

Find information on coronavirus disease 2019 (COVID-19).



Influenza (Flu)

COVID-19 timeline
Global situation

CDC, 2016

Pandemic Severity Assessment Framework (PSAF)

Once a novel influenza A virus is identified and is spreading from person-to-person in a sustained manner, public health officials use the Pandemic Severity Assessment Framework (PSAF) to determine the impact of the pandemic, or how “bad” the pandemic will be. There are two main factors that can be used to determine the impact of a pandemic. **The first is clinical severity, or how serious is the illness associated with infection. The second factor is transmissibility, or how easily the pandemic virus spreads from person-to-person.** These two factors combined are used to guide decisions about which actions CDC recommends at a given time during the pandemic.

The framework is divided into two parts. The first part is the **initial assessment**, which happens early during a pandemic. At this time, activity may be detected in pockets or certain communities across the country so information and understanding about the pandemic virus will be limited. By studying the information that is available, CDC can produce a preliminary assessment of the potential impact of the pandemic (e.g., low to moderate transmissibility and moderate to high clinical severity). However, that assessment may change as the pandemic evolves and more information is known.

The second part, or **refined assessment**, happens later in the pandemic when more information is available. This additional information helps to provide a more refined and accurate picture of pandemic impact, including assessments of the impact by age group.

The results of these assessments can be compared to past pandemics (or even seasonal influenza epidemics), creating a quick comparative snapshot of the potential impact of the pandemic. For example, using the PSAF, the 1918 pandemic can be characterized as one with very high transmissibility and very high clinical severity whereas the 2009 H1N1 pandemic can be characterized as one with moderate transmissibility and clinical severity for the overall population. The results help public health officials and health care professionals make timely and informed decisions, and to take appropriate actions.

The PSAF is one of two assessment tools developed by CDC to guide and coordinate actions among federal, state, local, and tribal entities involved in pandemic response. Please refer to “Novel Framework for Assessing Epidemiologic Effects of Influenza Epidemics and Pandemics” for more information about the PSAF.

Related Links

[Pandemic Intervals Framework](#)

[Influenza Risk Assessment Tool](#)

[Influenza Risk Assessment Tool \(IRAT\) Results](#)

[Pandemic Planning and Preparedness Resources](#)

[Pandemic Influenza Risk Management: WHO Interim Guidance](#)

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