

**ALL PATHOGENS  
COMPROMISE  
OCCUPANT HEALTH  
IN YOUR FACILITIES  
NOT JUST COVID-19**

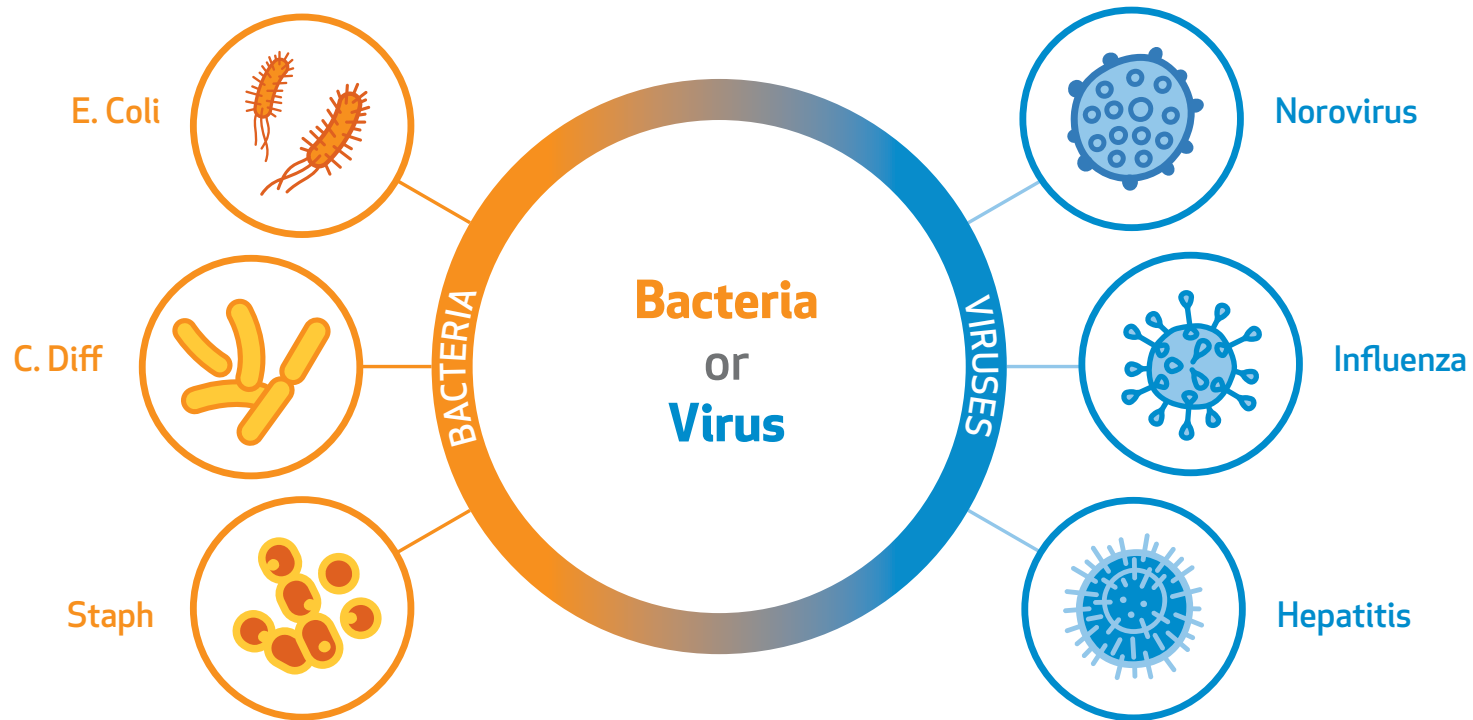
# INTRODUCTION



COVID-19 may be getting all of the attention in the battle against the spread of illness, but the other invisible pathogens we've worried about for years still pose a threat to your facility's guests and occupants.

The proactive measures and attitudes we're taking to defend against COVID-19 can and should be equally applied to common bacteria and viruses responsible for causing illnesses both minor and serious.

# WHAT'S THE DIFFERENCE BETWEEN A BACTERIUM AND A VIRUS?



There's a lot of talk about pathogens, those microscopic organisms that can cause disease, but do you know the difference between the two main instigators? Here's what you should know about bacteria versus viruses.

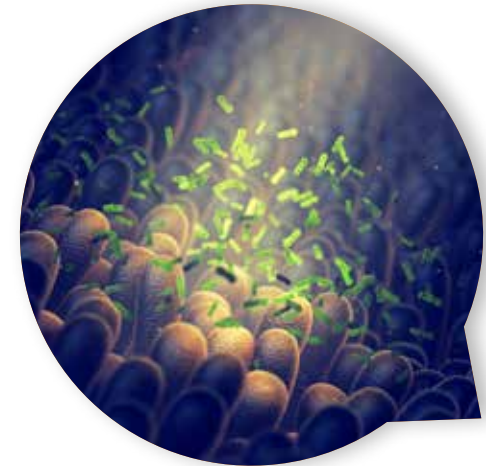
# Bacteria

Bacteria are a wide range of single-celled microorganisms, many of which thrive in extreme hot or cold temperatures. Most bacteria pose no threat to humans, such as the living cultures in yogurt or the helpful bacteria in your intestines that break down and digest food.<sup>1</sup>

But harmful bacteria can lead to a number of illnesses, especially when underlying conditions in the body are present. Harmful bacteria can lead to colitis in the colon, gastrointestinal problems, or staph infections, aggravating preexisting health concerns.

Bacteria in the bloodstream, the lungs, or the heart can cause a number of infections ranging from strep throat to pneumonia to heart failure. The most serious illnesses can result from a preestablished health concern being worsened by the introduction of harmful bacteria, not solely the bacteria alone.<sup>2,3,4</sup>

“ It’s more often the introduction of bacteria to a preexisting condition that causes the most serious illnesses — not just the bacteria alone. ”



| EXAMPLES OF HARMFUL BACTERIA    |                          |   |   |
|---------------------------------|--------------------------|---|---|
| Scientific Name                 | Also Known As            | Symptoms <sup>3,5,6</sup>   | U.S. Annual Statistics <sup>5,7,8</sup>   |
| <i>Escherichia coli</i>         | E. Coli                  | <ul style="list-style-type: none"> <li>• Stomach cramps</li> <li>• Diarrhea and/or blood in stool</li> <li>• Vomiting</li> <li>• Fever</li> </ul>   | <ul style="list-style-type: none"> <li>• 265,000 infections</li> <li>• 100 deaths</li> </ul>    |
| <i>Clostridioides difficile</i> | C. diff                  | <ul style="list-style-type: none"> <li>• Diarrhea</li> <li>• Fever</li> <li>• Stomach pain</li> <li>• Loss of appetite</li> <li>• Nausea</li> </ul>   | <ul style="list-style-type: none"> <li>• 453,000 infections</li> <li>• 29,000 deaths</li> </ul> |
| <i>Staphylococcus aureus</i>    | Staph or Staph Infection | <p><i>Dependent on the Type of Infection</i></p> <ul style="list-style-type: none"> <li>• Swollen, painful, red areas of the skin (skin infection, bone infection)</li> <li>• Rapid heartbeat, shortness of breath, fever, chills, fatigue (endocarditis)</li> <li>• High fever, chills, worsening cough (pneumonia)</li> </ul> | <ul style="list-style-type: none"> <li>• 119,000 infections</li> <li>• 20,000 deaths</li> </ul> |

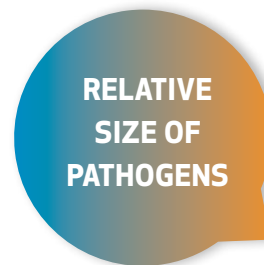
1. <https://www.mayoclinic.org/diseases-conditions/infectious-diseases/expert-answers/infectious-disease/faq-20058098> 2. <https://www.cdc.gov/hai/organisms/staph.html> 3. <https://www.cdc.gov/cdiff/what-is.html> 4. <https://www.medicalnewstoday.com/articles/322349#causes> 5. <https://epi.dph.ncdhhs.gov/cd/diseases/ecoli.html> 6. <https://medlineplus.gov/staphylococcalinfections.html> 7. [https://www.nejm.org/doi/full/10.1056/NEJMoal408913?query=featured\\_home](https://www.nejm.org/doi/full/10.1056/NEJMoal408913?query=featured_home) 8. <https://www.cdc.gov/media/releases/2019/p0305-deadly-staph-infections.html>

# Viruses

Viruses, on the other hand, are strictly harmful. These organisms are even tinier than bacteria and require a living host to survive, manipulating cell production to reproduce itself instead of the healthy cells your body is made of.

Many of the same illnesses can be caused by either bacteria or viruses, often making it difficult to determine the source of your symptoms. To minimize risks, personal preventive measures such as handwashing, maintaining appropriate social distancing, and staying at home when sick to avoid spreading an illness should be practiced when possible. Larger preventive measures in the form of proper cleaning and disinfection should be put to use in shared spaces, as well.

| A CLOSER LOOK AT COMMON VIRUSES   |                     |  |  |
|-----------------------------------|---------------------|--|--|
| Scientific Name                   | Also Known As       | Symptoms <sup>9,10,12</sup>  | U.S. Annual Statistics <sup>9,11,13</sup>  |
| <i>Norovirus</i>                  | Stomach Flu/<br>Bug | <ul style="list-style-type: none"> <li>• Diarrhea</li> <li>• Vomiting</li> <li>• Nausea</li> <li>• Stomach pain</li> </ul>               | <ul style="list-style-type: none"> <li>• 265,000 infections</li> <li>• 100 deaths</li> </ul>                                 |
| <i>Influenza</i>                  | The Flu             | <ul style="list-style-type: none"> <li>• Fever/chills</li> <li>• Cough</li> <li>• Sore throat</li> <li>• Runny or stuffy nose</li> </ul> | <ul style="list-style-type: none"> <li>• Muscle or body aches</li> <li>• Headaches</li> <li>• Fatigue (tiredness)</li> </ul> |
| <i>Hepatitis A, B, C, D, or E</i> | Hepatitis           | <ul style="list-style-type: none"> <li>• Jaundice</li> <li>• Dark urine</li> <li>• Extreme fatigue</li> <li>• Nausea</li> </ul>          | <ul style="list-style-type: none"> <li>• 119,000 infections</li> <li>• 20,000 deaths</li> </ul>                              |



**Norovirus**  
23-40 nm

**Hepatitis**  
20-50 nm

**Influenza**  
80-130 nm

**Staph**  
800-1000 nm

**E. Coli**  
1100-1500 nm

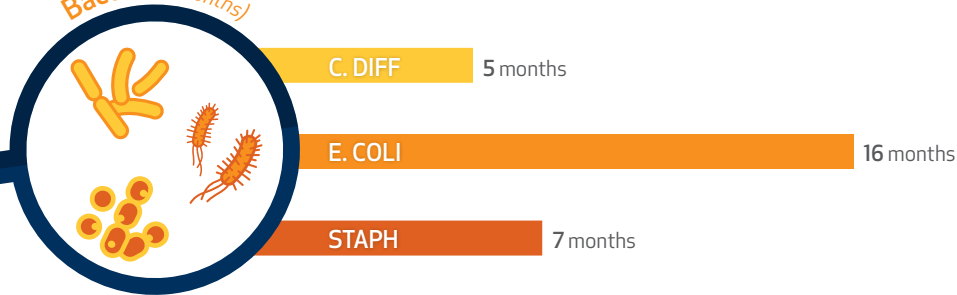
**C. Diff**  
3000-4000 nm



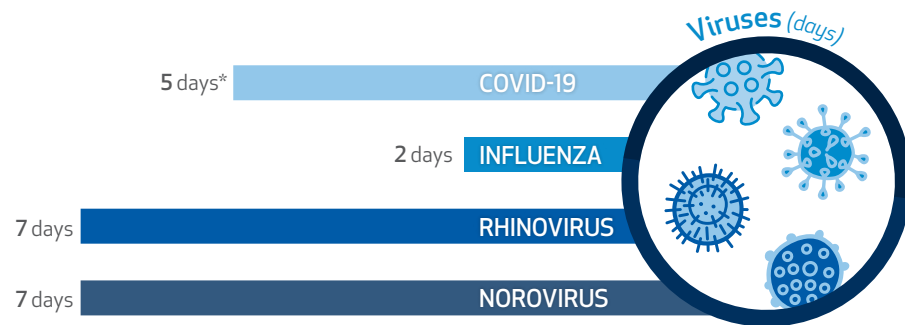
9. <https://www.cdc.gov/norovirus/index.html> 10. <https://www.cdc.gov/flu/symptoms/index.html> 11. <https://www.cdc.gov/flu/about/burden-averted/2017-2018.htm#table1>  
12. <https://www.who.int/news-room/q-a-detail/what-is-hepatitis> 13. <https://www.cdc.gov/nchs/fastats/hepatitis.htm>

## HOW LONG DO GERMS LIVE?

### Bacteria (months)



### Viruses (days)



\*<https://www.webmd.com/lung/how-long-covid-19-lives-on-surfaces> – This number is subject to change if and when new data emerges.

Despite COVID-19 taking center stage in the conversation about cleaning and prevention, it's important to remember the rest of the family of bacteria and viruses that can cause illness if left untreated on your surfaces.

While information continues to be gathered by scientific experts, current data suggests that COVID-19 can remain infectious on surfaces for as few as 2 hours to possibly as long as 9 days, depending on the material.<sup>14,15</sup>

14. <https://www.sciencedirect.com/science/article/pii/S0195670120300463>

15. <https://www.webmd.com/lung/how-long-covid-19-lives-on-surfaces>

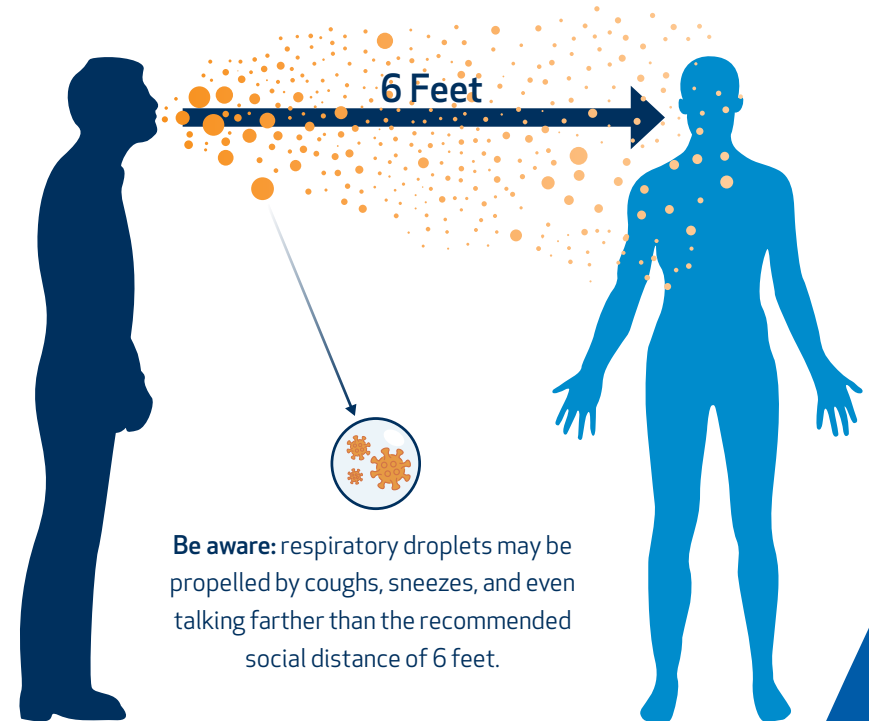
## WHAT WE KNOW ABOUT COVID-19?

### Staying up to Date on the Global Pandemic

Information on the coronavirus is constantly changing as the world's top experts research and reassess the global pandemic. But COVID-19's potential to disrupt your facility's return to normality without a proper disinfection program in place is an issue you'll have to address; it's a necessary consideration for the sake of your occupants' safety, wellbeing, and confidence in your management.

Like many viruses, COVID-19 spreads when an infected person sneezes, coughs, or even talks, producing droplets that can carry the virus and infect others. These respiratory droplets may be inhaled into the lungs of others when brought in contact with their mouths or noses. The risk of exposure greatly increases when carriers are in close contact with other people (within about six feet or less).

No current evidence suggests that COVID-19 can be spread through food or drinking water, with the main risk being posed by proximity to exposed persons and contact with their virus-carrying respiratory droplets. However, touching your nose or mouth after touching a surface or object on which the virus is living is a very possible way to attain the virus.<sup>16</sup>



<sup>16</sup>. <https://www.cdc.gov/coronavirus/2019-ncov/faq.html#Spread>

## THREE METHODS TO ELIMINATE PATHOGENS

A person wearing blue nitrile gloves is shown in profile, spraying a clear liquid from a bottle onto a dark surface. In the foreground, another pair of blue nitrile gloves and a grey microfiber cloth are resting on the same surface. The background is blurred, showing what appears to be a laboratory or industrial setting with various pieces of equipment.

One of the best ways to limit viral exposure is to provide preventative programs and promote the social responsibilities of the people in your shared space. While encouraging hand washing and social distancing are key ways to continue to keep your occupants safe, beginning your reopening plan with a dedicated program that focuses on cleaning, sanitizing, and disinfecting the surfaces your occupants come across is essential to placing everyone on the right first step.



## BUT WHAT'S THE DIFFERENCE BETWEEN CLEANING, SANITIZING, AND DISINFECTING?



**Cleaning** uses soap and water to physically remove germs, dirt, and other impurities from surface and objects. This process does not necessarily kill germs but lowers their numbers and the risk of spreading infection.



**Sanitizing** lowers the number of germs on surfaces and objects to a safer level according to public health requirements. This process works by either cleaning or disinfecting the surfaces or objects.



**Disinfecting** works by using chemicals to kill germs on surfaces or objects. This process does not necessarily clean dirty surfaces or remove the germ cells, but it is the most effective method to lower the risk of infection.

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For increased protection, disinfection with electrostatic sprayers heightens the bond between the particles in disinfecting products (by electrostatically charging them) and the surfaces that they're disinfecting. This creates a highly strong attraction, making sure disinfectant clings to even the hardest to reach spots.

Visit [EnhancedClean.com/Three-Step-Approach](https://EnhancedClean.com/Three-Step-Approach) for more information.

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# Prepare and Stay Proactive with a Comprehensive Disinfection Program

Utilizing a successful program such as ABM's EnhancedClean™ in your facility can eliminate and prevent the spread of bacterial, viral, and additionally worrisome threats.

Not all pathogens are the same, and neither are all facilities and their needs. To learn more about the services that best serve the safety and wellbeing of your occupants, go to [ABM.com/EnhancedClean](https://www.abm.com/enhancedclean).

Learn what EnhancedClean™ can do to protect your occupants, call [866.624.1520](tel:866.624.1520) or visit [EnhancedClean.com](https://www.enhancedclean.com)

## About ABM

ABM (NYSE: ABM) is a leading provider of facility services in the United States and various international locations. ABM's comprehensive capabilities include janitorial, electrical & lighting, energy solutions, facilities engineering, HVAC & mechanical, landscape & turf, mission critical solutions and parking, provided through stand-alone or integrated solutions. ABM provides custom facility solutions in urban, suburban and rural areas to properties of all sizes - from schools and commercial buildings to hospitals, data centers, manufacturing plants and airports. ABM Industries Incorporated, which operates through its subsidiaries, was founded in 1909. For more information, visit [ABM.com](https://www.abm.com).

