



Transcript for CDC Telebriefing: Update on Acute Flaccid Myelitis (AFM) in the U.S.

Press Briefing Transcript

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- [Audio recording](#) [4.11MB]

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OPERATOR: Good afternoon and thank you for standing by and welcome to CDC update on acute flaccid myelitis. Today's conference is being recorded. If you have objections please disconnect at this time. Your line is placed on a listen only mode until the question and answer session of today's conference. At that time you may press star followed by the number one to ask a question. I would like to turn it over to Kathy Harben, Chief of CDC's New Media Branch.

KATHY HARBEN: Thank you all for joining us today on an update on acute flaccid myelitis also known as AFM in the United States. We are joined by Dr. Nancy Messonnier. She is director of CDC's National Center for Immunization and Respiratory Diseases. She has opening remarks and then she and her staff will be available for a Q&A period.

NANCY MESSONNIER: Thank you. Good afternoon and thank you for joining us today to talk about acute flaccid myelitis or AFM. Today I want to update you on CDC's work on AFM including what we know and what we don't know about the condition and advice for clinicians and parents. AFM is a rare, but serious condition that affects the nervous system. It specifically affects the area of spinal cord called gray matter and causes muscles and reflexes to become weak. We know this can be frightening for parents. I know many parents want to know what the signs and symptoms are that they should be looking for in their child. I encourage parents to seek medical care right away if you or your child develop sudden weakness or loss of muscle tone in the arms or legs. CDC has been actively investigating AFM, testing specimens and monitoring disease since 2014 when we first saw an increase in cases. The number of cases reported in this time period in 2018 is similar to what was reported in the fall of 2014 and 2016. Since 2014, most of the AFM cases have been among children. In 2018 so far, CDC has received reports of 127 patients under investigation or PUIs; **62 cases have been confirmed as AFM (in 22 states) –edited for clarity.** CDC and state and local health departments are still investigating some of these PUIs. Of the confirmed cases, the average age is about 4 years old. More than 90 percent of the cases are in children age 18 years and younger. We plan to post updated PUI and AFM counts on our website this afternoon. Going forward, we will report updated case counts on our website every Monday afternoon. We expect that the case count may vary from week to week as our experts work with local and state health departments to investigate their PUIs. Based on previous years, most AFM cases occur in the late summer and fall. The data we are reporting today is a substantially larger number than in previous months this year. CDC recently received increased reports for patients suspected to have AFM with an onset of symptoms in August and September. With enhanced efforts working with state and local health departments and hospitals we were able to confirm a number of these cases faster. Also, CDC is now providing a number of patients still under investigation or PUIs, so people can better investigate increases in confirmed cases over the coming months. We understand that people particularly parents are concerned about AFM. Right now, we know that poliovirus is not the cause of these AFM cases. CDC has tested every stool specimen from the AFM patients, none of the specimens have tested positive for the poliovirus. AFM can be caused by other viruses, such as enterovirus and west nile virus, environmental toxins and a condition where the body's immune system attacks and destroys body tissue that it mistakes for foreign material. While we know that these can cause AFM, we have not been able to find a cause for the majority of these AFM cases. The reason why we don't know about AFM — and I am frustrated that despite all of our efforts we haven't been able to identify the cause of this mystery illness — we continue to investigate to better understand the clinical picture of AFM cases, risk factors and possible causes of the increase in cases. Despite extensive laboratory testing, we have not determined what pathogen or immune response caused the arm or leg weakness and paralysis in most patients. We don't know who may be at higher risk for developing AFM or the reasons why they may be at higher risk. We don't fully understand the long-term consequences of AFM. We know that some patients diagnosed with AFM have recovered quickly and some continue to have paralysis and require ongoing care. And we know of one death in 2017 in a child that had AFM. For health reasons, certain information about this case is being withheld from the public. For more information, please contact the CDC at 207.241.237.3.

child that had AFM. For health care professionals, we have developed a provider tool kit that contains information on AFM and instructions for reporting PUIs to the health department. CDC's website has information for families with patients with AFM, links to important resources and a section for health care providers. We will continue to post updates on our website. As a parent myself, I understand what it is like to be scared for your child. Parents need to know that AFM is very rare, even with the increase in cases that we are seeing now. We recommend seeking medical care right away if you or your child develop sudden weakness of the arms or legs. As we work to better understand what is causing AFM, parents can help protect their children from serious diseases by following prevention steps like washing their hands, staying up to date on recommended immunizations and using insect repellent. While I am concerned about the increase in cases, I want folks to know this work is core to CDC's mission to protect America from health threats. Thank you and we are happy to take any questions.

OPERATOR: Thank you, at this time if you is questions or comments you may press star 1. Again that is star 1 for questions or comments. Maggie Fox, you may go ahead.

MAGGIE FOX: Thanks, very much. Can you talk about a little bit more about the possible agents? You mentioned environmental toxins for the first time. Can we also put this in context of how extraordinarily rare these numbers are given the overall population of children? Thank you.

NANCY MESSONNIER: Sure. Thank you for the questions. Let me start with the second. Overall, the rate of AFM over the years that it has been diagnosed which is since 2014 is less than one in a million. That is why we say that this disease is incredibly rare. In terms of the causes, we are looking at everything. Certainly, after three cycles of this, when we have looked through all the normal agents, we are looking beyond that to see if there are things beyond normal infectious diseases that could cause this. Of course, we are considering environmental agents broadly. We have seen no sign of that yet, but we are open and considering all possibilities. This is a mystery so far and we haven't solved it yet, so we have to be thinking broadly.

MAGGIE FOX: Thank you.



OPERATOR: The next question comes from Mike Stobbe. You may go ahead sir.

MIKE STOBBE: Thank you for taking my call. So I just wanted to confirm a couple of things. First of all, did you say 90 percent of these cases are in children 15 and younger, 1 in 5. Also, I want to confirm there have been no deaths in the 127? Also, 127, each of these cases are people who had paralysis or weak arms and legs? Then the last question, you talked about the rate of AFM since 2014 is less than one in a million. What is the denominator? A million kids in the U.S. or a million kids who have enterovirus? You said you haven't been able to establish a cause in most cases, but in some it sounds like you have. What have you established and how many cases have you determined a cause?

NANCY MESSONNIER: That's a long list of questions. Let me see if I can start with — overall since we have started detecting the increases in 2014 there has been 386 cases. So it's that case over the population denominator, not those with the enterovirus that gets us less than one in a million. It's 18 years old, so 90 percent of the cases are in those 18 years of age or younger. Let's see — what are the causes? So for individual cases, we have determined causes. For example, we've have detected enterovirus in several of these individual cases. There's sort of a long list of other agents that we have found in one or two. But if you are having the peaks of disease every late summer and early fall you would think we are finding a single agent. That is what we are not finding. For individual cases we are finding agents, but nothing that provides the unifying diagnosis that we expect to explain this disease. I guess, if you want to be specific, I can tell you that in several of the cases we found enterovirus and several cases we found rotovirus. Sorry, rhinovirus, not rotovirus. Some of it is public literature. But again this is a wide variety of causes. It doesn't explain the whole peak of disease. Did that answer all of your questions? There are a lot of them.

MIKE STOBBE: I'm sorry to load a big list on you. Can you quantify of the 62 confirmed cases, like 20 of them you found something? Did you find west Nile in any of them? If there is a tally of specific numbers, that would be helpful.

NANCY MESSONNIER: The numbers that I'm quoting are actually primarily from the last two clusters in 2014 and 2016 where we have had much more time to go through a long list of diagnostics. In 2018, most of these cases are just occurring, so we haven't finished the whole diagnostic algorithm. The numbers we would quote would be from the previous two clusters though we had no reason to think they would be different now. The number that I gave you, the overall number of patients under investigation are those patients for which we are looking in more depth to see if they meet the confirmed case definition. That is the smaller number versus the larger number that I gave you. I will stop there and see if there are more questions.

O  207.241.237.3  gain, that is star 1 if you would like to ask a question. Our next question comes from Helen Branswell, please state your affiliation.

HELEN BRANSWELL: Hi, I'm with stat. I was wondering if there are any geographic clues that you are seeing a pattern with these infections? Do they cluster in any part of the country? Are they being seen elsewhere? I'm fairly certain Canada has seen them. I'm not sure if I've heard reports from Europe. Is this unique to North America?

NANCY MESSONNIER: Thank you for both of the questions and for giving me the chance to clarify. There has been reported cases of AFM in many countries, but nobody else has detected this very particular pattern of disease with these seasonal clustering every other year. As far as we know it has only been detected in the United States. In terms of clustering in the United States, many states in the U.S. has been impacted by this disease, so we are not seeing geographic clustering in 2018 nor have we seen it in 2016 or 2014. We are looking for clues, but we really haven't seen it in the geography.

HELEN BRANSWELL: Thank you.

OPERATOR: our next question comes from Betsy McKay from Wall Street Journal. You may go ahead.

BETSY MCKAY: Thanks so much. I have a couple questions. One is, if you compare this year, 2018 so far with 2014, is it on track, do you think, to be worse? Or is this more intense so far than 2014 or not? I saw 127 cases, but some are under investigation whereas in 2014, the CDC reported I think 120 people. Anyway, if you can put this year in context with 2014 and whether this is worse or not or if you think it will be worse — and also, is AFM reportable by — reported voluntarily by health departments to the CDC? Is it a reportable disease by doctors to health departments? How might that be playing into the numbers?

NANCY MESSONNIER: As you point out, in previous years we reported confirmed cases and we didn't regularly update on the patients under investigation. We decided this year that it was really important to be able to report also the patients under investigation so folks to see what is coming. That may be why the numbers don't exactly lineup to what you are familiar with in the previous two, 2014 and 2016. So far, we are generally on track to have a number of cases similar to what we have seen in 2014 and 2016, but it would be premature to say that we're confident that we know what is going to happen since it really is early in this. Your second —

BETSY MCKAY: What is reportable? Is AFM notifiable? What is the process right now?

NANCY MESSONNIER: So we work very closely with our state and local partners across a wide variety of diseases. They are very concerned about AFM as we are. And they are working hard to identify these cases, report them and track them. And that's something that all across the country we are working with state and local health departments on. We have a call with them later today. We have a close partnership with them and we know that they are concerned about AFM and they have been reporting patients under investigation to us.



BETSY MCKAY: I guess my real question was, of the number of cases that have been reported, do you think there may be more out there that aren't being reported? And is growing awareness of the disease affecting the numbers, causing them to be higher or do you not think that is a factor here?

NANCY MESSONNIER: Thank you for clarifying the question. This is actually a pretty dramatic disease. These kids have a sudden onset of weakness. They are generally seeking medical care and being evaluated by neurologists, infectious disease doctors and pediatricians. So, it is certainly possible that there are patients out there who have the disease who haven't been reported, especially mild disease. We think the majority of cases are coming to our attention. That being said, one of the reasons that we are going out with this information is we do want to let patients know about this illness so that they can be aware of it and know that if their child does have sudden onset of weakness in their arms and legs they need to seek medical care right away.

BETSY MCKAY: thanks so much.

OPERATOR: Thank you. Lena Sun from the Washington Post, you may go ahead.

LENA SUN: Hi. Thanks for taking the call Dr. Messonnier. Can you just sort of very simply go over what CDC does when these cases come to your attention? What are you doing to investigate? And how is anything different now this year than in previous years in terms of what you guys are doing?

NANCY MESSONNIER: Sure. So this is what CDC is here for, to investigate these kinds of clusters of illness. So we do all of the  207.241.237.3  at we would follow. When we detect the cases we gather a bunch of information through our health departments, partners and hospitals, as well as collecting a whole bunch of samples. So with a case investigation we have

departments, parents and hospitals, as well as, collecting a whole bunch of samples so that a case investigation. We have expanded laboratory testing. We also have reviewed a number of external experts to help us think through this disease to make sure that we are doing absolutely everything we can both clinically, epidemiologically and also from a laboratory perspective to identify the cause. Although we have had activities all along and this is a normal pattern of how we would investigate, we are certainly escalating our response this year to make sure that we are basically considering everything possible and doing everything that we can.

LENA SUN: So just to follow up, so is that external panel of experts, was that something new this year or have you always had that external panel?

NANCY MESSONNIER: We have been consulting with experts since this began as we would normally do when something isn't so straightforward to us. We expanded the group last year – not last year, but in 2016 to make sure that we were considering every possibility. We are going to do the same thing this year, go back and make sure that any expert that might be able to give us information is included in our discussions.

LENA SUN: Thank you.

OPERATOR: Thank you. Allison Aubrey from NPR, you may go ahead.

ALLISON AUBREY: Three quick questions. Wondering if you can circle back to the west nile question. Have any of them been linked to west nile this year? I'm assuming the diagnosis is made by the onset of the symptoms if there isn't a common pathology, as you just explained you haven't been able to link it back to any common pathology confirming the diagnosis is made on the symptoms. You mentioned that some kids recover fully, there was one death, some kids continue to have paralysis. Can you talk about the number of kids that you think make a full recovery?

NANCY MESSONNIER: Thank you for reminding me about the west nile virus. I think it was in Mike Stobbe's list of questions and I missed it. None of these patients have had west nile virus, though we do not believe that west nile virus is causing these cases. In terms of the case definition, it is also a radiological finding. These patients have a specific finding in their MRI scans. It is a combination of symptoms, but also an MRI. Since we don't have a pathogen identified the case definition has to include those findings, not the identification of an actual pathogen. In terms of the numbers, I don't have that right in front of me, but we can get back to you with estimates from the previous two seasons.

ALLISON AUBREY: Thank you.

OPERATOR: Thank you. Our last question comes from Susan Scutti from CNN. You may go ahead.

SUSAN SCUTTI: Thank you for taking my question. Yesterday CNN reported 30 states reporting PUIs or confirmed cases. You are saying 22 states. Can you explain the eight-state discrepancy?

NANCY MESSONNIER: I think the way that I would explain this is that the 22 states that we are reporting are the states that have confirmed cases. As you know, many states across the country as well as parents are identifying issues and are talking about their own kids that may have illness. The 22 number is the states that have confirmed cases. That's what we will be reporting on our website. There is going to be a delay, a lag in the timing of some of these reports. It's a case definition that requires review of the radiological images as well as the clinical syndrome. So there is a bit of a lag as we review those things. There may be cases reported in the media that aren't yet confirmed to the CDC. We will report overall cases under investigation, but then the confirmed cases and the states that have confirmed cases.

KATHY HARBEN: Thanks. Dr. Messonnier now has a few final comments.

NANCY MESSONNIER: Thank you for listening today. I want to take this last moment to remind parents that AFM is a very rare condition. It is also a serious condition. We want to encourage parents to seek medical care right away if you or your child develops symptoms of AFM, such as sudden weakness and loss of muscle tone in your arms or legs. As we work to better understand what is causing AFM, parents can help protect their children from serious diseases by following prevention steps like washing our hands, staying up to date on recommended vaccines and using insect repellent to prevent mosquito bites. Thank you.

KATHY HARBEN: Thank you Dr. Messonnier and also thank you to the media who have joined us for this call. If you have follow up questions, you can call our media line at 404-649-3286 or e-mail us at media@cdc.gov. A transcript of this call will be posted at <https://www.cdc.gov/media/releases/2017/s170814-afm.html>. Thank you again for joining us. This concludes our call.

OPERATOR: Thank you. This does conclude today's conference call. You may go ahead and disconnect at this time.

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