



## ADVISORY

### Hand and Environmental Hygiene: Preventing Pathogen Transmission

In health care settings such as hospitals and long-term care facilities, fundamental infection prevention measures such as hand hygiene and environmental hygiene are critical to prevent the transmission of pathogens ([Centers for Disease Control and Prevention Reference](#)).

Recent outbreaks of acute flaccid myelitis (AFM) and adenovirus among children have raised questions about ways to prevent transmission when those affected are admitted to a health care facility. This advisory offers information regarding AFM, viruses that are currently implicated, modes of transmission and measures of prevention.

#### **Acute Flaccid Myelitis:**

The CDC has confirmed 90 cases of AFM in 27 states so far this year, triple the number in 2017. AFM is a serious condition causing sudden muscle weakness in the arms or legs, sometimes following a respiratory illness. Other symptoms may include neck weakness or stiffness, drooping eyelids or a facial droop, and difficulty swallowing or slurred speech.

***Pathogen or Cause.*** The specific cause of AFM paralysis in the current outbreak has not been determined, but several viruses have been implicated, including enterovirus and rhinovirus ([CDC Reference](#)).

Similar outbreaks reported in 2014 and 2016 were caused by enterovirus, but other viruses—including poliovirus, non-polio enteroviruses, West Nile Virus (WNV), other viruses in the same family as WNV, and adenoviruses—have also caused AFM or other similar neurologic conditions. [CDC Reference](#)

***Mode of Transmission.*** The mode(s) of transmission remains unknown at this time because the cause has not yet been determined. However, many of these viruses are transmitted through direct contact with respiratory secretions, such as saliva, nasal mucus, sputum, stool, contaminated surfaces, or via an insect bite such as WNV ([CDC Reference](#)).

#### **Prevention Measures:**

***Hand Hygiene.*** While it is unknown if hand hygiene is effective in preventing AFM, performing hand hygiene with soap and water or alcohol-based hand rub is one of the best ways to avoid getting sick and spreading germs to others ([CDC Reference](#)). Maintaining clean hands should be a cornerstone to all infection prevention activities at work and at home.

***Environmental Hygiene.*** Environmental disinfection of surfaces in health care settings should be performed using a hospital-grade disinfectant with an Environmental Protection Agency label claim for any of the several non-enveloped viruses (e.g., norovirus, poliovirus, and rhinovirus). Disinfectant products should be used in accordance with the manufacturer's instructions for the specific label claim and in a manner consistent with environmental infection control recommendations.

***Pest Management.*** Given the question of the role WNV infection may play in AFM, it is prudent for health care facilities to ensure an integrated pest management plan is in place that includes identification of local areas that may promote mosquito breeding. Removing standing water, clearing brush and vegetation, and monitoring of mosquito presence are examples of such a plan.

***Presenteeism.*** Health care personnel remain committed to the care of patients, employees, their own families, and others within their communities. Commitment to patients is often demonstrated by taking unscheduled days off, including sick days. If health care personnel report to work sick, this action may cause transmission of an illness from that health care worker to patients or others within their facility. To that end, health care personnel should stay home from work when ill. This is also an opportunity to verify immunization status with age-appropriate vaccines to ensure adherence with the CDC's Advisory Committee on Immunization Practices immunization schedule.

**Further Questions:**

Please contact Patti Costello, AHE executive director, at [ahe@aha.org](mailto:ahe@aha.org) and 312-422-3860.

**About the Association for the Health Care Environment**

The Association for the Health Care Environment (AHE) is a Professional Membership Group of the American Hospital Association. AHE is the organization of choice for professionals responsible for establishing and maintaining health care environments that are free of surface contamination and that support safety, service, and efficient and effective operations.

AHE is the go-to resources for best-in-class tools, products, education and training that raise the standard of the health care environmental services field and shape the future workforce for over 2,300 professionals committed to pathogen free, healing environments across all care settings. [www.ahe.org](http://www.ahe.org)