are caring for an ill person, cover your mouth and nose with a mask when you are near them and clean your hands and face often. Follow expert advice for patient care and caregiver safety.

## **Professional Environmental Hygiene Services**

Professional cleaning and sanitizing services for NOROVIRUS outbreaks are generally recommended by healthcare professionals, but should not be used as a substitute for common sense and risk-reducing measures. If the situation dictates that the environment be *hygienically* cleaned, a professional service is required. This service provider should be aware of the potential risk to their employees and have them trained in the specialized methodologies required. Worker protection should include increased ventilation, disposable suits, gloves and eye protection. It may also include N-95 respirators. Sometimes, dust control measures, such as negative pressure ventilation and/or HEPA air purification may be warranted. HEPA filtered vacuums should be used to clean excess dust from porous and fibrous surfaces.

Hard, inanimate *shared-contact* surfaces should first be cleaned to remove excess grime. Then a disinfectant should be applied. The most widely recommended disinfectant for the NOROVIRUS is a dilute bleach solution (typically 4 to 12 ounces household bleach to a gallon of fresh water; always follow manufacturer instructions). Remember that some materials are chlorine-sensitive, and the use of a bleach-based disinfectant could result in damage (e.g., bleaching, fading, loss of structural integrity, corrosion, etc.).

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Generally speaking, a single-use disposable towel saturated with the bleach solution is more effective than spray-type applicators used with dry-wiping towels. It should also be noted that, since a bleach solution may leave spots or streaks, it may be necessary to follow-up with more suitable finish cleaning (e.g., complete the cleaning process with the application of furniture polish, plastic cleaner, stainless cleaner, glass cleaner, etc.).

The most important surfaces to clean are those that people contact regularly. Examples of these *shared-contact* surfaces in the workplace include the following:

- Doorknobs
- Door push-bars
- Desks
- Drawer pulls
- Chair arms & backs
- Computers
- Keyboards & mice
- Printers
- Telephones
- Calculators
- Pens & staplers
- Fax machines
- Copiers
- Scanners
- Paper shredders
- Trash can lids
- Toilets & stall doors
- Faucets
- Towel dispensers
- Light switches
- Counters
- Refrigerator pulls
- Coffee pot handles
- Stair railings

Start clean and stay clean. Stay home if you're sick. Send people home if they start to get sick at work. Once symptoms clear, allow 72 hours for the viral contagion to clear the body (and the chance of spreading the NOROVIRUS minimizes).

Keep yourself fit. Get plenty of rest and eat well. Respect those around you by covering-up when you cough or sneeze (and remember to wash your hands and face). Wash your hands after each bathroom break. Don't touch your face and then environmental surfaces. A little effort goes a long way towards protecting yourself and those that work around you.

We may not be able to prevent the NOROVIRUS outbreak, but we can work to minimize its impact on our work environment and community.

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