

- **Personal protective measures for everyday use:** These include voluntary home isolation of ill persons, respiratory etiquette, and hand hygiene.
- **Personal protective measures reserved for pandemics:** These include voluntary home quarantine of exposed household members and use of face masks in community settings when ill.
- **Voluntary home isolation (i.e., staying home when ill or self-isolation):** Persons with influenza stay home for at least 24 hours after a fever or signs of a fever (chills, sweating, and feeling warm or flushed)** are gone (<https://www.cdc.gov/flu/protect/preventing.htm>), except to obtain medical care or other necessities.†† To ensure that the fever is gone, patients' temperature should be measured in the absence of medication that lowers fever (e.g., acetaminophen or ibuprofen). In addition to fever, common influenza symptoms include cough or chest discomfort, muscle or body aches, headache, and fatigue. Persons also might experience sneezing, a runny or stuffy nose, sore throat, vomiting, and diarrhea (<https://www.cdc.gov/flu/consumer/symptoms.htm>).
- **Respiratory etiquette:** Persons cover coughs and sneezes, preferably with a tissue, and then dispose of tissues and disinfect hands immediately after a cough or sneeze, or (if a tissue is not available) cough or sneeze into a shirt sleeve. Touching the eyes, nose, and mouth should be avoided to help slow the spread of germs (<https://www.cdc.gov/flu/protect/covercough.htm>).
- **Hand hygiene:** Persons perform regular and thorough hand washing with soap and water (or use alcohol-based hand sanitizers containing at least 60% ethanol or isopropanol when soap and water are not available).
- Most persons infected with an influenza virus might become infectious 1 day before the onset of symptoms and remain infectious up to 5–7 days after becoming ill. However, studies found that infants and immunocompromised persons might shed influenza viruses for prolonged periods (up to 21 days and a mean of 19 days, respectively). The effectiveness of personal protective measures depends on their ability to interrupt virus transmission from one person to another. Voluntary home isolation, which is a form of patient isolation, prevents an ill person from infecting other people outside of their household. Respiratory etiquette reduces the dispersion of droplets contaminated with influenza virus being propelled through the air by coughing or sneezing. Hand hygiene reduces the transmission of influenza

viruses that occurs when one person touches another (e.g., with a contaminated hand). Contamination also can occur through self-inoculation via fomite transmission (indirect contact transmission) when persons touch a contaminated surface and then touch their nose with a contaminated hand. A study conducted in households in Bangkok, Thailand, found that increased handwashing reduced surface contamination with influenza virus, which lowered the potential for self-inoculation via fomite transmission (58). Additional studies found that influenza viruses can remain viable on the human hand for roughly 3–5 minutes and that influenza viruses can remain on fingers for 30 minutes after contamination

- **Settings and use.** Voluntary home isolation involves persons remaining at home when ill with influenza. Respiratory etiquette and hand hygiene are recommended in homes and in all other community settings, including schools and workplaces. All three personal protective measures are considered everyday preventive actions that should be implemented year-round but that are especially important during annual influenza seasons and influenza pandemics. Use of these personal protective measures might result in some secondary (unintended or unwanted) consequences (e.g., concerns about job security for ill persons who lack paid sick leave or skin irritations due to frequent hand washing).

- **CDC recommendations**

- **Voluntary home quarantine:** CDC might recommend voluntary home quarantine of exposed household members as a personal protective measure during severe, very severe, or extreme influenza pandemics in combination with other personal protective measures such as respiratory etiquette and hand hygiene. If a member of the household is symptomatic with confirmed or probable pandemic influenza, then all members of the household should stay home for up to 3 days (the estimated incubation period for seasonal influenza)^{¶¶} starting from their initial contact with the ill person, to monitor for influenza symptoms.

- **Use of face masks by well persons:**

CDC does not routinely recommend the use of face masks by well persons in the home or other community settings as a means of avoiding infection during influenza pandemics except under special, high-risk circumstances