**Viral Arthritis Characteristics and Diagnosis**

Viral arthritis is acute arthritis that is caused by a viral infection. According to *Clinical Medicine*, about 1 percent of all cases of acute arthritis is associated with a viral causative agent. Many viruses have been reported as the cause of viral arthritis. In those who have an acute onset of [polyarthritis](https://www.verywellhealth.com/what-is-polyarthritis-189659), a viral cause should be considered. Viruses are not believed to cause the destructive, chronic [inflammatory types of arthritis](https://www.verywellhealth.com/what-is-inflammatory-arthritis-189657), such as [rheumatoid arthritis](https://www.verywellhealth.com/overview-of-rheumatoid-arthritis-4164535). But viruses can initiate rheumatic symptoms through various mechanisms.1﻿

**How Viral Arthritis Develops**

Viruses can directly invade a joint which leads to an infection of the [synovium](https://www.verywellhealth.com/what-is-synovium-188024) or surrounding joint tissues. Viral particles (whole virions or viral antigens) may act as the antigen in immune complexes which form in response to a viral infection. In such cases, the immune complexes may be deposited in the joints. The other mechanism of action involves persistent viral infections which lead to immune dysregulation and chronic inflammatory reactions.1﻿

**Symptoms**

Typical symptoms associated with viral arthritis include symmetric joint involvement that can develop as arthralgia (joint pain) or arthritis (joint inflammation) that [mimics rheumatic disease,](https://www.verywellhealth.com/diseases-that-mimic-rheumatoid-arthritis-190335) often with a characteristic rash. The joint symptoms can precede or coincide with the clinical signs and symptoms of viral infection.

Typically, joint involvement associated with viral arthritis tends to:

* Develop suddenly
* Be of short duration (i.e., it does not persist)
* Not recur

However, some viral infections do persist or recur. Even so, viral arthritis generally does not lead to persistent chronic arthritis with joint destruction—with the exception of the chikungunya virus.

**Causes**

The most common viruses that have been linked to arthralgia or arthritis include:

* **Parvovirus:** Joint symptoms occur in 60 percent of infected adults
* **Hepatitis B:** 10 to 25 percent develop arthritis
* **Hepatitis C:** 2 to 20 percent develop arthritis
* **Rubella:** Incidence of arthritis is up to 30 percent of infected females and 6 percent of males
* **Alphaviruses:** Mosquito-borne RNA viruses increasingly common in travelers to endemic areas
* **Epstein-Barr Virus:** Common in patients taking [biologic drugs](https://www.verywellhealth.com/what-are-biologics-189483)

Because of the availability of specific [vaccinations](https://www.verywellhealth.com/vaccinations-and-rheumatoid-arthritis-189785) (e.g., mumps) or the development of antiretroviral medications (e.g., for HIV), it has become less common to see viral arthritis associated with certain viruses. Other viruses that may also be associated with viral arthritis, but less commonly, include Hepatitis E, human T-lymphotropic virus type-1, enterovirus, and the dengue virus.

The chikungunya virus, an alphavirus which has caused disease in Africa and Asia primarily, is spread by Aedes mosquitoes. Acute chikungunya usually lasts for up to a week, but it is associated with arthritis that persists for up to 36 months. Usually, the symmetrical arthritis of chikungunya affects the fingers, wrists, knees, and ankles. Relapsing and remitting symptoms occur in 60 to 80 percent of those affected, according to *Clinical Medicine*. The outbreak of chikungunya that has occurred in the Caribbean is likely to increase the prevalence of this specific type of viral arthritis since it is a hot spot for travelers.2﻿