



Summary of Vaccine Preventable Diseases Reported to the Michigan Department of Community Health, 2013

This is a summary of reported cases of selected vaccine-preventable diseases in Michigan in 2013 (reports received in the calendar year, January 1 – December 31). Totals for 2012 are provided for comparison in the table on the final page.

Congenital Rubella – No cases of congenital rubella were reported in 2013.

Diphtheria – No cases of diphtheria were reported in Michigan in 2013.

***Haemophilus influenzae* invasive disease** – There were 104 cases of invasive *Haemophilus influenzae* invasive disease reported in 2013, ranging in age from 5 days to 98 years. There were 17 cases reported in persons less than 15 years of age, and there were 13 cases under 5 years of age. All cases under age 15 were confirmed by culture isolates from either blood or CSF and all were serotyped, with the exception of one case (a 1-month old infant) that had no growth on culture but was considered a Probable case on the basis of a positive antigen test on CSF. None of the cases was caused by serotype b; 3 were serotype f, 2 were serotype e, 1 was serotype a, and 10 were non-typeable.

Measles – There were 5 cases of measles reported in Michigan in 2013; all were confirmed. An 8 month-old infant who contracted measles after traveling with family in England was reported in January. In April another 8 month-old infant case was reported after traveling in Pakistan. Neither of these children had received measles-containing vaccine despite the recommendation to vaccinate children as young as 6 months who will be traveling outside of the US. There were no secondary cases identified from either of those cases. In September an 18 month-old child who had just been adopted from the Ukraine arrived in Michigan and was diagnosed with measles. This child's immunization status was unknown. Subsequently two unvaccinated children in the adoptive family, ages 4 years and 2 years, developed measles.

Meningococcal disease – A total of 6 invasive meningococcal disease cases were reported in 2013; three were confirmed by positive culture result, and three were classified Suspect on the basis of clinical presentation or gram stain showing gram-positive diplococci without growth on culture. The cases ranged in age from 9 months to 88 years with a median age of 20.5 years. All three of the cultured isolates were serogrouped; one was serogroup B, one serogroup C, and one serogroup Y. There were 2 deaths: the serogroup B was a 19 year old female who had previously received 1 dose of MCV4 vaccine (which does not protect against serogroup B). The serogroup Y case, an 88 y.o. female, also resulted in death.

Mumps – A total of 15 mumps cases were reported in 2013, with 6 classified as Probable and 9 as Suspect (note: Suspect mumps cases are not included in final CDC data). There were no Confirmed cases. Cases ranged in age from 3 years to 91 years, with a median of 19 years.

Among the Probable cases the age range was 5 – 46 years with a median age of 13.5 years. Four of the six Probable cases had documentation of previously receiving the recommended 2 doses of mumps vaccine.

Pertussis – There were 995 pertussis cases reported in Michigan in 2013, representing a 17% increase over the 845 cases reported in 2012. The median age was 11 years (with an mean age of 16.3 years), ranging from 7 days to 82 years. The largest proportion of cases (30.8%) was seen in the 11 – 19 year age group; slightly over 10% of cases occurred among infants less than 6 months of age, and 21% of cases were in persons 20 years of age or older (see Pertussis Figure 1) . An admission to hospital was noted in 114 (11.5%) case reports. There were no reported deaths. Cases were reported from 53 of Michigan’s 83 counties (see Pertussis Figure 2 below).

Pertussis Figure 1

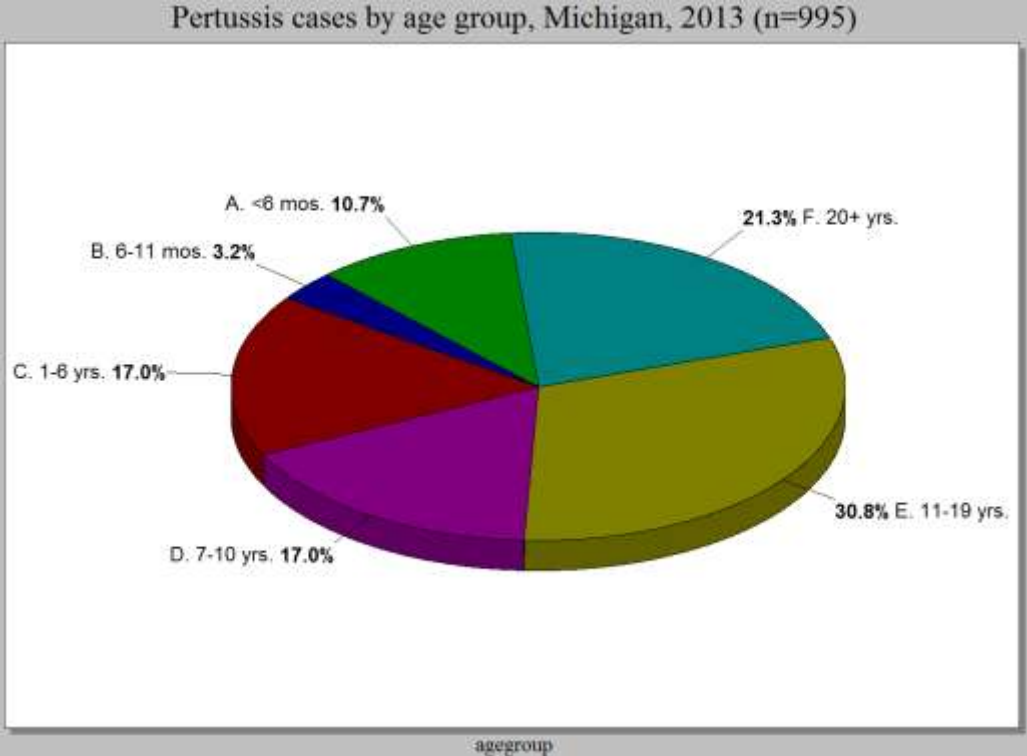


Table 1 - Number of reported cases of selected vaccine preventable diseases, Michigan, 2012 and 2013.

Disease	Total Cases 2012	Total Cases 2013
Congenital Rubella	0	0
Diphtheria	0	0
<i>H. influenzae</i> invasive <5 years (serotype b)	16 (2)	13 (0)
Measles	1	5
Meningococcal disease	16	6
Mumps	23	15
Pertussis	845	995
Poliomyelitis	0	0
Rubella	0	0
Tetanus	2	1
Varicella	972	719