

- **What is COVID-19?**

COVID-19 is the infectious disease caused by the most recently discovered coronavirus. This new virus and disease were unknown before the outbreak began in Wuhan, China, in December 2019.

- **What are the symptoms of COVID-19?**

The most common symptoms of COVID-19 are fever, tiredness, and dry cough. Some patients may have aches and pains, nasal congestion, runny nose, sore throat or diarrhea. These symptoms are usually mild and begin gradually. Some people become infected but don't develop any symptoms and don't feel unwell. Most people (about 80%) recover from the disease without needing special treatment. Older people, and those with underlying medical problems like high blood pressure, heart problems or diabetes, are more likely to develop serious illness.

- **Will warm weather kill off COVID-19?**

As the virus is too new, firm data on how cases will change with the seasons is simply not available and predictions are too uncertain as the spread depends on a lot of factors. Unpublished studies suggest a link between the spread of the virus and temperature, wind speed and relative humidity as well as a preference of the virus for cool and dry conditions. Additionally, the behavioural component plays a role, too and it is unlikely to disappear entirely over the summer months.

On a positive note, a [study](#) conducted ten years ago found that three coronaviruses showed marked winter seasonality, causing infections between December and April. The main reason for that are the characteristics of the virus ("enveloped virus", coated in lipid bilayer). They make them more susceptible to heat than other viruses. In colder conditions, the layer hardens and protect it for longer when it is outside the body.

- **How long does the virus survive on surfaces?**

It is not certain how long the virus that causes COVID-19 survives on surfaces, but it seems to behave like other coronaviruses. Studies suggest that coronaviruses (including preliminary information on the COVID-19 virus) may persist on surfaces for a few hours or up to several days. This may vary under different conditions (e.g. type of surface, temperature or humidity of the environment).

- **Which disinfectants are recommended?**

Many disinfectants are active against enveloped viruses, such as the COVID-19 virus, including commonly used disinfectants. The WHO recommends using alcohol solutions with at least 70% alcohol, but also bleach solutions or simply every disinfectant with the label "virucidal" are very effective in killing the virus. There are several lists of disinfectants available for each respective country, such as the one from the "[Industrieverband Hygiene und Oberflächenschutz](#)", Germany or of the [Environmental Protection Agency](#), USA.

- **Does UV light kill the virus?**

Yes, but only the UV-C part does (shortest wavelength: 100-280 nm, highest energy). It destroys the molecular band that hold together the DNA of viruses and also bacteria. UV-A and UV-B radiation, as emitted by sunbeds, are **NOT** sufficient to decontaminate surfaces.

- **Positive effects of UV radiation – respiratory infections**

Next to all the other known positive effects of UV radiation, a [study](#) examined the role of UV radiation and vitamin D in the seasonality and outcomes of infectious disease and found positive vitamin D-dependent and independent effects on the immune system. Also another [publication](#) supports the hypothesis that sufficient serum vitamin D levels lead to a reduction of influenza-like illnesses. Lastly, a large [meta-analysis](#) found similar results, specifically for respiratory infections.

For further information, please click here: <https://bit.ly/2y0R346> (WHO) or <https://bit.ly/39i8F8H> (ECDC)
Find additional material on benefits of UV radiation here: <http://www.europeansunlight.eu/>