



**U S Chemical**

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**Infection Prevention**

# **Safe Schools Program**

**For COVID-19 and the SARS-CoV-2 (novel coronavirus)**

# Safe schools, healthy people

When your staff and students are confronted with a disease such as COVID-19, SARS, MERS or others, there is always a need to ensure a safe environment. Failing to reduce the risk of disease may result in loss of business, risk to your brand value, reduced workforce efficiency and even lives. During an outbreak there are a number of things that can be done to help prevent spreading disease. Key areas and touchpoints as well as high risk areas need more frequent attention. Cleaning and sanitation are essential building blocks to infection prevention and outbreak control. In all areas that you clean, disinfect and sanitize, pay attention to standard operating procedures, using recommended products only. Specific attention should be paid to hand hygiene and frequently-touched hard surfaces to avoid cross-contamination.

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# About outbreak prevention

## Outbreaks

It is difficult to predict instances of illness or outbreak, especially when large numbers of people gather in close proximity to one another. The important factor is to be prepared. Precautionary measures and ensuring you have the right resources to handle a speedy response can be the difference between a few isolated cases and a full blown outbreak. Ultimately outbreaks are more difficult to control and costly to business. This is why prevention is better than cure.

## What is an infection?

Infections are caused by pathogens ('bugs') such as bacteria, viruses, yeasts or fungi that enter into the body. It can take some time before the microbes multiply enough to trigger the symptoms of an illness, which means an infected person may unwittingly spread the disease during this incubation period. For most infectious diseases, person to person transmission is most likely when the infected person is symptomatic. Instances of transmission can rapidly escalate into larger scale outbreaks which are often difficult to control and extremely damaging to health and business alike.

It is the responsibility of employers to provide a safe workplace for their staff, clients and customers alike, which includes the provision of adequate infection control procedures. There are, however, precautions you can take to reduce the risk and increase your ability to control an outbreak when it does occur.

## How are infections transmitted?

Pathogens can spread in a variety of ways and understanding these different modes of transmission will help your staff to adopt good infection control practices. Some diseases are present in respiratory secretions of droplets that can travel up to 6 feet, meaning transfers can happen through contact as well as droplet transmissions. If infected people sneeze or cough they spread germs through tiny airborne droplets. These droplets land on surfaces and once touched can aid in the spread of disease. Some of the infections that are spread in this way include the Common Cold, Influenza and Coronaviruses.

## Contaminated objects, humans or food

Cross-contamination carries pathogens from one contaminated place to another. If a person is unwell they could carry viruses, bacteria or parasites wherever they go. Also, a person does not have to seem unwell to be carrying a pathogen. To ensure pathogens are not transmitted, special attention should be paid to hand and surface hygiene.

### Key touchpoints for schools:

- Athletic equipment
- Benches and Chairs
- Railings
- Copier/Printers
- Computers
- Phones
- Desks and Tables
- Locker exteriors
- Toilets and sinks



# About coronaviruses and the enveloped SARS-CoV-2 (novel coronavirus)

## What is a coronavirus?

Coronaviruses (CoV) are a broad family of viruses named after the crown-like spikes on their surface. They typically cause mild to moderate upper respiratory tract disease in humans, but can also cause more severe infections such as pneumonia and other lower respiratory tract infections. There are some coronaviruses that can be transmitted from animals to people.

## How does the SARS-CoV-2 (novel coronavirus) compare?

In December 2019, the novel coronavirus (now known as SARS-CoV-2) was first identified in several hundred people in Wuhan China, most of whom had contact with the same live animal market in Wuhan. Because the COVID-19 outbreak is still evolving, infection and death numbers are changing daily. As of April 1, 2020, there were 213,144 cases reported in the US with 4,513 deaths reported (2.12% deaths US) while globally there are 823,626 confirmed cases and 40,598 total deaths being reported (4.93% deaths globally). For comparison, SARS-CoV had a mortality rate of 9.6% (9.6% of those people infected died from the disease) and MERS-CoV has a mortality rate of 34.5%.

The incubation period is 1-14 days, but can be longer in rare cases. People are most contagious when showing symptoms.

Symptoms Include High fever (over 101° F or 38.3° C), cough and breathing difficulties

## How SARS-CoV-2 Spread

From animals to people



Bats and game animals



Visiting live animal market, contact with live or dead animals



People handling the animals or exposed to their secretions

From person to person



Person to person transmission



By droplets made when infected cough, sneeze or talk



Touching contaminated objects or surfaces

For the most recent information on this outbreak please visit: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019>

# How to prevent spreading a virus during an outbreak

## How can you control infections?

Infections can be prevented or controlled by reducing the opportunities for infection transmission. This is achieved by adopting basic infection control practices.

## Basic infection control practice

Good infection control begins with assuming everyone is potentially infectious and following proper procedures at all times. The following are guidelines to reducing transmission of infection:

## Hand hygiene

Effective hand hygiene is the greatest single measure that you can take to prevent the spread of pathogens. When below situations occur please perform approved methods to ensure excellent hand hygiene when you:

- Can see your hands are dirty
- Have just used the toilet
- Are about to prepare food
- Have just completed a daily task (such as emptying trash)
- Sneezed in your hands

Methods for correct hand hygiene for hand washing and hand rubbing can be viewed at the end of this document.

## Special situations

**Wound dressing:** Broken skin wounds provide an opportunity for pathogens to penetrate the body. Individuals with cuts, burns, sores or other forms of open wounds must have the wounds covered using waterproof dressings.

**Blood and bodily fluid spillages:** Please use caution when cleaning up blood or bodily fluid. For public facilities bodily fluid spillages must be decontaminated to protect public health. The procedure must also protect the worker during decontamination. Personal protective equipment, such as gloves or face masks, should be used. See CDC or OSHA guidelines for recommendations of such equipment.

**Respiratory Hygiene:** When a person coughs or sneezes, they should cover their mouth with a disposable tissue or use their elbow. They should dispose of used tissues and perform hand hygiene after used tissue disposal.

## Recommendations for laundry in case of an outbreak

For handling and sorting of linen, follow the CDC guidelines.\* For the laundry process itself, the preferred option is to apply thermal disinfection in line with local regulations. These differ by governing body, but the safest recommendations are:

- Thermal process 1: 85° C for 15 minutes
- Thermal process 2: 90° C for 10 minutes
- Thermal process 3: 70° C for 25 minutes\*\*

Alternatively,

- Follow the CDC recommended process \*
- Use a locally authorized disinfectant/sanitizer and follow the required chemo-thermal wash process.



\* Recommendations from CDC (Center for Disease Control and Prevention). CDC is the leading national public health institute of the United States

\*\* Recommendations from WHO (World Health Organization)

# Cleaning frequently-touched surfaces to reduce risk

## Cleaning and sanitation

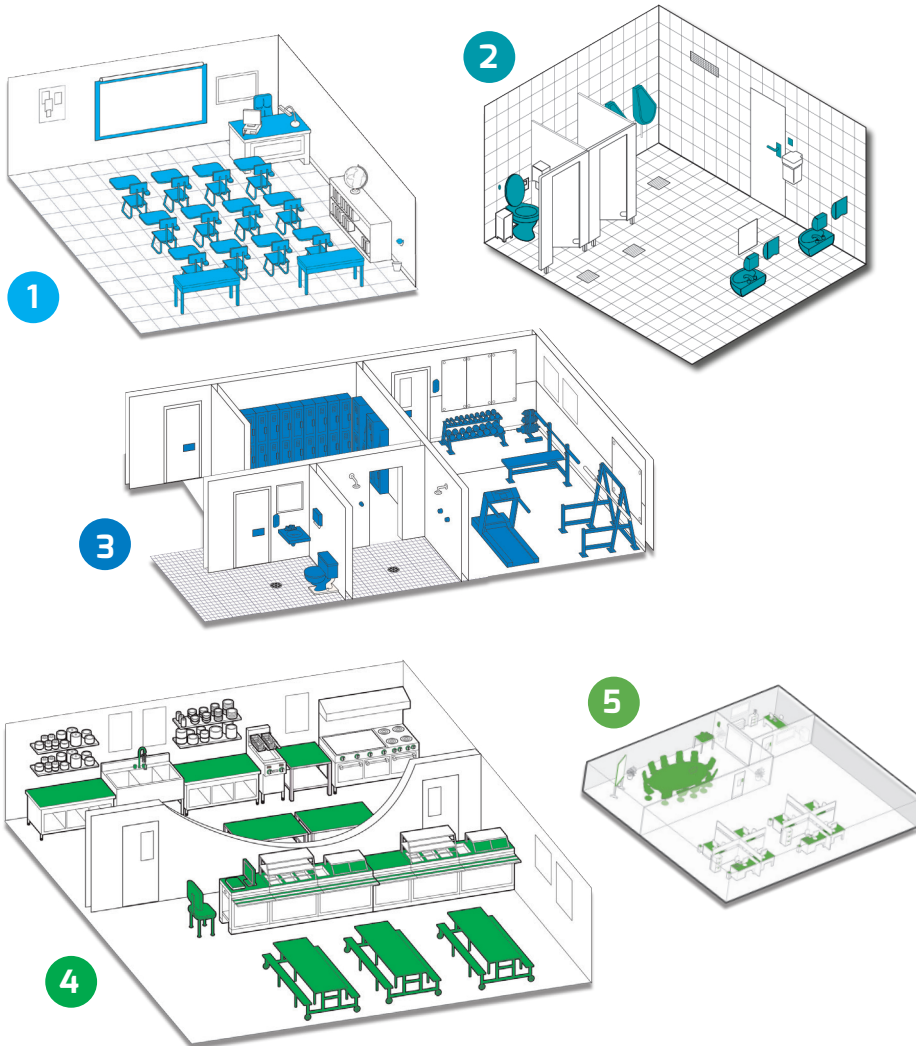
Cleaning and sanitation will reduce the risk of an outbreak. Clean all areas frequently following your standard operating procedures.

## High risk areas

High risk infection areas need to be cleaned and disinfected on a regular basis to create protection against pathogen spread. Certain conditions allow pathogens to spread easier from one individual to another. These include areas where traffic is high, bodily spills are frequent or where there is a general low level of hygiene.

- Maintain excellent hand hygiene
- Use a disinfectant for targeted disinfection of frequently touched surfaces
- Deal with blood or other bodily fluid spillages immediately

## Key touchpoints



### 1 Classroom Areas

- Phones, computers and electronics
- Desks, tables and chairs
- Light switches and door handles
- Pencil sharpener and shared surfaces

### 2 Restroom Areas

- Door and bathroom stall handles
- Dispensers and hand dryers
- Light switches and door handles
- Toilet seats, urinal and toilet flush handles
- Faucet, sink handles and countertops
- Splash walls

### 3 Athletic Facilities

- Light switches and door handles
- Dispensers
- Food contact surfaces
- Shower, toilet and sink areas
- Lockers, benches and hard surfaces
- Athletic equipment

### 4 Kitchen and Cafeteria

- Light switches and door handles
- Dispensers
- Cash registers and touch screens
- Hand and food contact areas
- Countertops, tables and chairs
- Sneeze guards

### 5 Office and Conference Areas

- Phones, computers and electronics
- Desks, tables and chairs
- Light switches and door handles

# Essential areas to focus on during an outbreak

## Apply correct hand hygiene methods

**Hand washing:** To wash your hands effectively, wet them, apply soap, lather fully and rub your hands together for at least 20 seconds. Then rinse all the soap off and dry them fully with a paper towel.

**Hand rubbing:** To sanitize your hands apply 3ml of approved hand rub and rub them for 30 seconds. Do not rinse or dry the hands, the hand rub will evaporate.

Handwashing charts may be found on our website.

## Cleaning and disinfection of hard surfaces during outbreaks

Please use your standard procedures, otherwise follow these generic guidelines. **Use approved products with the correct dosing for disinfection of hard surfaces!**

1. Pre-soak a disposable cloth with cleaner or disinfectant and remove gross soil (if necessary), then place in plastic bag for disposal.
2. Clean surface with a disposable cloth pre-soaked with a cleaner or disinfectant, then dispose in a plastic bag.
3. Spray the disinfectant liberally onto surface and spread with a disposable cloth making sure entire surface is wet. Dispose of cloth into a plastic bag.
4. Allow the disinfectant to remain on surface for the necessary contact time. Rinse if required. Always follow Directions for Use on product container.
5. All soiled materials and protective clothing must be deposited into a yellow clinical waste bag and disposed as contaminated material, if possible.
6. Wash hands thoroughly for at least 20 seconds using hand soap.



## Cleaning up blood and body spillages

Please use your standard procedures. If absent, use this as general advice instead.

### Blood or other body fluids (BBF) exposure guidelines:

1. Assess the size of the spill and determine whether to treat as a large spill or a small spill.
2. Perform hand hygiene and put on appropriate Personal Protective Equipment (PPE) to prevent bloodborne pathogen exposure during decontamination, including disposable latex, vinyl, or nitrile gloves, fluid resistant gowns with sleeves, face masks and eye covering (goggles or face shield).
3. Note that for certain disinfectants or if there is a risk of splashing during the cleanup, additional PPE may be required. Refer to the SDS for the disinfectant for additional information.
4. Perform the following procedures for small spill or large spill surface decontamination.
5. Remove PPE, dispose of PPE appropriately, and perform hand hygiene.

### Directions for cleaning spills:

1. Wipe up a small BBF spill with paper towel or similar disposable absorbent material. For large spills, absorb and/or wipe up BBF or other organic material with paper towels, absorbent granules, or similar material. Discard in red bag (bio-hazard) trash.
2. Clean the surface using an appropriate cleaner or cleaner/disinfectant to remove all of the gross soil and any BBF residues. Cleaning cloths used in BBF decontamination should be treated as contaminated and laundered or disposed of appropriately.
3. Disinfect the surface with a registered disinfectant that contains a bloodborne pathogen claim and apply according to the directions on the label. Ensure surfaces stay wet for the contact time of the disinfectant, reapplying the disinfectant if needed to keep the surface wet for the full contact time. Cleaning cloths used in BBF decontamination should be treated as contaminated and laundered or disposed of appropriately.
4. Once the contact time of the disinfectant has lapsed and the surface has air dried, the surface can be returned to normal use. Always follow Directions for Use on product container.

