

The Acute Flaccid Myelitis Task Force

A workgroup of the Board of Scientific Counselors, Office of Infectious Diseases



The Acute Flaccid Myelitis Task Force is a nationwide group of physicians, scientists, and public health experts from a variety of disciplines and institutions. The Task Force is committed to moving the AFM research agenda forward to better understand the causes of AFM, and review and update clinical guidance on the management of patients with AFM.

The Acute Flaccid Myelitis Task Force (AFM-TF) held its first in-person meeting in Atlanta, GA on December 4, 2018. This group of 16 multi-disciplinary experts come from various organizations across the country, from the National Institutes of Health to state health departments to hospitals and universities. At the beginning of the first meeting, TF members heard from parents who had children affected by AFM. Their impactful stories helped inform the subsequent discussions. Those discussions at the first meeting centered on better understanding the causes of AFM, including the possibility that AFM is caused by a virus or viruses. They also discussed whether those affected have any common risk factors, the symptoms associated with AFM, and how the body's immune system responds to AFM. The AFM-TF then summarized existing research and important areas that needed to be studied in the future. They presented all of that information during the Office of Infectious Diseases Board of Scientific Counselors meeting on December 6, 2018.

Meeting summary

AFM-TF members agreed that the increase in AFM cases seasonally we are currently seeing is likely new and began in the United States in 2014. Task Force members also felt that evidence supports the hypothesis of viruses, in particular enterovirus D68 (EV-D68), as a cause AFM cases. However, they acknowledged that evidence is insufficient to definitively conclude a single cause for AFM, as other viruses have been detected in some cases and no virus is found in a large proportion of specimens from AFM case-patients. It was also discussed that based on studying the cases of AFM, it is likely that a viral infection directly affects the spinal cord, as opposed to being a reaction of the immune system that could happen after a person experiences a viral infection. The AFM-TF acknowledged that one way they test this hypothesis is by looking for pathogens (like EV-D68) in the cerebrospinal fluid (CSF), which is fluid found in the brain and spinal cord. To date, however they have not been able to consistently detect pathogens in the CSF,

and they believe this will likely continue to be an obstacle, even as we continue to improve our knowledge of AFM.

Going forward

The AFM-TF and the BSC agreed on a number of key priority activities. These include:

- Strengthening and expanding education and communication outreach to clinicians for the diagnosis and rapid reporting of cases
- Providing more resources at the state and local levels to improve case identification, AFM monitoring, and collecting more long-term data on cases and outcomes
- Implementing studies that can help establish potential risk factors
- Further distinguishing the symptoms or group of symptoms associated with diagnosed cases of AFM
- Developing a system for collecting, processing, storing, and sharing clinical specimens (e.g., blood, tissue, CSF, etc.) to support future scientific investigation and collaboration
- Advancing the ability to detect and identify potential causes of AFM using cutting-edge laboratory technologies, such as enhanced gene sequencing

The AFM-TF and the BSC have committed to moving the AFM research agenda forward, positioning CDC to better understand the causes of AFM, and review and update clinical guidance on the management of patients with AFM. The AFM-TF will continue to meet monthly via teleconference and will reconvene for a second in-person meeting in spring 2019. The AFM-TF will continue to provide its findings to the BSC for discussion and deliberation.

AFM is defined by sudden onset of limb weakness with inflammation of the spinal cord seen on MRI (magnetic resonance imaging).

www.cdc.gov/afm