DV DECON SEVEN Coronavirus by the Numbers

Are you concerned about preventing the spread of coronavirus in your facility?

Understanding the science behind it is the first step toward making smart decisions that will affect your employees and customers.

Although the exact origins are still unknown, scientists currently believe that the novel coronavirus originated in bats, spread to another type of animal, and then to humans. Although the first cases were discovered in Wuhan, China, the virus has rapidly spread to other parts of the world.

Coronavirus by the **Numbers**

In the US, the number of cases reported per day has increased from under 1,000 in early March to a high of more than per day 67,000 in mid-July.



As of July 15, 2020, the numbers were:



Total global cases = 13,150,645

Total global deaths = 574,464



Total US cases = 3.483.832

Total US deaths = 136.938

How Does Coronavirus Spread?

Coronavirus is spread by exposure to an infectious dose of viral particles. Based on similar viruses, scientists believe that exposure to as few as 1,000 SARS-CoV2 infectious viral particles could lead to an infection of COVID-19.

> Exposure is cumulative and an infectious dose doesn't necessarily happen in a single event. The key formula is:

Infection = Exposure x Time.



infectious viral particles in one breath



viral particles in each

of 10 breaths



viral particles in each of 100 breaths

The same is true for surfaces.

If a person touches an infected surface and gets 1,000 viral particles on their hands and then touches their nose or mouth, this could be an infectious dose. This is why disinfecting surfaces and washing hands are so important for preventing the spread of coronavirus.

> **Coronavirus can spread through exposure to infected** respiratory droplets through:



- ten times, or to about 330 virus particles per minute, so it would take just a few minutes to be exposed to an infectious dose.
- Droplets in a single cough or sneeze from an infected person may contain as many as 200,000,000 (two hundred million) virus particles.



Infected people can spread the virus without even knowing it.





Symptomatic people

spread the virus faster through coughing and sneezing

Asymptomatic people

account for at least 44% of spread

Where Does Coronavirus Spread?

Coronavirus thrives in environments that are enclosed with poor ventilation and a high density of people, such as:





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Loud machinery requires yelling in close proximity to others.

Restaurants and hospitality

Ventilation systems carry the virus across the room to other customers in restaurants, lobbies, and event spaces.

Workplaces

Offices and call centers with open layouts allow the virus to spread throughout the space. Networking events with a lot of talking and handshaking are also sources of outbreaks.

Social and religious gatherings

Weddings, funerals, and religious events encourage close interaction between people.

First responders

Being on the front line in a public health crisis increases exposure. New York and California first responders saw a huge surge in illness at the beginning of the outbreak.

What Can You Do to Stop it?

In addition to wearing appropriate PPE and enforcing personal hygiene practices, facilities can take steps to help prevent the spread of coronavirus.



In meat packing and processing Work in shifts, reduce production, disinfect between shifts, provide safer methods of communication.



In workplaces

Reduce office occupancy, upgrade ventilation systems, work in shifts, reduce time spent in shared spaces, disinfect shared surfaces between uses.



In restaurants and hospitality Reduce occupancy, seat outdoors only, limit use of shared bathrooms.



For first responders Disinfect vehicles between transporting patients and properly dispose of used PPE.



so Important

Properly disinfecting surfaces is critical to help prevent the spread of COVID-19 and not all products are equal.

A single sneeze produces up to 30,000 droplets

Those droplets have up to 200,000,000

(two hundred million) virus particles

The virus can live on surfaces for hours to days

Using a disinfectant with a on an infected surface with 200,000,000 virus particles reduces the virus level down to s, well over the infectious dose of ticles. This is not effective enough.

D7 is proven to have an efficacy between

, which means that on a surface with 200,000,000 (two hundred million) virus particles, only will remain.

About D7

D7 is a powerful, patented chemical disinfectant, sanitizer, and cleaning solution. Originally developed to counter biochemical threats to national security, D7 today is EPA-registered and approved for a variety of applications, including the EPA's list of approved disinfectants for use against SARS-CoV-2 (COVID-19).

D7 can be safely used in a range of industries and applications, including:



Food processing facilities



Public spaces



Restaurants and hotels



Offices and conference centers

Questions about Coronavirus?

Contact Us