



# CORONAVIRUS OVERVIEW

## JUNE 2020

### What is COVID-19?

Coronavirus disease 2019 (COVID-19) is an infection caused by a novel coronavirus, first detected in late 2019. Coronaviruses are a large family of viruses first discovered in the 1960s and named for the crown-like spiked proteins found on their surface.<sup>1-2</sup> Coronaviruses commonly infect people, in whom they cause the “common cold,” as well as animals.<sup>1</sup> On rare occasion, strains of coronavirus that infect animals can infect people and then continue to spread between people.<sup>3</sup> This was the case for SARS-CoV-1 and MERS-CoV, and is now the case for the novel coronavirus, SARS-CoV-2, which causes COVID-19.<sup>1</sup> All three of these coronavirus strains are thought to have originated in bats.<sup>4</sup>

COVID-19 is a respiratory illness whose severity can range from mild symptoms to severe disease and death (symptoms).<sup>5</sup> Researchers around the globe are actively studying the virus and the disease it causes, with new information reported daily.

### What We Know thus Far: *An Evolving Story*

#### Impact

In March 2020, the World Health Organization (WHO) declared COVID-19 a global pandemic.<sup>6</sup> With each passing day, the number of confirmed cases of COVID-19 continues to rise. As of June 1, 2020, the WHO had reported 6,057,853 confirmed cases and 371,166 deaths globally,<sup>7</sup> while the Centers for Disease Control and Prevention (CDC) had reported 1,787,680 confirmed cases and 104,396 deaths in the U.S.<sup>8</sup> Although these numbers are staggering, according to the CDC, “levels of influenza-like illness (ILI) and COVID-19-like illness (CLI) and the percentage of specimens testing positive for SARS-CoV-2... continue to decline or remain stable.”<sup>9</sup> For the most updated information on global and US cases, please refer to the [WHO](#) and [CDC](#) websites.

In response to the rapid acceleration of this pandemic, governments across the globe have been implementing mitigation measures, including stay-at-home recommendations and school/business closings, in an attempt to slow the spread of the disease.<sup>10-11</sup> More recently, many countries have begun lifting restrictions and gradually reopening businesses, public spaces and other activities.<sup>12-13</sup>

#### Symptoms

COVID-19 can cause a wide range of symptoms in affected individuals.<sup>5</sup> These typically appear within 2 to 14 days of exposure. In most affected individuals, symptoms are respiratory in nature and include:<sup>5</sup>

- Fever
- Cough
- Shortness of breath

But recent data suggests affected individuals may also experience<sup>5</sup>:

- Chills
- Fatigue
- Muscle or body aches
- Headache
- Sore throat
- New loss of taste or smell
- Congestion or runny nose
- Nausea or vomiting
- Diarrhea



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In some patients, infection can lead to pneumonia, severe acute respiratory syndrome, septic shock, and even death.<sup>14</sup> The CDC reports that people age 65 or older, people with serious underlying medical conditions, such as heart or lung disease, diabetes, or severe obesity, and people living in a nursing home or long-term care facility are at greatest risk of developing severe illness.<sup>15</sup>

### Spread

COVID-19 is a new disease and the CDC states they are still learning how it spreads, the severity of illness it causes, and whether someone who has been infected can be re-infected.<sup>16-17</sup> The virus that causes COVID-19 seems to be spreading easily and sustainably in the community (“community spread”) in some affected areas.<sup>4</sup>

The virus is thought to spread mainly from **person-to-person**.<sup>17</sup>

- Between people who are in close contact with one another (within about 6 feet)<sup>17</sup>
- Through respiratory droplets produced when an infected person coughs or sneezes<sup>17</sup>

These droplets can land in the mouths or noses of people who are nearby or possibly be inhaled into the lungs.<sup>17</sup>

The CDC also states that the virus may be spread from contact with **contaminated surfaces**.<sup>17</sup> This could occur when a person touches a surface with virus on it and then touches their eyes, nose, or mouth.<sup>17</sup> Although there has been some recent confusion about this mode of transmission, the CDC recently clarified that, based on “data from lab studies on COVID-19 and what we know about similar respiratory diseases it may be possible that a person can get COVID-19 by touching a surface or object that has the virus on it and then touching their own mouth, nose, or possibly their eyes, but this isn’t thought to be the main way the virus spreads.”<sup>18</sup>

Additionally, recent studies have detected SARS-CoV-2 genetic material in blood and stool, but it is not yet known whether these sources can lead to disease transmission.<sup>16</sup>

Importantly, reports state that the virus can be spread even when the infected patient is symptom-free.<sup>19-20</sup> One study for COVID-19 found that infected individuals were contagious anywhere from 8-37 days with the median being 20 days,<sup>21</sup> compared to the normal flu at less than 7 days.<sup>22</sup> Combined with the evidence suggesting the virus can survive for extended periods of time on surfaces—up to days in some studies,<sup>23</sup> this prolonged contagion period underscores the importance of isolating infected patients and maintaining sustained levels of environmental hygiene (e.g. surface cleaning and disinfection) to prevent transmission.<sup>24</sup>

### Prevention

There is currently no vaccine to prevent COVID-19.<sup>25</sup> The best way to prevent illness is to avoid being exposed to this virus.<sup>25</sup> However, there are many ongoing clinical trials evaluating potential treatments, and the U.S. Food and Drug Administration has granted Emergency Use Authorization for the antiviral remdesivir based on a study showing its ability to shorten the time to clinical recovery in some patients.<sup>26</sup> The CDC and WHO will continue to provide updated information as soon as clinical findings become available.<sup>27</sup>

Given the known mode of transmission, the CDC recommends everyday [preventive actions](#) for the general public to help prevent the spread of respiratory viruses,<sup>25,28</sup> including SARS-CoV-2, as well as more detailed guidance for healthcare personnel, including environmental services (EVS) staff. <sup>24</sup> Among the key recommendations are:

- **Hand Hygiene**
- **Environmental Infection Control**

The CDC has also issued [guidance on wearing cloth face covers](#) for individuals age 2 and older to prevent the spread of disease to others.<sup>25</sup> This is in addition to maintaining a distance of 6 feet between yourself and others.<sup>25</sup>



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### Hand Hygiene for the General Public—How<sup>28</sup>:

- Wash hands with soap and water for at least 20 seconds
- If soap and water are not readily available, use an alcohol-based hand rub (ABHR) with at least 60% alcohol
- Always wash hands with soap and water if hands are visibly soiled
- Hand hygiene supplies should be readily available to facilitate compliance

### Hand Hygiene for the General Public—When<sup>28</sup>:

- **Before, during, and after** preparing food
- **Before** eating food
- **Before and after** caring for someone at home who is sick with vomiting or diarrhea
- **Before and after** treating a cut or wound
- **After** using the toilet
- **After** changing a diaper or cleaning up a child who has used the toilet
- **After** blowing your nose, coughing, or sneezing
- **After** touching an animal, animal feed, or animal waste
- **After** handling pet food or pet treats
- **After** touching garbage

### Hand Hygiene in Healthcare—How<sup>24, 29</sup>:

- Use an alcohol-based hand rub (ABHR), with a minimum alcohol concentration of 60%, before and after all contact with patients, potentially infectious materials, and donning/removal of personal protective equipment.
- Wash hands with soap and water for at least 20 seconds before use of an ABHR if hands are visibly soiled or as an alternative to ABHR.
- Ensure access to hand hygiene supplies for all personnel in every care location.

### Hand Hygiene in Healthcare—When<sup>29</sup>:

- The healthcare setting necessitates hand hygiene for certain circumstances beyond those included for the general public
- **Before and after** all patient contact
- **Before and after** contact with potentially infectious material
- **Before** putting on and **after** removing all personal protective equipment including gloves

### Environmental Infection Control in Healthcare<sup>24</sup>:

- Use dedicated equipment for patient care.
- Clean and disinfect all non-dedicated, non-disposable medical equipment according to manufacturers' instructions and facility policies.
- Ensure consistent and correct environmental cleaning and disinfection procedures.
- Use of disinfectant [products](#) that meet the Environmental Protection Agency's criteria for use against SARS-CoV-2.

### Environmental Infection Control in the Community<sup>30</sup>:

The CDC also provides recommendations for cleaning and disinfection aimed at limiting the survival of SARS-CoV-2 in the community, non-healthcare facilities such as schools, institutions of higher education, offices, daycare centers, businesses, and community centers that do, and do not, house persons overnight.<sup>23</sup> These do not apply to healthcare facilities. The recommendations include:

- Added guidance for disinfection of electronics.
- Updated guidance for cleaning and disinfection of soft (porous surfaces).
- Updated core disinfection/cleaning practices.



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### Moving Forward

#### Cleaning and Disinfecting for Reopening<sup>31</sup>:

The United States federal government has issued [guidelines](#) for reopening the country based on a set of data-driven criteria.<sup>32</sup> Accordingly, the CDC has provided [guidance](#) to support a phased reopening.<sup>31</sup> This includes [recommendations](#) for cleaning and disinfecting businesses, public spaces, schools, and homes when reopening.<sup>31</sup> These guidelines contain detailed information for a variety of settings and emphasize the need for developing a thorough cleaning and disinfection plan. The framework of the plan is based on:<sup>31</sup>

- Normal routine cleaning with soap and water to decrease the load of virus on surfaces and objects
- Disinfection, particularly of surfaces and objects frequently touched by multiple people, with [EPA-approved disinfectants against COVID-19](#)
- Use of alternative disinfectants, such as 1/3 cup of bleach added to a gallon of water or 70% alcohol solutions, when EPA-approved disinfectants are not available

### How can Rubbermaid Commercial Products Assist with Environmental Cleaning and Disinfection?

Rubbermaid Commercial Products (RCP) is committed to assisting commercial facilities maintain a clean environment.

#### Washroom:

Proper hand hygiene is critical in preventing the spread of illness.<sup>24,28-29</sup> The Global Handwashing Partnership reports that diarrhea and pneumonia are the leading causes of death for children under the age of five and that handwashing alone can cut diarrheal and acute respiratory infections by roughly fifty and twenty five percent, respectively.<sup>34</sup>

Rubbermaid Commercial Products have not been tested against the newly-identified SARS-CoV-2. Our [Enriched Foam Alcohol Sanitizer](#) (SKU: 2080802), which has a 70% alcohol content, can be used in connection with the CDC's [Hand Hygiene in Healthcare Settings Guidance](#) and Interim Infection Prevention and Control Recommendations. Additionally, the freestanding [Autofoam Hand Sanitizer Station](#) (SKU: FG750824) can be used to ensure access to hand hygiene supplies in all care locations as directed by the CDC.<sup>29</sup>

#### Cleaning:

The CDC describes environmental cleaning as a "fundamental intervention for infection prevention and control."<sup>35</sup> While we await more definitive answers on the role of the environment and SARS-CoV-2, it is imperative to employ the most effective and practical strategies in achieving environmental cleaning and disinfection.

Microfiber cleaning products (e.g. cloths and mop pads) have been shown in a number of studies to achieve superior surface cleaning compared to traditional cotton products.<sup>36-39</sup> Microfiber products are not only more effective at capturing and removing microbes from surfaces, but their use as part of a larger infection prevention and control strategy has been associated with reductions in HAIs.<sup>36</sup>

Microfiber's split fiber design creates a larger surface area for microbe removal.<sup>37</sup> At the same time, the positive charge of the microfiber attracts negatively-charged particles including dirt and microorganisms.<sup>38</sup>

Rubbermaid Commercial Products cleaning products, including microfiber, has not (bold has not) been tested against the newly identified SARS-CoV-2. Our [HYGEN™ Disposable Microfiber Cloths](#), [HYGEN™ Disposable Microfiber Mop Pads](#), launderable [HYGEN™ Microfiber Cloths](#), and launderable [HYGEN™ Microfiber Wet Pads](#) have been shown to remove 99.9% of certain microbes when used with water alone\*, but we do not have test data to indicate how they will perform against SARS-CoV-2.



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Our HYGEN microfiber cloths and mop pads provide effective microfiber cleaning with built-in scrubbing power. HYGEN disposable microfiber cloths and mop pads are quat safe and bleach safe.

### Refuse:

Additionally, our [Step-On Container](#) serves as a safe, “no-touch receptacle for disposal” of soiled tissues and other potentially contaminated items. This is a measure referenced in the "[Minimize Chance for Exposures](#)" section of the CDC’s Interim Infection Prevention and Control Recommendations for SARS-CoV-2.<sup>24</sup> By eliminating the need for manual operation, the Step-On Container helps mitigate the potential cross-contamination that could occur when multiple hands open and close a waste receptacle.<sup>24</sup> Importantly, all of these products are manufactured in the United States, so there are no anticipated shipping delays.

Rubbermaid Commercial Products is ready to assist distribution partners and commercial facilities in their efforts to promote and maintain a clean and safe environment.

\*Based on third-party testing with water only. The product can be used with a wide array of cleaning solutions. EPA EST. 90650-NC-001

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