



Summary of Vaccine Preventable Diseases Reported to the Michigan Department of Community Health, 2009

This is a summary of reported cases of selected vaccine-preventable diseases in Michigan in 2009 (reports received in the calendar year, January 1 – December 31). Totals for 2008 are provided for comparison in the table below.

Congenital Rubella – No cases of congenital rubella were reported in 2009.

Diphtheria – No cases of diphtheria were reported in 2009.

***Haemophilus influenzae* invasive disease** – Twenty-four cases of invasive *H. influenzae* were reported in 2009, of which 7 were in persons 5 years of age or younger. All 7 in this age group were serotyped; one was determined to be due to serotype b (of the others, 1 was serotype f and the remaining 5 cases were untypeable serotypes of biotypes that rule out serotype b). The serotype b case occurred in a 6 month old infant who had received 2 doses of Hib vaccine. (there were another 2 reported invasive cases in persons between 5 years and 15 years of age, both were typed and neither were serotype b). All isolates grew from blood; 2 were additionally cultured from CSF.

Measles - There were no reported measles cases in Michigan in 2009.

Mumps –

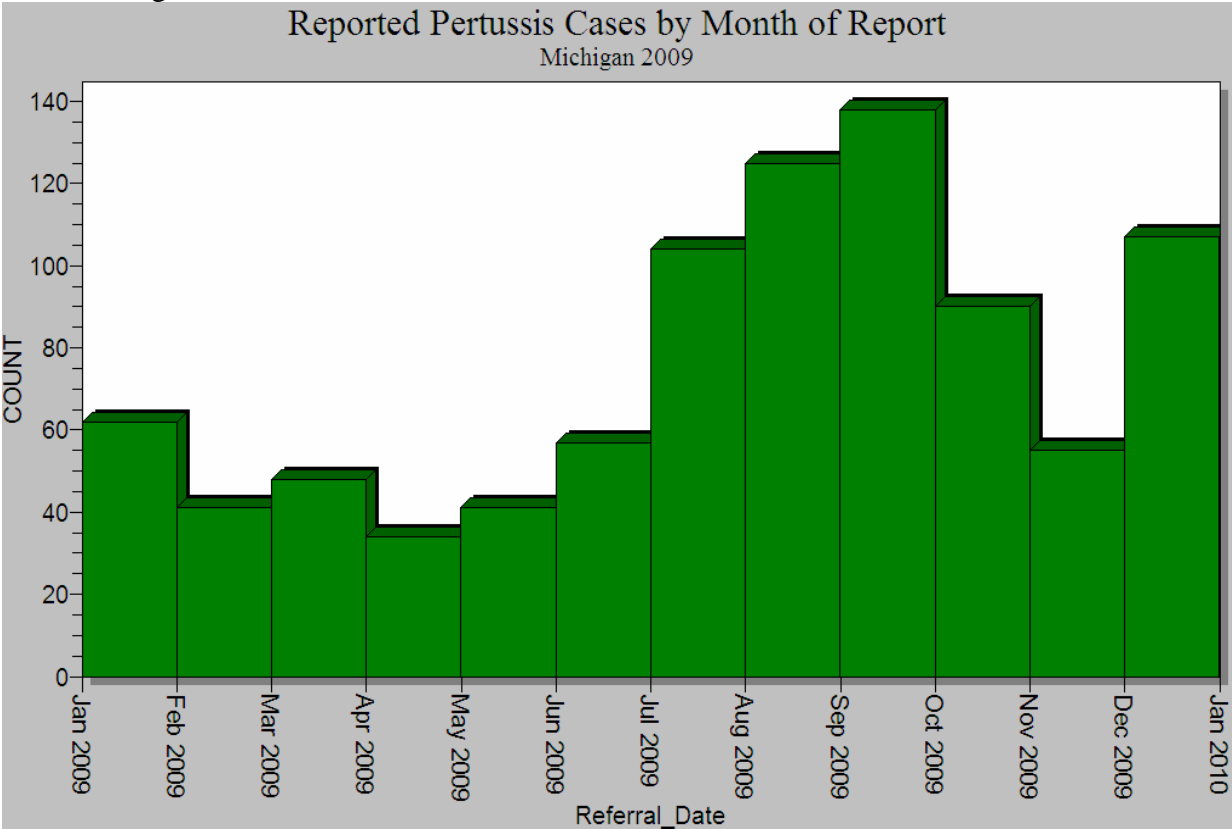
Twenty-two cases of mumps were reported in 2009, 10 Confirmed, 1 Probable, 11 Suspect. There were no outbreaks identified. Thirteen cases (59%) were female. Cases ranged in age from 11 months to 63 years (median age 12.5 years, mean 19.1 years). Cases were reported from 14 local health jurisdictions. Of 16 cases between the ages of 12 months and 24 years, 13 (81%) had received the age-appropriate number of mumps-containing vaccine doses.

Pertussis –

A total of 902 pertussis cases were reported to MDCH in 2009, representing an increase of 186% over the 2008 total of 315.

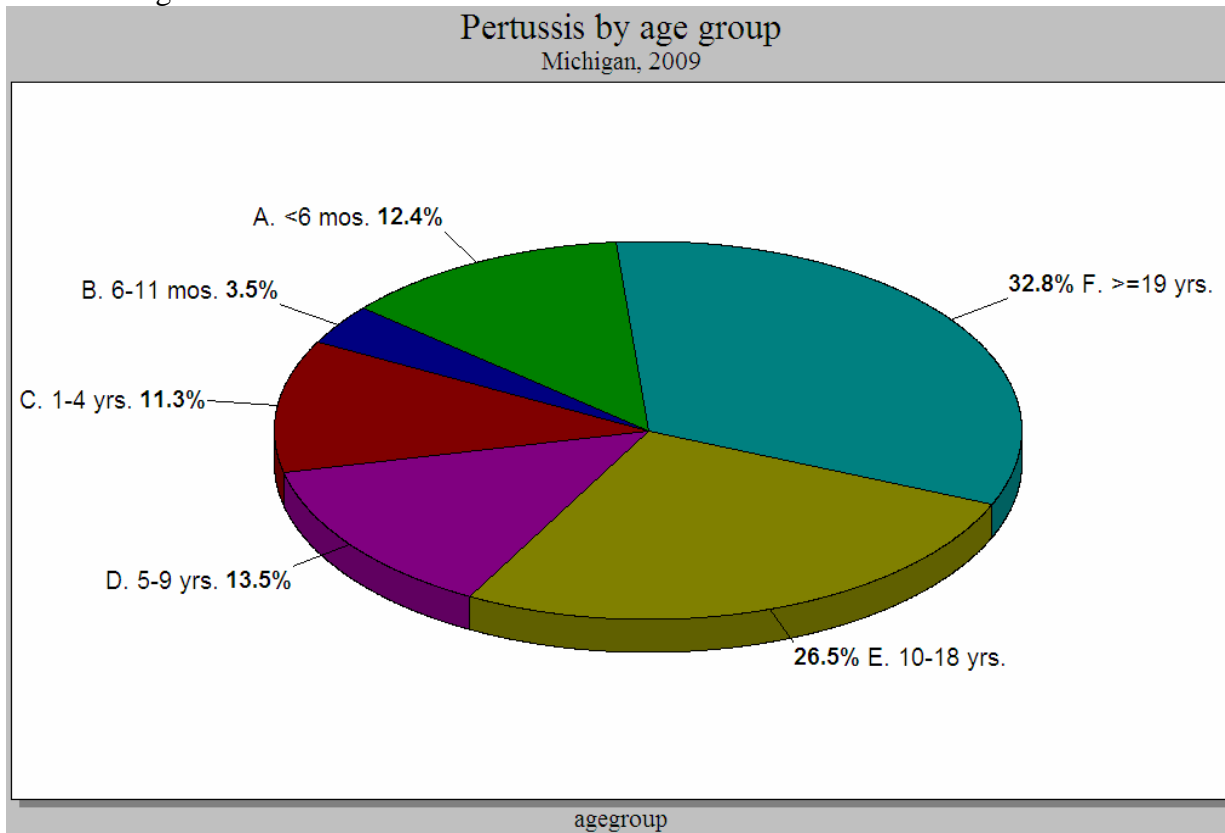
The increase in reported cases started in the second half of 2008 and continued unabated into, and throughout, 2009 (see Pertussis Figure 1). Females comprised 55% of cases. The largest proportion of cases, nearly one-third, occurred among adults (persons 19 years of age or older), followed by adolescents (defined here as persons 10-18 years of age - see Pertussis Figure 2). Of the 902 total cases, 111 (12.3%) were infants less than 6 months of age, a group at high risk for pertussis complications; 70 of these (63%) were hospitalized. There were no reported deaths. Among 601 cases under 19 years of age, a cohort for whom immunization history information should be readily available, 160 (26.6%) lacked documentation of the recommended number of pertussis vaccine doses for their age. Cases were reported from 60 counties in 2009 (see Pertussis Figure 3).

Pertussis Figure 1



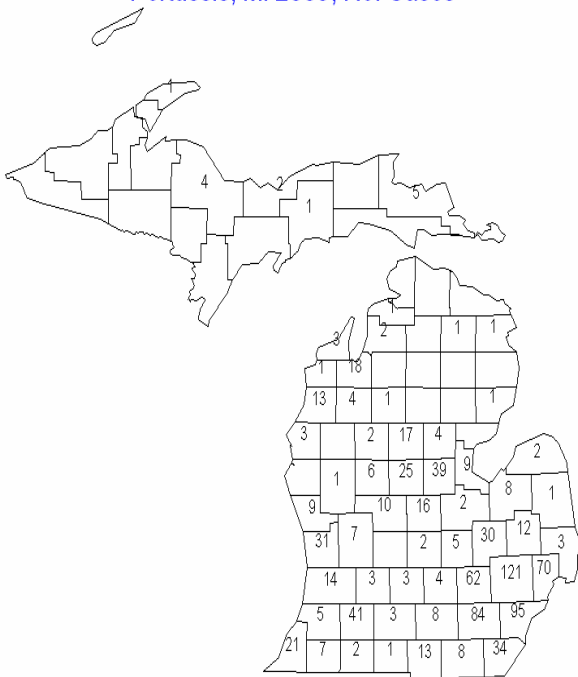
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Pertussis Figure 2



Pertussis Figure 3

Pertussis, MI 2009, No. Cases



Rubella –

There were no cases of rubella reported in 2009.

Tetanus –

There were no cases of tetanus reported in 2009.

Varicella

There were 1,889 cases of varicella (chickenpox) reported to MDCH in 2009, representing a 38% decline from the 3,048 cases reported in 2008. Gender was reported for 1,848 (97.8%), and was evenly split between females and males. Age was reported for 1877 (99.4%), ranging from 1 month to 78 years., with a median age of 9 years (mean age 9.9 years). The greatest proportion of cases was reported in the 5-9 year agegroup (821, 34.5%). Overall, 1,074 (56.9%) indicated prior receipt of at least 1 dose of varicella vaccine.

Table 1 - Number of reported cases of selected vaccine preventable diseases, Michigan, 2009 and 2008.

Disease	Total Cases 2009	Total Cases 2008
Congenital Rubella	0	0
Diphtheria	0	0
<i>H. influenzae</i> invasive <5 years (serotype b)	7 (1)	8(2)
Measles	0	4
Mumps	22	39
Pertussis	902	315
Poliomyelitis	0	0
Rubella	0	0
Tetanus	0	1
Varicella	1,889	3,048