

Summary of Vaccine Preventable Diseases Reported to the Michigan Department of Health and Human Services, 2015

This is a summary of reported cases of selected vaccine-preventable diseases in Michigan in 2015. Totals for 2014 are provided for comparison in the table on the final page.

Congenital Rubella – No cases of congenital rubella were reported in 2015.

Diphtheria – No cases of diphtheria were reported in Michigan in 2015.

***Haemophilus influenzae* invasive disease** –

There were 132 cases of invasive *Haemophilus influenzae* disease reported in 2015, with cases ranging in age from newborn to 97 years. There were 17 cases under 15 years of age and there were 13 under age 5 years. Among the cases under 5 years of age, 12 (92%) of the 13 were serotyped; none were serotype b, 4 were serotype a, 2 were serotype e, 1 was serotype f, and 5 were untypeable.

Measles –

There was one case of measles reported in 2015 in Michigan, a 40 year-old female who may have been exposed while visiting California or during return travel to Michigan. The case coincided with a large multi-state measles outbreak mostly centered in southern California, with many cases resulting from exposures at amusement/theme parks there. This case did visit one of the parks involved in the outbreak, although exposure and a timeline linking it to the outbreak could not be definitively established. The case was confirmed by measles IgM serology; PCR testing was negative. The case reportedly had a history of one dose of measles-containing vaccine though no documentation was available.

Meningococcal disease –

There were 8 cases of meningococcal disease reported in Michigan in 2015, ranging in age from 2 months to 81 years with a median of 28.5 years. Serogroup was available for 6 cases: 3 were group W135, 2 were group B, and 1 was group C.

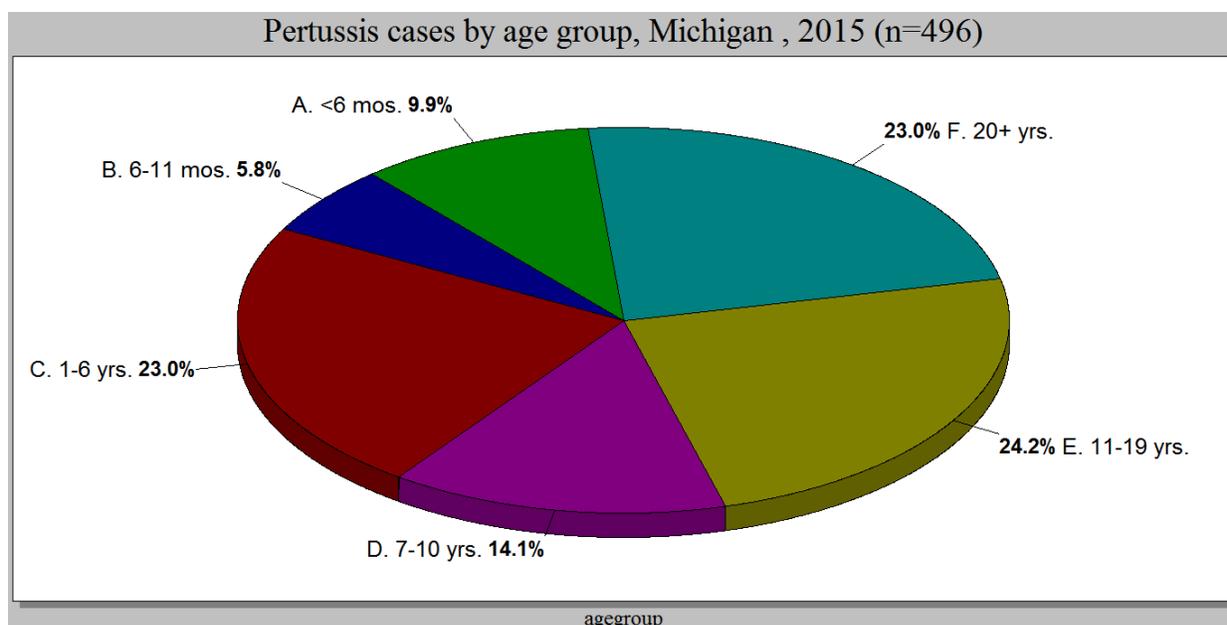
Mumps –

There were 18 cases of mumps reported, 8 Probable and 10 Suspect; there were no Confirmed cases. Males predominated among the cases, accounting for 12 cases (67%). Cases ranged in age from 14 months to 63 years with an average age of 27 years and a median age of 13 years. Following the current CSTE case classification definition and criteria, the probable cases were classified on the basis of consistent mumps illness and positive mumps IgM serologic tests, and suspect cases represented clinically compatible mumps illnesses with no, or negative, laboratory findings supporting the diagnosis of mumps. All of the reported cases were considered sporadic cases, there were no outbreaks identified.

Pertussis –

In 2015 there were 496 pertussis cases reported in Michigan, a decrease of 65% from the 1,424 cases reported in 2014. Approximately 54% of reported cases were female. Cases ranged in age from 3 days to 95 years; the median age was 10 years (mean age 16.1 years). The largest proportion of cases occurred in the 11-19 year-old age group, followed by the 1-6 year-old and 20+ year age groups with 23% of cases each (see Pertussis Figure below). Hospitalization was reported for 31 (6.3%) cases. Cases were reported from 55 of the state’s 83 counties. There was 1 pertussis-related death reported, a 16 day-old infant.

Pertussis Figure



Rubella – There were no rubella cases in Michigan in 2015.

Tetanus – There were no cases of tetanus reported in 2015.

Varicella –

There were 548 varicella cases reported in 2015 in Michigan, a 24.5% decrease from the 726 cases reported in 2015. Cases ranged in age from 16 days to 83 years, with mean and median ages of 12.4 and 8 years, respectively. The largest proportion of cases among age groups was seen in the 5–9 year age group (see Varicella Figure, below).

Varicella Figure

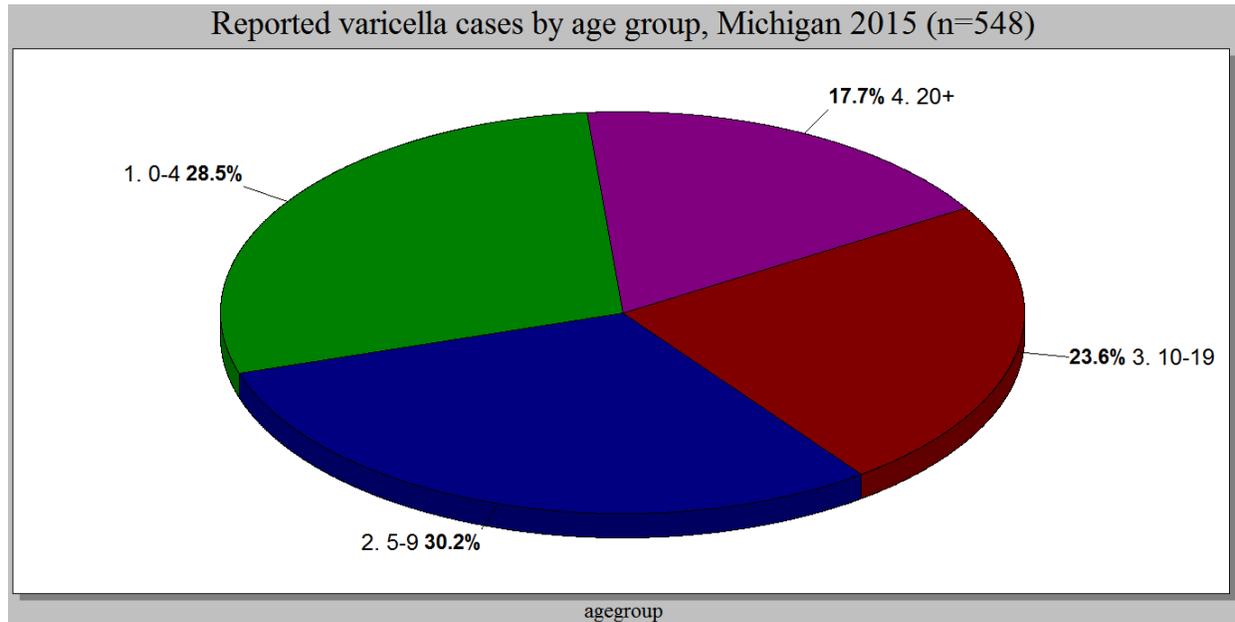


Table 1 - Number of reported cases of selected vaccine preventable diseases, Michigan, 2013 and 2014.

Disease	Total Cases 2014	Total Cases 2015
Congenital Rubella	0	0
Diphtheria	0	0
<i>H. influenzae</i> invasive <5 years (serotype b)	14 (4)	13 (0)
Measles	5	1
Meningococcal disease	11	8
Mumps (includes Suspect)	42	18
Pertussis	1,424	496
Poliomyelitis	0	0
Rubella	0	0
Tetanus	0	0
Varicella	726	548