**Introduction to Viral Diseases**

* [Contagiousness](https://www.healthline.com/health/viral-diseases#contagiousness)
* [Respiratory](https://www.healthline.com/health/viral-diseases#respiratory)
* [Gastrointestinal](https://www.healthline.com/health/viral-diseases#gastrointestinal)
* [Exanthematous](https://www.healthline.com/health/viral-diseases#exanthematous)
* [Hepatic](https://www.healthline.com/health/viral-diseases#hepatic)
* [Transmission](https://www.healthline.com/health/viral-diseases#transmission)
* [Cutaneous](https://www.healthline.com/health/viral-diseases#cutaneous)
* [Transmission](https://www.healthline.com/health/viral-diseases#transmission)
* [Hemorrhagic](https://www.healthline.com/health/viral-diseases#hemorrhagic)
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**Viral disease definition**

Viruses are very small infectious agents. They’re made up of a piece of genetic material, such as DNA or RNA, that’s enclosed in a coat of protein.

Viruses invade cells in your body and use components of those cells to help them multiply. This process often damages or destroys infected cells.

A viral disease is any illness or health condition caused by a virus. Read on to learn more about some of the main types of viral diseases:

**They aren’t always contagious**

Not all viral diseases are contagious. This means they aren’t always spread from person to person. But many of them are. Common examples of contagious viral diseases include the flu, the common cold, HIV, and herpes.

Other types of viral diseases spread through other means, such as the bite of an infected insect.

**Respiratory viral diseases**

Respiratory viral diseases are contagious and commonly affect the upper or lower parts of your respiratory tract.

Common symptoms of a respiratory viral disease include:

* runny or stuffy nose
* coughing or sneezing
* fever
* body aches

**Examples**

Examples of respiratory diseases include:

* [flu](https://www.healthline.com/health/cold-flu/flu)
* [common cold](https://www.healthline.com/health/cold-flu/cold)
* [respiratory syncytial virus infection](https://www.healthline.com/health/respiratory-syncytial-virus-rsv)
* adenovirus infection
* [parainfluenza virus infection](https://www.healthline.com/health/cold-flu/parainfluenza)
* [severe acute respiratory syndrome (SARS)](https://www.healthline.com/health/severe-acute-respiratory-syndrome-sars)

**Transmission**

Respiratory viruses are spread by droplets generated through coughing or sneezing. If someone with a viral illness coughs or sneezes nearby and you inhale these droplets, you may develop the disease.

These viruses can also be spread through contaminated objects, such as doorknobs, tabletops, and personal items. If you touch one of these objects and then touch your nose or eyes, you could develop a disease.

**Treatment**

Respiratory viral diseases usually heal on their own. But over-the-counter (OTC) medications, including nasal decongestants, cough suppressants, and pain relievers, can help to reduce symptoms.

In addition, Tamiflu, an antiviral drug, is sometimes prescribed if someone is in the very early stages of developing the flu.

**Prevention**

The best way to avoid respiratory viral diseases is to practice good personal hygiene. Wash your hands often, cover your mouth when you cough or sneeze, and limit your interactions with people who show symptoms of a respiratory condition.

There’s also a [vaccine](https://www.healthline.com/health/flu-shot-pros-and-cons) that can help to reduce your risk of getting the seasonal flu.

**Gastrointestinal viral diseases**

Gastrointestinal viral diseases affect your digestive tract. The viruses that cause them are contagious and usually lead to a condition called [gastroenteritis](https://www.healthline.com/health/viral-gastroenteritis), also called the stomach flu.

Common symptoms of gastrointestinal viral diseases include:

* abdominal cramps
* diarrhea
* vomiting

**Examples**

Examples of gastrointestinal viral diseases include:

* [norovirus infection](https://www.healthline.com/health/norovirus)
* [rotavirus infection](https://www.healthline.com/health/rotavirus)
* some adenovirus infections
* astrovirus infection

**Transmission**

Gastrointestinal viruses are shed in the stool during bowel movements. Food or water that’s been contaminated by feces can spread the virus to others. You can also get the virus from sharing utensils or personal objects with someone who has a virus.

**Treatment**

There aren’t any treatments for gastrointestinal viral diseases. In many cases, they resolve on their own within a day or two. In the meantime, drink plenty of fluids to replace those lost from diarrhea or vomiting.

**Prevention**

You can prevent gastrointestinal viral diseases by washing your hands often, especially after using the bathroom. Wiping down contaminated surfaces and not sharing personal items or eating utensils can also help.

There’s also a vaccine for rotavirus that’s recommended as part of a child’s [vaccination schedule](https://www.healthline.com/health/vaccinations/infant-immunization-schedule).

**Exanthematous viral disease**

Exanthematous viruses cause skin rashes. Many of them cause additional symptoms as well.

Many of the viruses in this category, such as the measles virus, are highly contagious.

**Examples**

Examples of exanthematous viral diseases include:

* [measles](https://www.healthline.com/health/measles)
* [rubella](https://www.healthline.com/health/rubella)
* chickenpox/[shingles](https://www.healthline.com/health/shingles-pictures)
* [roseola](https://www.healthline.com/health/roseola)
* [smallpox](https://www.healthline.com/health/smallpox)
* [fifth disease](https://www.healthline.com/health/fifth-disease)
* chikungunya virus infection

**Transmission**

Many exanthematous viruses are spread through respiratory droplets from the cough or sneeze of someone with the virus.

Other exanthematous viral diseases, such as chickenpox and smallpox, can be transmitted by coming into contact with fluid in broken skin lesions.

Shingles only occurs in people who’ve had chickenpox at some point. It’s a reactivation of the varicella-zoster virus that’s been lying dormant in your cells.

Chikungunya virus is spread through a mosquito bite and cannot be transmitted from person to person.

**Treatment**

Treating exanthematous viral diseases focuses on managing symptoms. Fever-reducing medications, such as acetaminophen, can help with some of the more bothersome symptoms.

Antiviral drugs, such as acyclovir, may be given for chickenpox or shingles.

**Prevention**

Measles, rubella, chickenpox, shingles, and smallpox can all be prevented through vaccination. You can reduce your risk of a chikungunya virus infection by protecting yourself from mosquito bites.

[Learn more about viral rashes.](https://www.healthline.com/health/rashes-with-viruses)

**Hepatic viral diseases**

The hepatic viral diseases cause inflammation of the liver, known as viral hepatitis. The [most commonTrusted Source](https://www.cdc.gov/hepatitis/abc/index.htm) types of viral hepatitis are hepatitis A, B, and C.

It is worth noting that diseases caused by other viruses, such as cytomegalovirus and the yellow fever virus, can also affect the liver.

**Examples**

Examples of hepatic viral diseases include:

* [hepatitis A](https://www.healthline.com/health/hepatitis-a)
* [hepatitis B](https://www.healthline.com/health/hepatitis-b)
* [hepatitis C](https://www.healthline.com/health/hepatitis-c)
* [hepatitis D](https://www.healthline.com/health/delta-agent-hepatitis-d)
* [hepatitis E](https://www.healthline.com/health/hepatitis-e)

**Transmission**

Many neurologic viruses are spread through the bite of an infected animal or bug, such as a mosquito or tick.

Other viruses, such poliovirus and other enteroviruses, are quite contagious and spread through close contact with someone with the virus. Contaminated objects can also contribute to the spread of these viruses.

**Treatment**

There’s no specific treatment for people with mild viral meningitis or encephalitis. Getting plenty of rest, staying hydrated, and taking [OTC anti-inflammatories](https://www.healthline.com/health/pain-relief/otc-anti-inflammatories) to ease pain or headaches can all help. In some cases, antiviral medication may be prescribed.

Polio or severe cases of meningitis or encephalitis may require additional treatment, such as breathing assistance or IV fluids.

If an animal that’s suspected to have the rabies virus bites you, you’ll be given a series of shots to help prevent the rabies virus from infecting you.

**Prevention**

There’s a vaccine for both [poliovirus](https://www.healthline.com/health/polio-vaccine-side-effects) and the [mumps virus](https://www.healthline.com/health/mmr-vaccine), which can cause meningitis and encephalitis.

Practicing good hygiene, avoiding close contact with those who have the virus, and protecting against insect bites can all help to reduce the spread of encephalitis and meningitis.

To reduce the risk of spreading rabies, keep your pets vaccinated and avoid approaching wild animals.

**Cutaneous viral diseases**

Cutaneous viral diseases cause lesions or [papules](https://www.healthline.com/symptom/papule) to form on the skin. In many cases, these lesions can stick around for a long time or come back after disappearing for a while.

**Examples**

Examples of cutaneous viral diseases include:

* [warts](https://www.healthline.com/health/skin/warts), including [genital warts](https://www.healthline.com/health/std/genital-warts)
* oral herpes
* [genital herpes](https://www.healthline.com/health/std/genital-herpes)
* [molluscum contagiosum](https://www.healthline.com/health/molluscum-contagiosum)

**Hemorrhagic viral diseases**

Hemorrhagic viral diseases are severe conditions that involve damage to your circulatory system.

Symptoms of a hemorrhagic viral disease include:

* high fever
* body aches
* weakness
* bleeding under the skin
* bleeding from the mouth or ears
* bleeding in internal organs

**Examples**

Examples of viral hemorrhagic diseases include:

* [Ebola](https://www.healthline.com/health/ebola-hemorrhagic-fever)
* Lassa fever
* [dengue fever](https://www.healthline.com/health/dengue-fever)
* [yellow fever](https://www.healthline.com/health/yellow-fever)
* Marburg hemorrhagic fever
* Crimean-Congo hemorrhagic fever

**Transmission**

Some hemorrhagic viral diseases, such as dengue fever and yellow fever, are spread through the bite of an infected insect.

Others, such as Ebola, are spread to other people through contact with the blood or other bodily fluid of someone with the virus. Lassa fever is spread through inhaling or consuming the dried feces or urine of a rodent with the virus.

**Treatment**

There’s no specific treatment for hemorrhagic viral diseases.

It’s important to stay hydrated if you have a viral hemorrhagic disease. Some people may need intravenous (IV) fluids to maintain electrolyte balance. Supportive care to maintain hydration and electrolyte balance is essential. In some cases, the antiviral drug ribavirin may be given.

**Prevention**

Researchers are in the process of developing vaccines for several hemorrhagic viruses. A yellow fever vaccine is currently available for people traveling to areas where yellow fever is common.

If you live or work in an area where viral hemorrhagic diseases are common, you can do the following to reduce your risk:

* Use proper protection, such as gloves, glasses, or a face shield, when working around people who have a virus.
* Avoid being bitten by insects, especially mosquitos and ticks, by wearing protective clothing or using insect repellent.
* Protect against rodent infestation by keeping food covered, removing garbage often, and making sure windows and doors are secured properly.

**Neurologic viral diseases**

Some viruses can infect the brain and surrounding tissues, causing neurologic viral diseases. This can result in a range of symptoms, including:

* fever
* confusion
* drowsiness
* seizures
* coordination problems

**Examples**

Examples of neurologic viral diseases include:

* [polio](https://www.healthline.com/health/poliomyelitis)
* viral [meningitis](https://www.healthline.com/health/meningitis)
* viral [encephalitis](https://www.healthline.com/health/encephalitis)
* [rabies](https://www.healthline.com/health/rabies)

**Bottom line**

There are many viral diseases. Some, such as the common cold or the stomach flu, are minor and go away on their own within a few days. Others, however, are more serious.

Unlike bacterial infections, viral diseases don’t respond to antibiotics. Instead, treatment usually focuses on managing symptoms and supporting the immune system with plenty of rest and hydration.

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