

October 19, 2018, Vol. 38, No. 19 (Page 1 of 3)



Serving Reno, Sparks and all of Washoe County, Nevada Telephone: 775-328-2447 | Fax: 775-328-3764 | <u>EpiCenter@washoecounty.us</u> | washoecounty.us/health

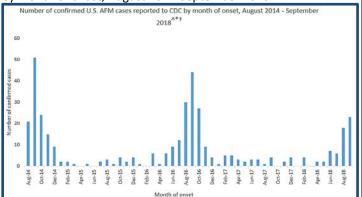
#### IN THIS ISSUE: ACUTE FLACCID MYELITIS - WHAT SHOULD YOU KNOW?

### Acute Flaccid Myelitis (AFM) – What Should You Know?

#### Background

Acute Flaccid Myelitis (AFM) became a buzz word during the past few weeks. It is truly a severe but rare disease, affecting less than one in a million people in the United States every year according to CDC's estimate. It is NOT a new disease. But the incidence appears to be increasing. Seasonality also appears to occur. Note the every other year pattern (Figure 1). On September 30, 2014, the Washoe County Health District (WCHD) released an issue of Epi-News addressing acute neurologic illness with focal limb weakness of unknown etiology in children. It called for case reporting in patients  $\leq$  21 years of age with acute onset of focal limb weakness occurring on or after August 1, 2014 AND an MRI Showing a spinal cord lesion largely restricted to gray matter. At that time, although AFM was not listed as a reportable condition, it was considered an extraordinary occurrence of illness that should be reported. As of October 17, 2018, no single case of AFM has been reported in Washoe County since September 2014.

**Figure 1.** Number of confirmed U.S. AFM cases reported to CDC by month of onset, August 2014-September 2018



Nationwide, 386 cases have been reported to CDC. The table below has case counts by each year (Data as of 10/16/2018).

Year	No. cases	No. States	Note
2018	62	22	NV had 1 case
2017	33	16	
2016	149	39 + DC	
2015	22	17	
2014	120	34	Data for 8/1-12/31

#### **Symptoms**

 Most patients will have sudden onset of weakness and loss of muscle tone and reflexes in the arms and legs.
Some patients, in addition to the limb weakness, will experience:

- o facial droop or weakness,
- o difficulty moving the eyes,
- o drooping eyelids, or
- o difficulty with swallowing or slurred speech.
- Numbness or tingling is rare in patients with AFM, although some patients have pain in their arms or legs. Some patients with AFM may be unable to pass urine. The most severe symptom of AFM is respiratory failure that can happen when the muscles involved with breathing become weak. This can require urgent ventilator support (breathing machines).

#### Causes

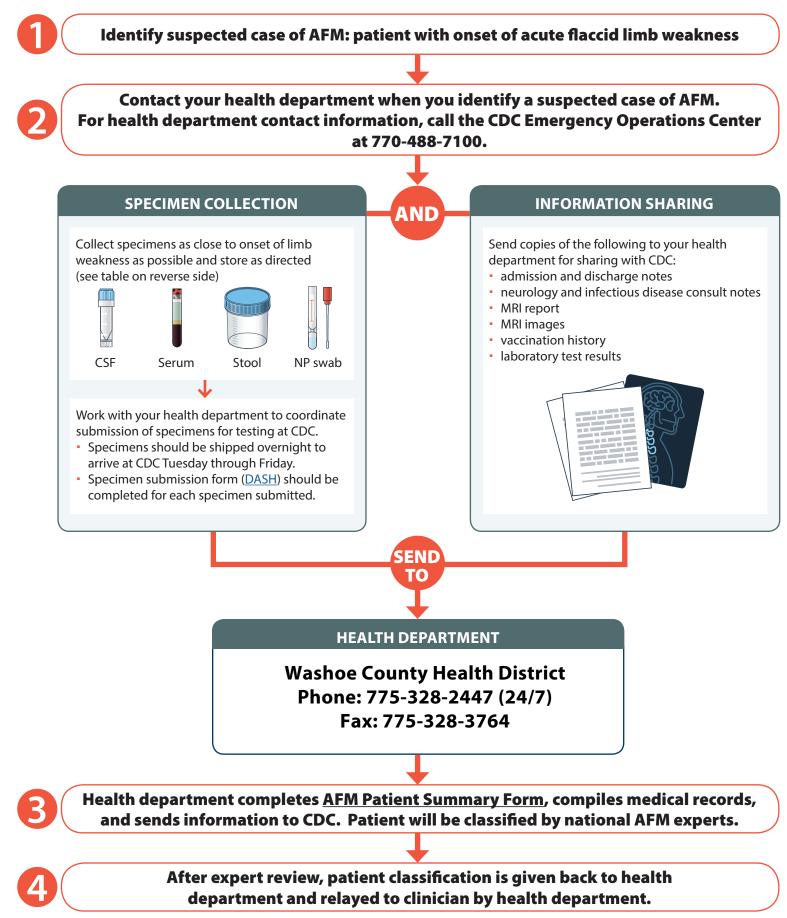
- The specific causes of most AFM cases are still being investigated.
- Poliovirus is not the cause of these AFM cases.
- There are a variety of possible causes of AFM such as viruses (e.g., poliovirus, non-polio enteroviruses such as EV-A71, adenoviruses, and West Nile virus), environmental toxins, and genetic disorders. A condition where the body's immune system attacks and destroys body tissue that it mistakes for foreign material may also cause AFM.
- CDC has not found a clear association between enterovirus D68 (EV-D68) and the AFM cases reported since 2014.
- In 2018, the Colorado Department of Public Health and Environment and the Children's Hospital Colorado notified CDC of an increase in neurologic illness, including 3 cases of AFM due to EV-A71, a known cause of AFM <u>https://www.cdc.gov/mmwr/volumes/67/wr/mm6736a5</u>..htm

#### **Recommendation for Clinicians**

- Please print the following two pages entitled "Job Aid for Clinicians" as your quick desktop reference.
- Refer to CDC's "Interim Considerations for Clinical Management of Patients with Acute Flaccid Myelitis," released November 7, 2014 with consensus from experts in infectious diseases, neurology, pediatrics, critical care medicine, public health epidemiology, and virology (www.cdc.gov/acute-flaccid-myelitis/downloads/acuteflaccid-myelitis.pdf). CDC is currently updating this guidance with input from national experts
- Consult with infectious diseases and neurology experts to assist with diagnostic and treatment recommendations
- Report to WCHD at **775-328-2447** any suspected cases **at ANY AGE** with AFM compatible symptoms.

# Job Aid for Clinicians

How to send information about a suspected AFM case to the health department



SAMPLE	AMOUNT	TUBE TYPE	PROCESSING	STORAGE	SHIPPING
CSF	1mL (collect at same time or within 24hrs of serum)	Cryovial	Spun and CSF removed to cryovial	Freeze at -20 <sup>°</sup> C	Ship on dry ice
Serum	≥0.4mL (collect at same time or within 24 hours of CSF)	Tiger/red top	Spun and serum removed to tiger/red top.	Freeze at -20°C	Ship on dry ice
Stool	≥1 gram (2 samples collected 24hrs apart)	Sterile container	n/a	Freeze at -20⁰C	Ship on dry ice. Rectal swabs should not be sent in place of stool.
Respiratory (NP)/ Oropharyngeal (OP) swab	1ml (minimum amount)	n/a	Store in viral transport medium	Freeze at -20°C	Ship on dry ice

## Specimens to collect and send to CDC for testing for suspected AFM cases

Coordinate with the Washoe County Health District (WCHD) to send information about suspected AFM cases and ship specimens to CDC through the Nevada State Public Health Laboratory. Contact information for WCHD:

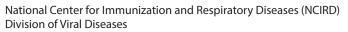
# **Washoe County Health District**

Phone: 775-328-2447 (24/7)

Fax: 775-328-3764

# Email: EpiCenter@WashoeCounty.us (for questions only, not for case reporting)

www.cdc.gov/acute-flaccid-myelitis



U.S. Department of Health and Human Services Centers for Disease Control and Prevention