



Mumps Update, Wisconsin

January 14, 2019

SUMMARY

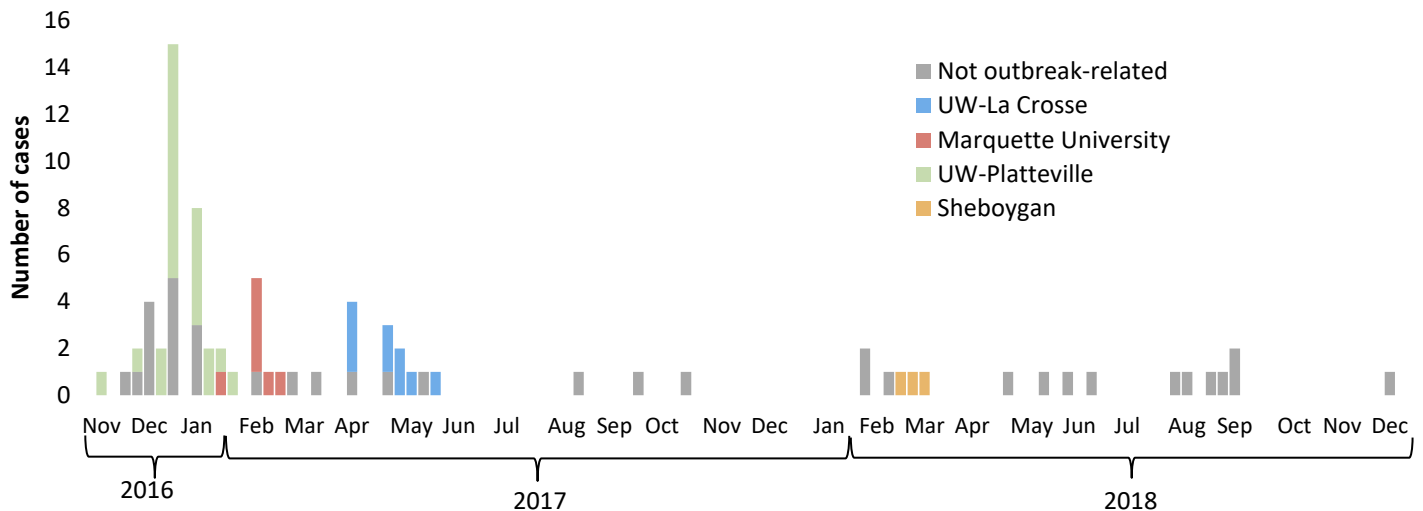
During 2018, [2,251 people in 47 U.S. states and the District of Columbia](#) had reported mumps infections. Most Midwestern states, including Illinois, Indiana, Iowa, Michigan, Minnesota, Missouri and Kansas, have reported infections among their residents. In Wisconsin, since November 2016 there have been 79 confirmed mumps cases: 23 associated with UW Platteville, 7 associated with Marquette University, 9 associated with UW La Crosse, 3 associated with Sheboygan, and 37 additional cases residing in a total of 17 Wisconsin counties. This report summarizes these 79 mumps cases in Wisconsin since November 2016.

CASES BY YEAR (Confirmed, finalized cases only)

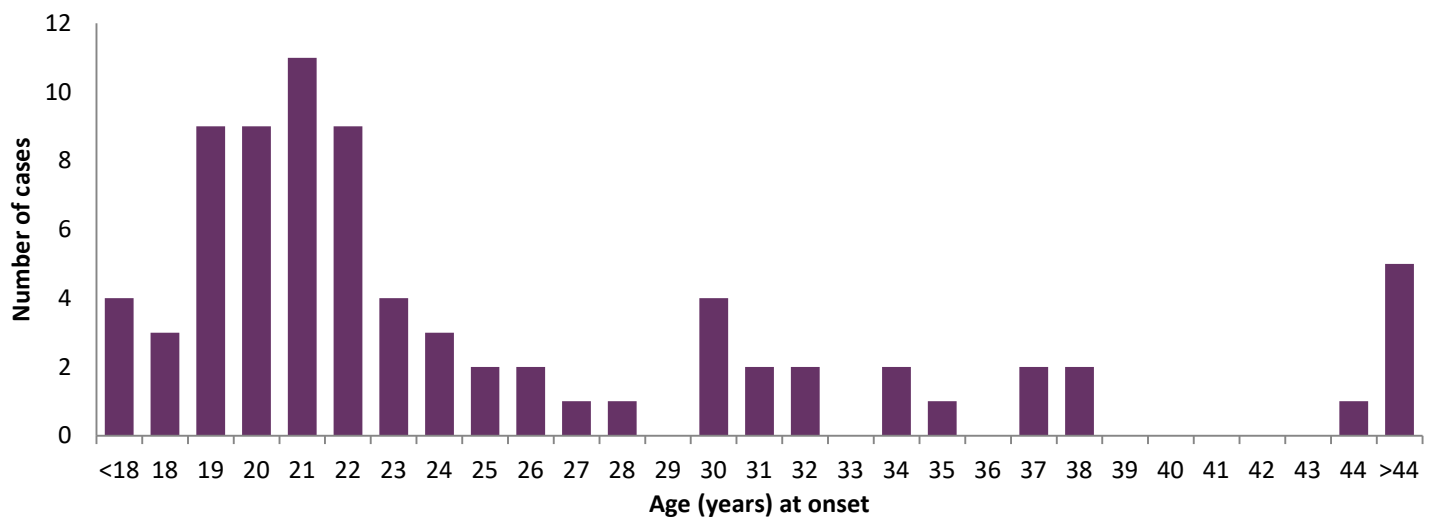
Year	2007	2008	2009	2010	2011	2012	2013	2014 ¹	2015	2016	2017	2018
Number of cases	54	6	8	4	4	8	0	53	45	44	37	17

RECENT CASES (Confirmed cases since November 1, 2016)

Occurrence. Since Nov. 1, 2016, 79 cases have been reported. The last reported onset was December 8, 2018.



Age distribution. Median: 22 years (range: 10 to 60 years)



Gender. 37% female, 63% male

Affected counties (number of cases). Bayfield (1), Brown (1), Calumet (1), Racine (2), Dane (11), Door (1), Grant (22), Kenosha (1), La Crosse (8), Lafayette (1), Milwaukee (21), Oconto (1), Ozaukee (1), Rock (1), Sauk (1), Sheboygan (2), Vernon (1), Waukesha (2)

Affected universities (number of cases associated). UW Platteville (23), Marquette University (7), UW La Crosse (9)

Mumps vaccination status. 49 (62%) received 2+ doses, 5 (6%) received 1 dose, 25 (32%) had an unknown vaccination status or were still under investigation.

Source of infection. 15 (19%) had a suspected exposure or history of travel outside of Wisconsin; 4 of these had a history of international travel. Only 13 (16%) cases were known to have had exposure to a mump-infected person.

Q1. What test should be done if mumps is suspected?

PCR is the preferred diagnostic test for mumps. Buccal swabs for PCR testing should be collected as soon as possible after symptom onset (ideally within 3 days of the onset of parotitis onset, but not more than 9 days after onset). Information on proper technique for collecting a buccal swab can be found on the CDC website: <http://www.cdc.gov/mumps/lab/detection-mumps.html>

The Wisconsin Division of Public Health requests that all samples collected from suspect cases of mumps be sent to the Wisconsin State Lab of Hygiene (WSLH) for testing. Specific guidance for the submission of the samples to the WSLH can be found at: <http://www.slh.wisc.edu/mumps-testing-guidance/> The WSLH Customer Service phone number is 800-862-1013.

In addition, the WSLH is requesting that two swabs are collected from individuals suspected of having mumps: a buccal swab for mumps testing and a nasopharyngeal swab for influenza and respiratory testing (see the following memo for more information: <https://www.dhs.wisconsin.gov/influenza/testing-parotitis.pdf>)

Q2. Some people who have been vaccinated with mumps-containing vaccine (MMR) are still getting mumps. Why is this happening?

MMR vaccine prevents most, but not all, cases of mumps and complications caused by the disease. People who have received two doses of the MMR vaccine are about nine times less likely to get mumps than unvaccinated people who have the same exposure to mumps virus. Specifically, two doses of the vaccine are 88% (range: 66 to 95%) effective at protecting against mumps; one dose is 78% (range: 49% to 92%) effective.

However, some people who receive two doses of MMR can still get mumps, especially if they have prolonged, close contact with someone who has the disease. If a vaccinated person does get mumps, they will likely have less severe illness than an unvaccinated person. Outbreaks can still occur in highly vaccinated U.S. communities, particularly in close-contact settings. In recent years, outbreaks have occurred in schools, colleges, and camps. However, high vaccination coverage helps limit the size, duration, and spread of mumps outbreaks.

<https://www.cdc.gov/mumps/outbreaks/outbreak-patient-qa.html>

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¹The case definition changed as of 2014; counts only include cases confirmed by PCR.