

## Legislation Text

---

**File #:** 15-0408, **Version:** 1

---

### Acute Neurological Illness - Pfister

In February, 2015, the state health department notified the LCHD/CHC Communicable Disease Program (CD) about a possible case of acute neurological illness that was considered a part of the nation-wide outbreak. This case is a child of almost 11 years of age.

Since September 2014, CDC and partners have been investigating reports of children across the United States who developed a sudden onset of weakness in one or more arms or legs with MRI scans that showed inflammation of the gray matter - nerve cells - in the spinal cord. This illness is now being referred to as acute flaccid myelitis (AFM).

From August 2, 2014 to March 2, 2015, CDC has verified reports of 115 children in 34 states who developed AFM that meets CDC's case definition (no state specific data are available). The median age of the children was about 8 years. Almost all of them were hospitalized; some were placed on breathing machines. Most patients had fever and/or respiratory illness before onset of neurologic symptoms. About two thirds of the children who have been observed (median 19 days) after their illness reported some improvement in symptoms, while about one third showed no improvement. Only two of the children have fully recovered.

The specific causes of this illness are still under investigation, however, these cases are most similar to illnesses caused by viruses, including enteroviruses, adenovirus, West Nile and other similar viruses, and herpes viruses. Among possible causes, CDC is investigating whether the cases of AFM may be linked to an outbreak of severe respiratory illness caused by enterovirus D68 (EV-D68) that the U.S. experienced in 2014.

To be considered a AFM case, a patient must meet all four of these criteria: Patient  $\leq 21$  years of age, acute onset of focal limb weakness, onset of illness on or after August 1, 2014, and have an MRI showing a spinal cord lesion largely restricted to gray matter.

This nation-wide outbreak is a reminder that emerging infectious diseases (EID) represent an ongoing threat to the health and livelihoods of people everywhere, including Americans. After a period of optimism during the 1960s and 1970s about humankind's ability to conquer infectious diseases, global concern about EIDs has grown. Since 1980, approximately one to three new human infectious diseases have been identified each year; others have "re-emerged," causing greater numbers of cases than before and/or affecting different populations and regions than in the past (e.g., dengue fever or Ebola), and others have developed resistance to available treatments (e.g., multi-drug resistant tuberculosis).

As new infectious diseases can emerge anywhere, governments, multilateral institutions, and other stakeholders have aimed to build and bolster a set of interconnected systems for outbreak prevention, preparedness, detection, and response. This complex web of global efforts includes disease surveillance, drug and vaccine research and development, infectious disease research and training, preparedness and response planning and execution, and public education, behavior change and disease prevention campaigns.

None, for information only.