

Replacement of Td with Tdap in Michigan in 2006

Kyle S. Enger, MPH

Vaccine-Preventable Disease Epidemiologist

Division of Immunization

Michigan Dept. of Community Health (MDCH)

Td and Tdap

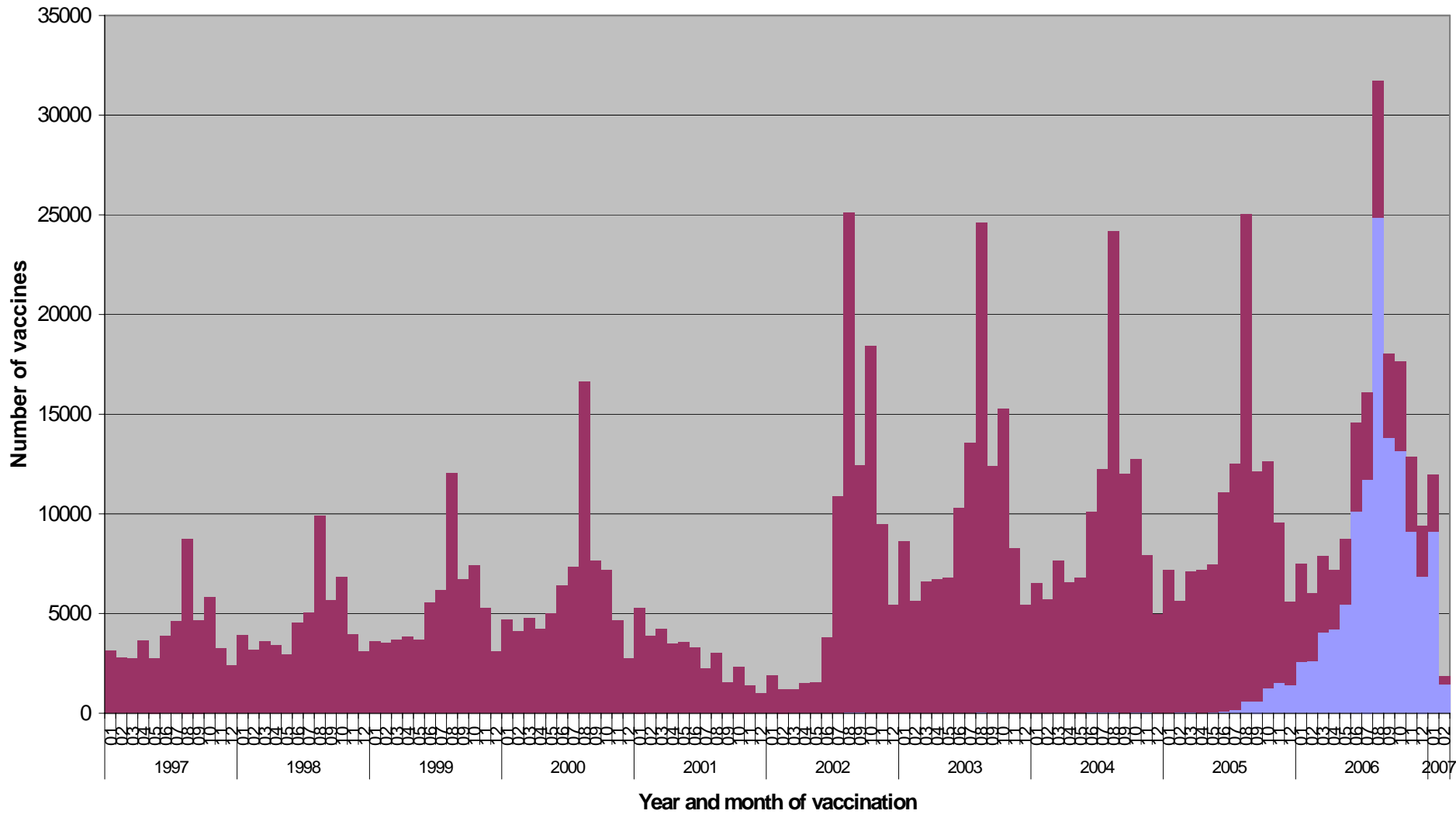
- Td boosts tetanus and diphtheria immunity (given to 11-12 y. olds; then every 10y)
- Td is required for Michigan students
 - if > 10 y since last tetanus iz.
- Tdap is Td with pertussis added
 - FDA-approved: mid-2005
 - VFC in MI: Sept. 2005
 - ACIP-recommended (MMWR): March 2006

Data source: MCIR

(Michigan Care Improvement Registry)

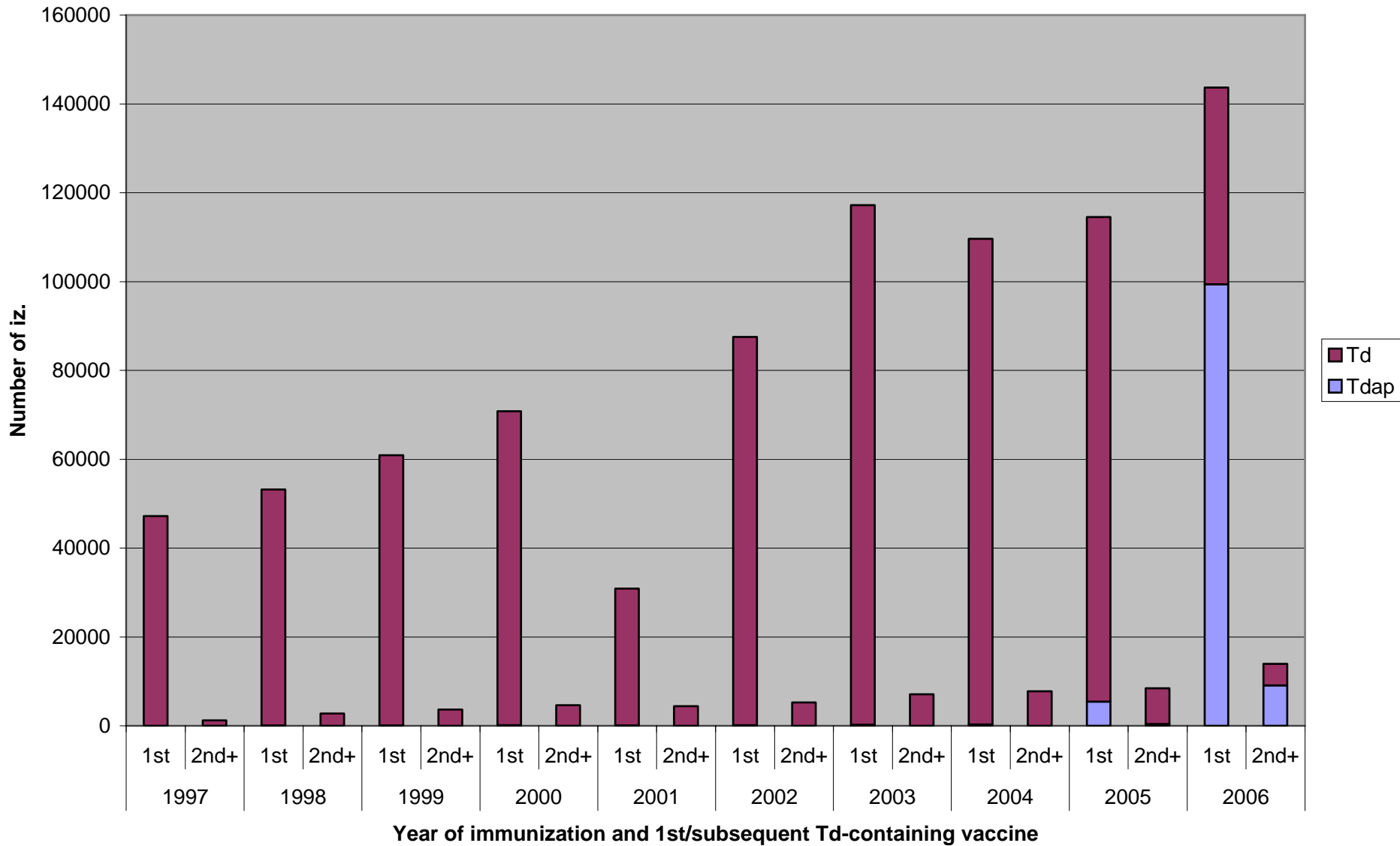
- Operational since 1998
- Birth-to-death immunization registry
 - < 20 y age restriction removed June 2006
- ~95% of providers participate
- Part of CDC's IIS sentinel site project
- Michigan's population is large
 - 10 million people
 - 130,000 births/year

Td-containing vaccines administered in Michigan by month, according to MCIR

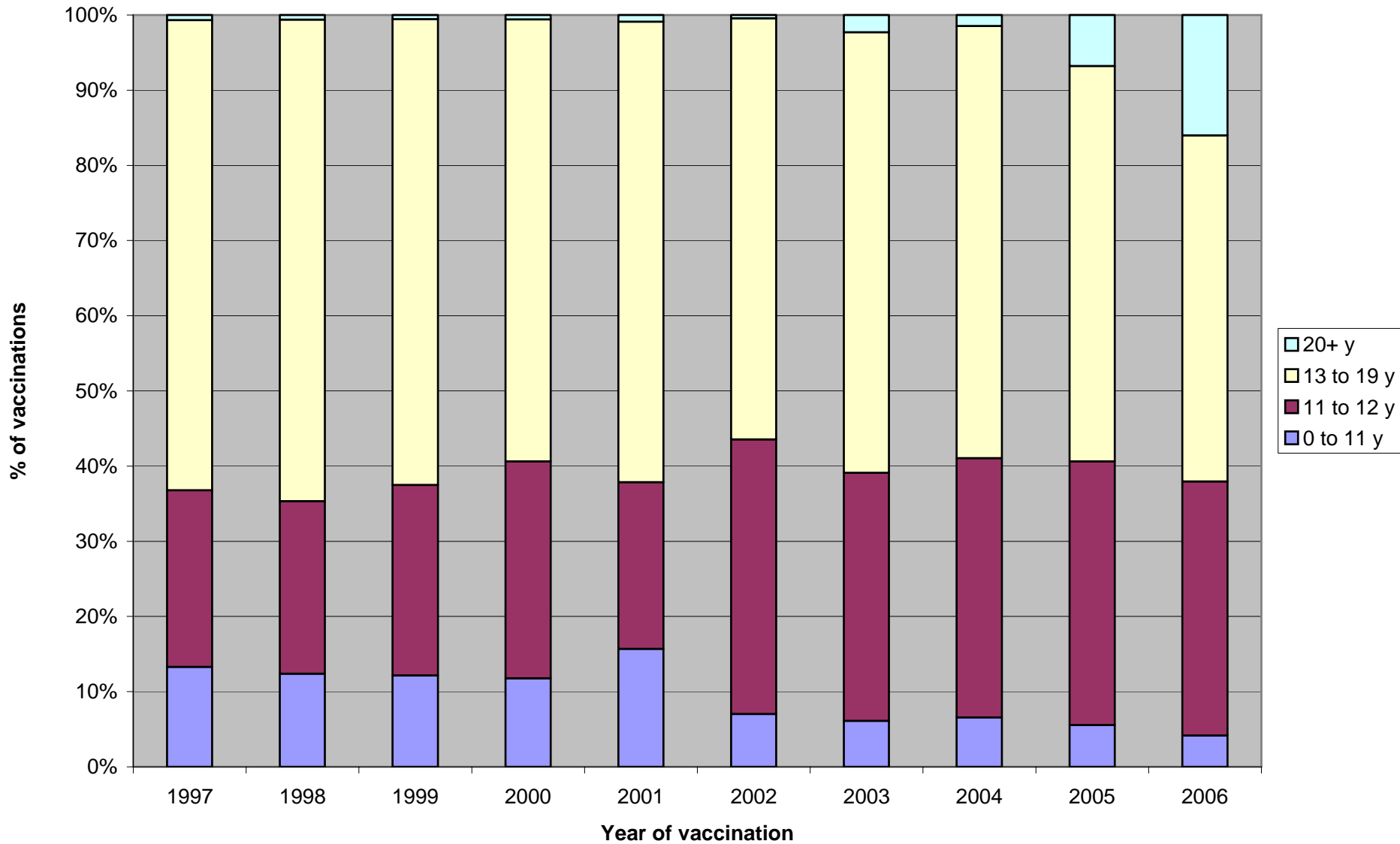


Tdap Td

Td-containing vaccines administered in Michigan by year, according to MCIR

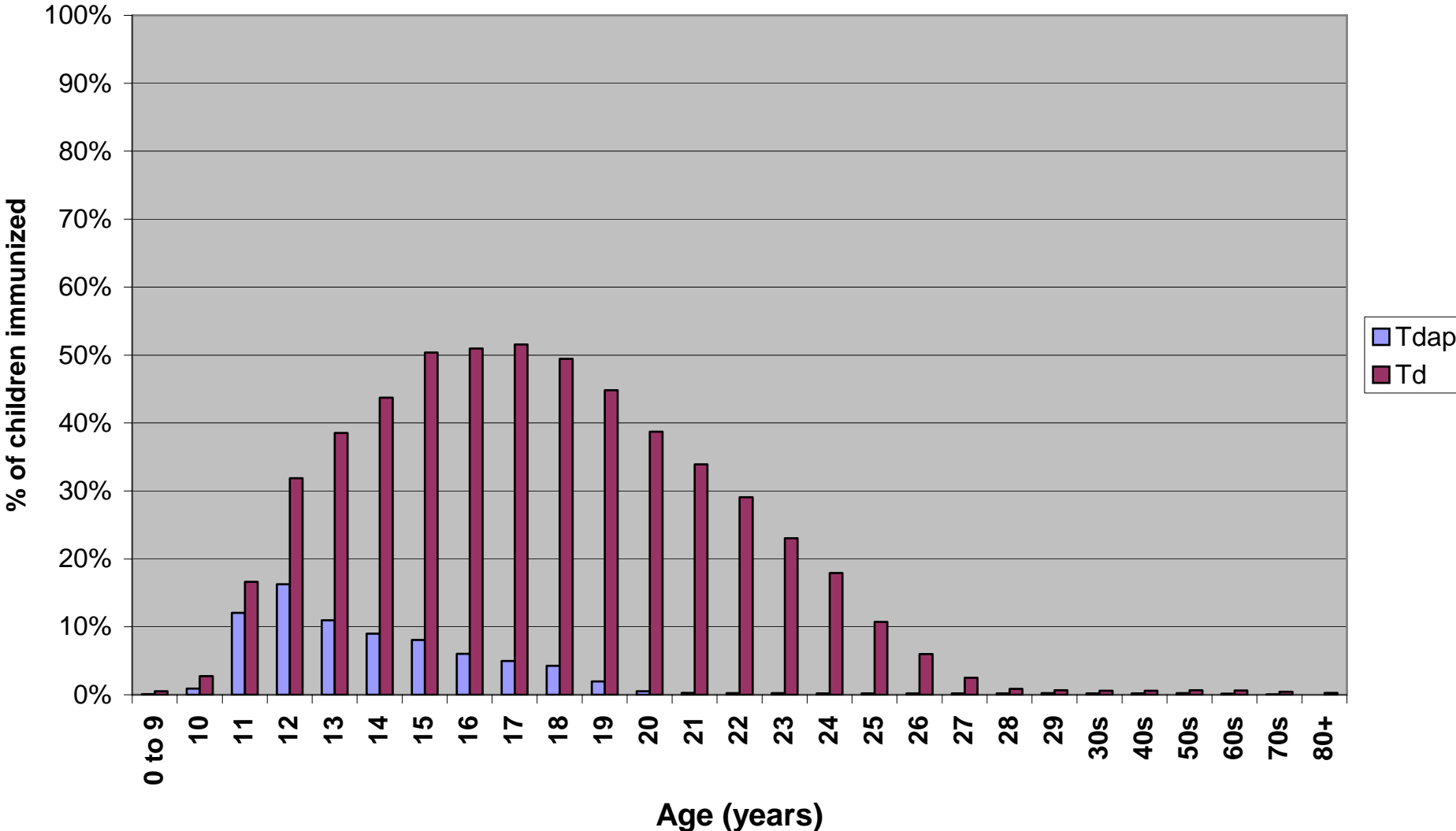


Distribution of Td-containing iz. among age groups, by year of administration



Percent coverage for Td and Tdap in Michigan, Feb. 2006, per MCIR

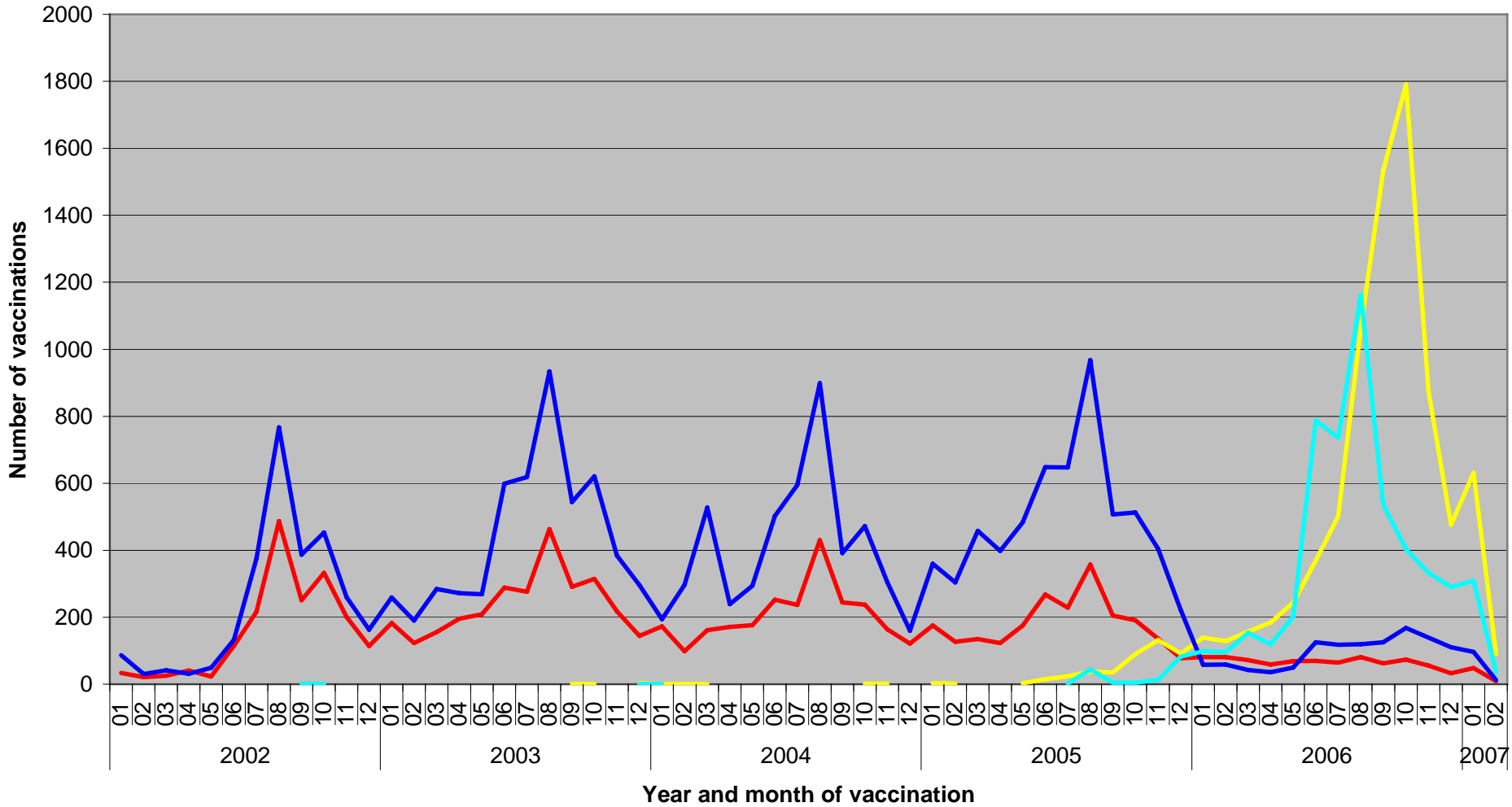
2005 census population estimate data used as denominator.



A tale of two counties

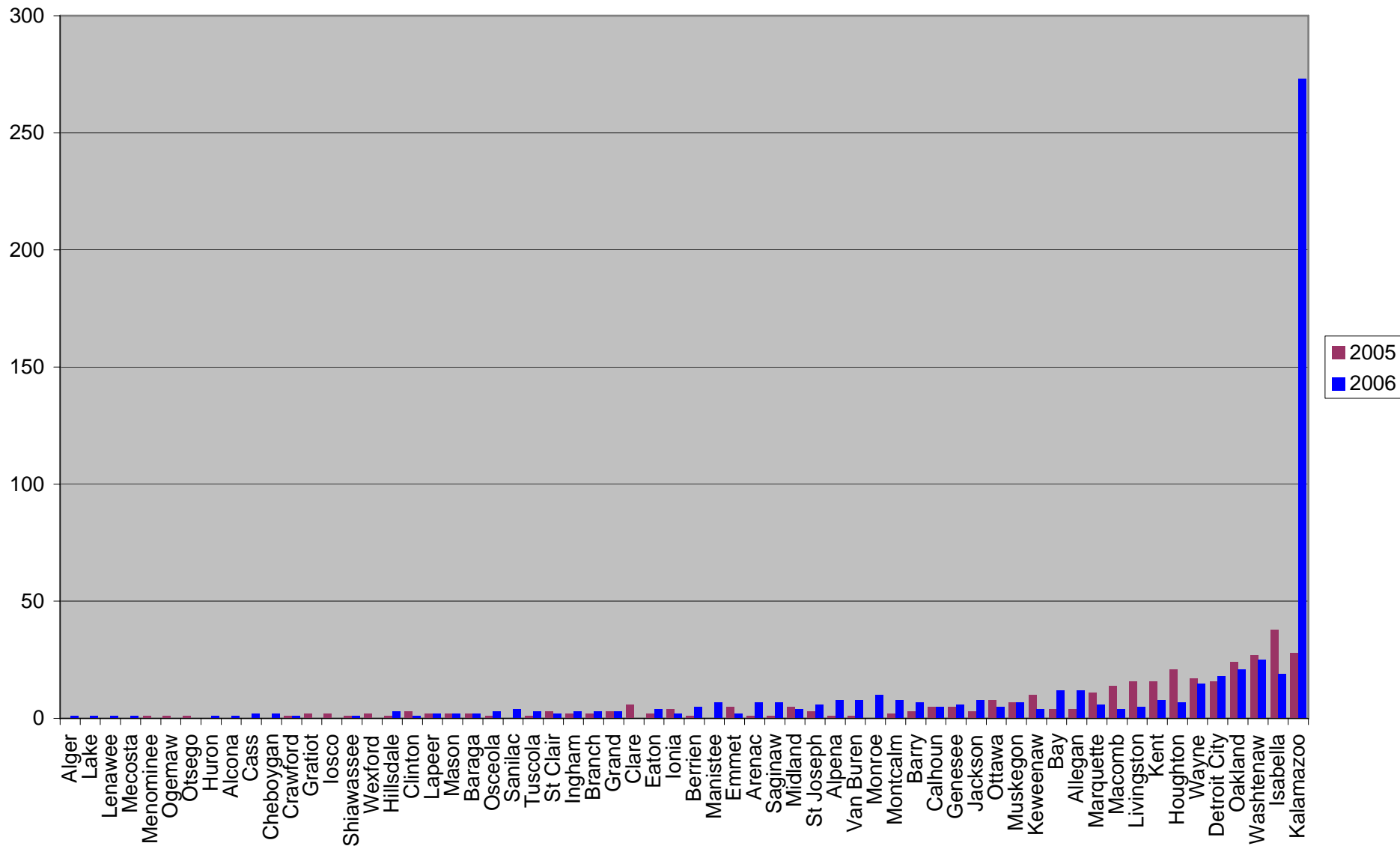
- Kalamazoo County
 - Birth cohort of 3200
 - City of Kalamazoo
 - 62,000 population
 - Lower cost of living
 - Washtenaw County
 - Birth cohort of 4200
 - City of Ann Arbor
 - 100,000 population
 - Higher income
-
- Both in southern Michigan
 - Both have strong local health departments
 - Both have large state universities

Td and Tdap administration: Kalamazoo vs. Washtenaw



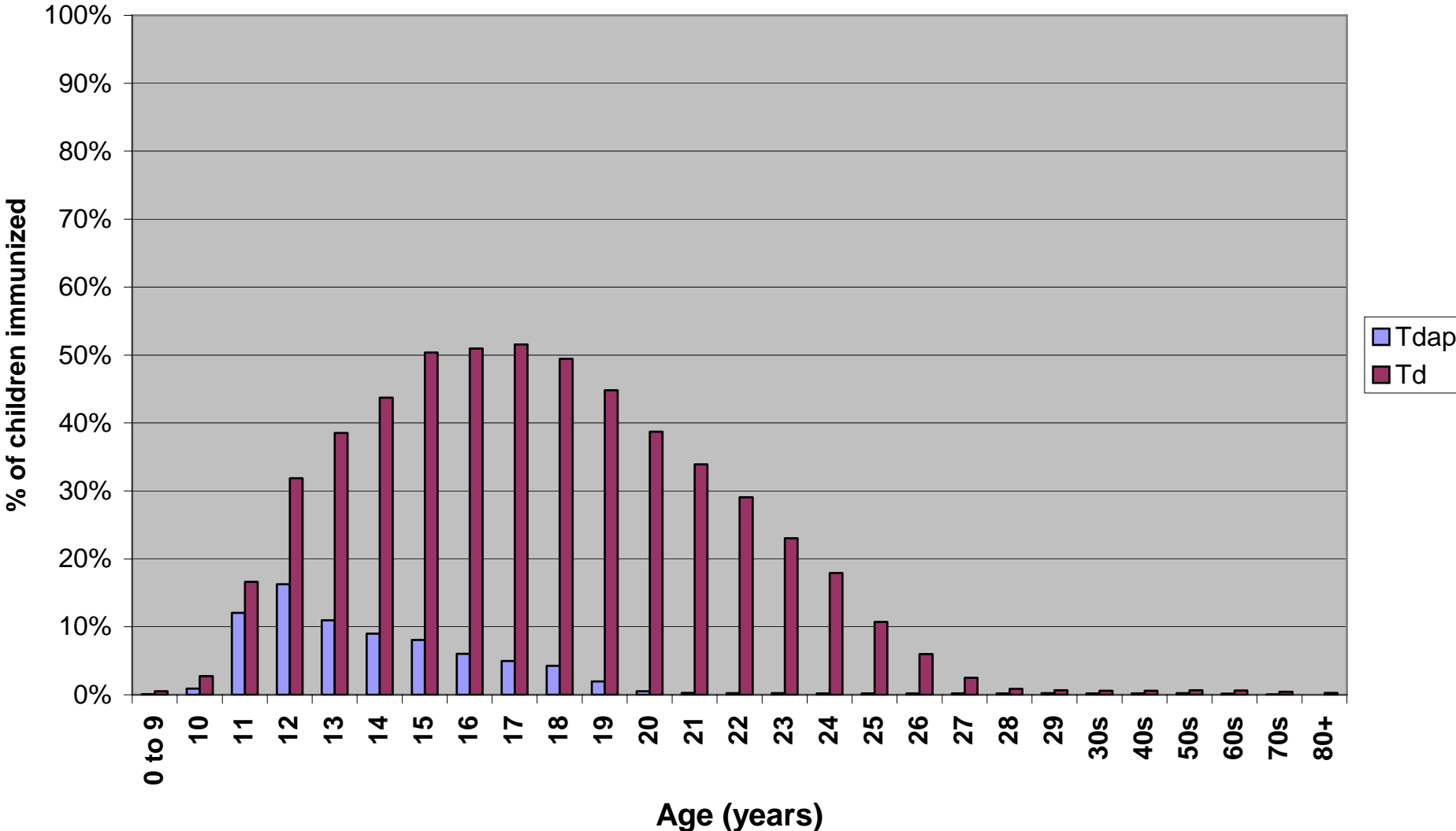
— Kzoo - Td — Kzoo - Tdap — Washtenaw - Td — Washtenaw - Tdap

Raw numbers of pertussis cases in Michigan, by county, 2005 & 2006



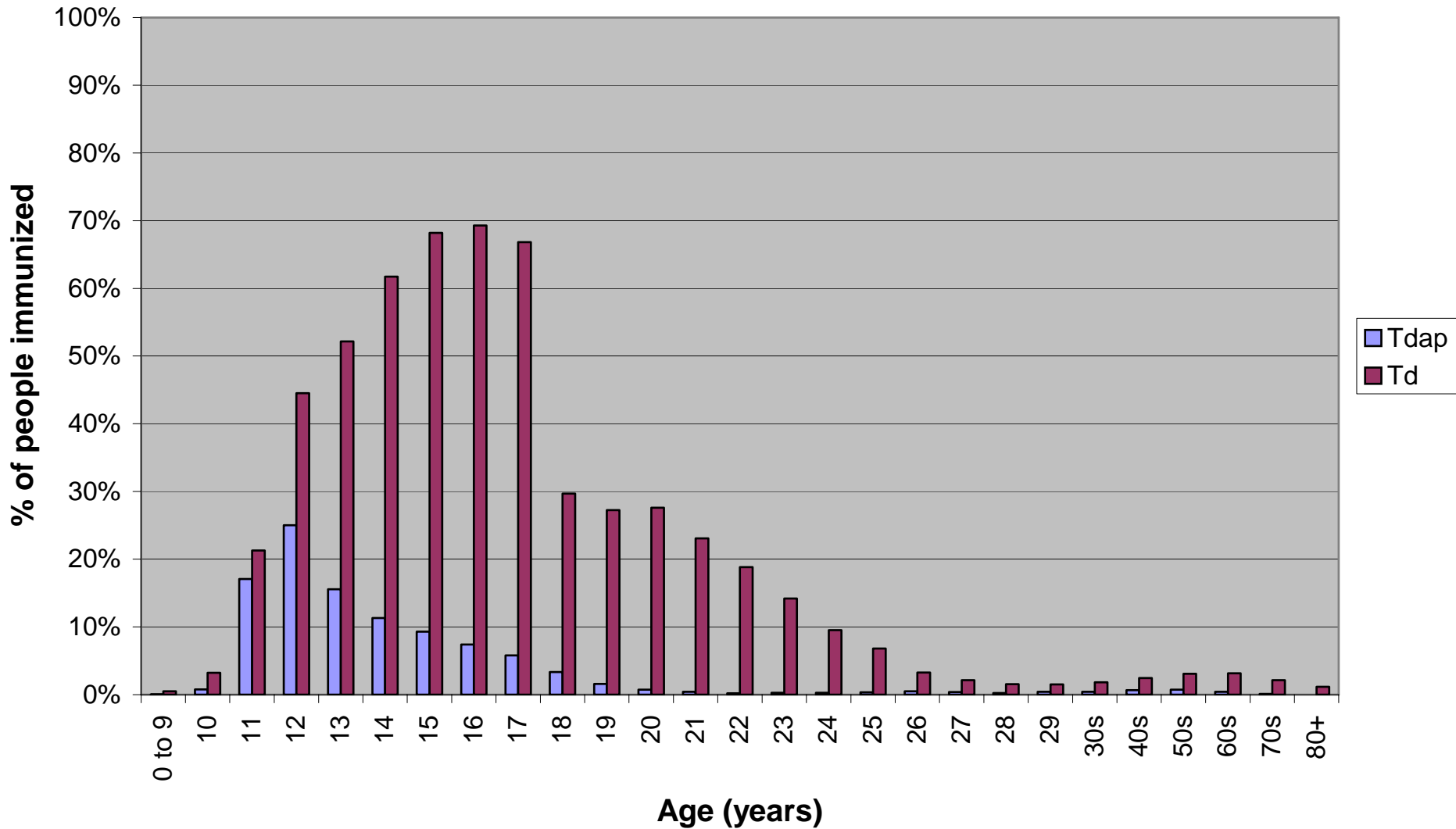
Percent coverage for Td and Tdap in Michigan, Feb. 2006, per MCIR

2005 census population estimate data used as denominator.



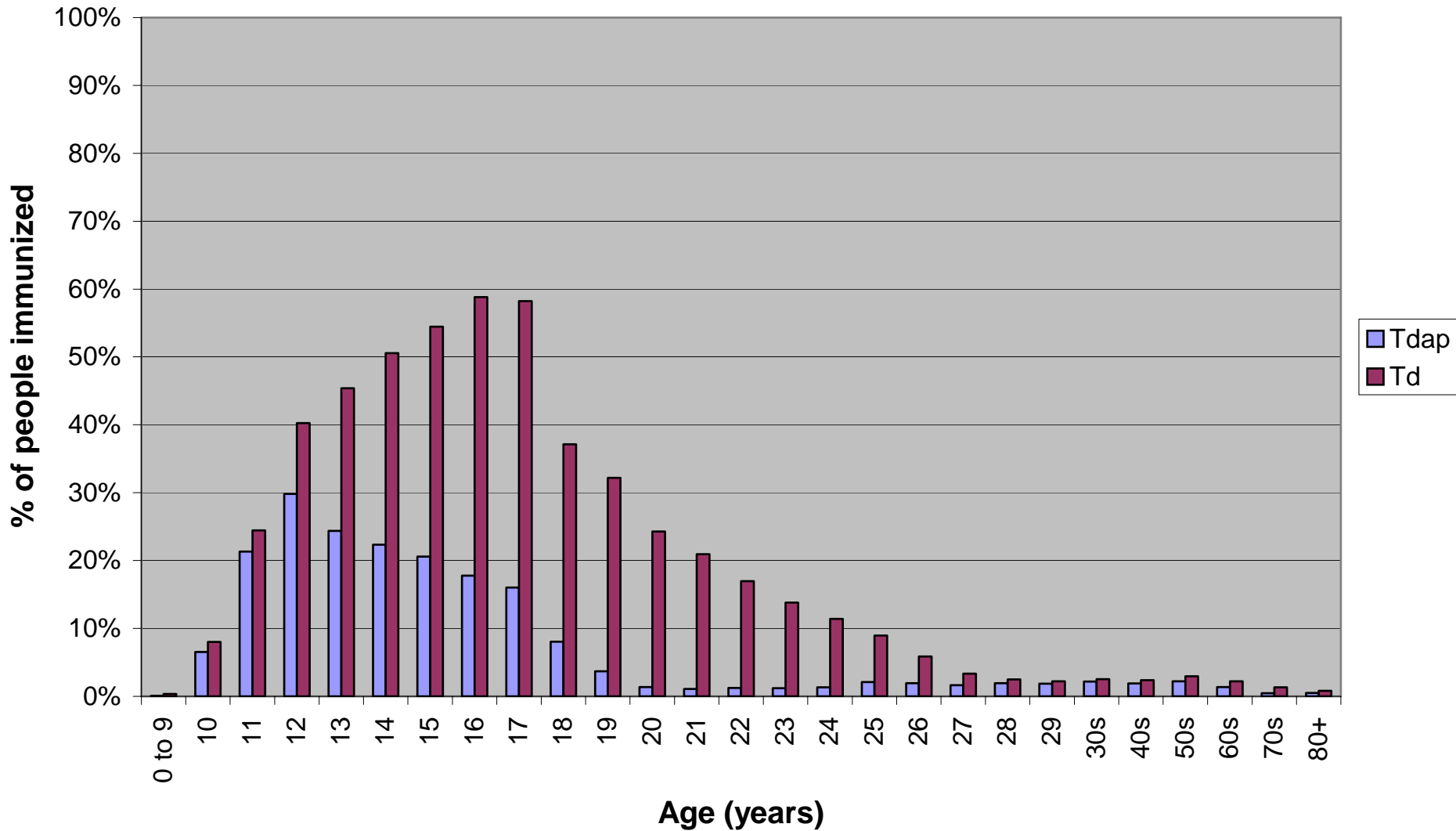
Percent coverage, Td & Tdap in Washtenaw County, Feb. 2006, MCIR

2005 census population estimate data used as denominator.

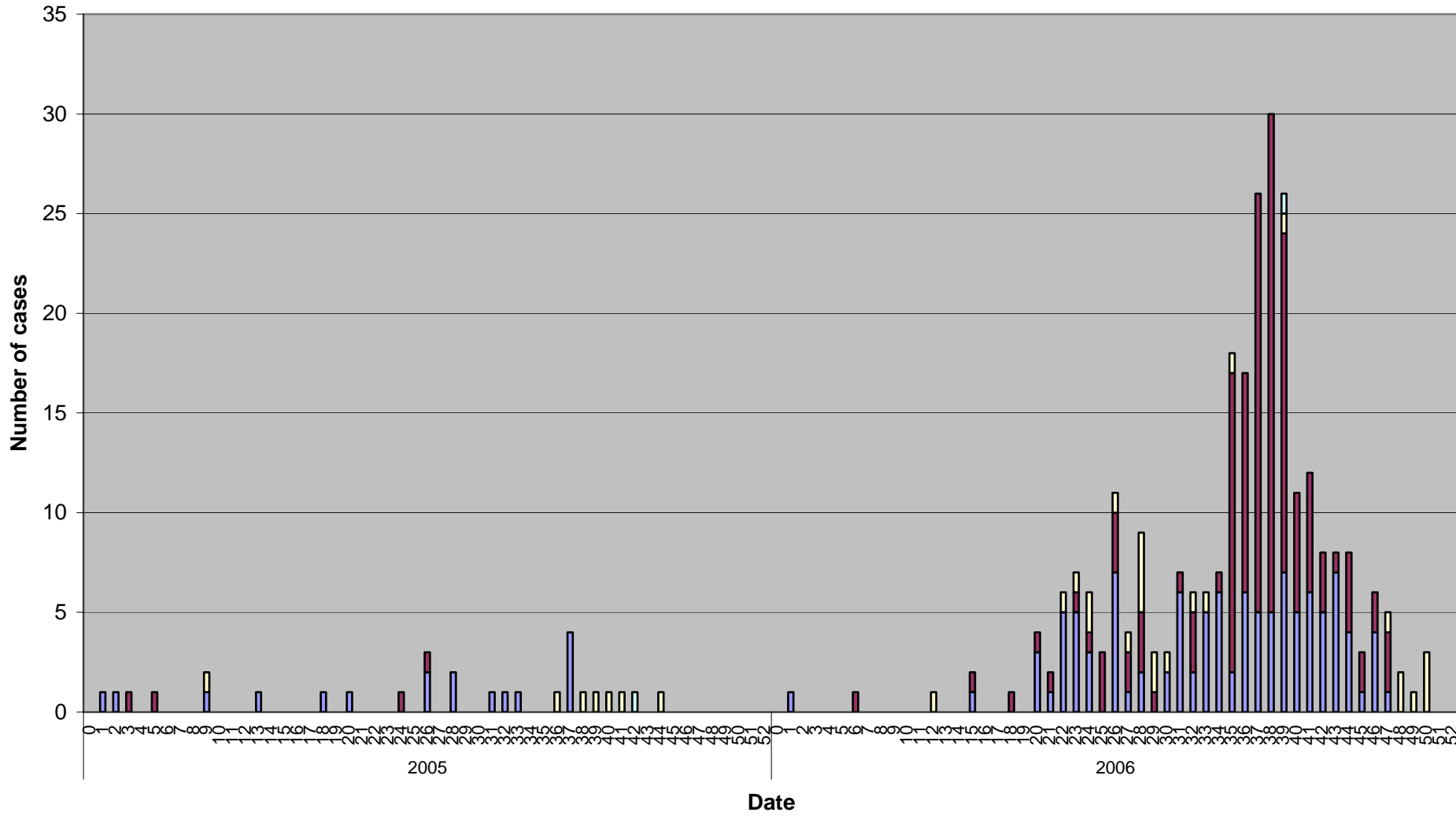


Percent coverage, Td & Tdap in Kalamazoo County, Feb. 2006, MCIR

2005 census population estimate data used as denominator.

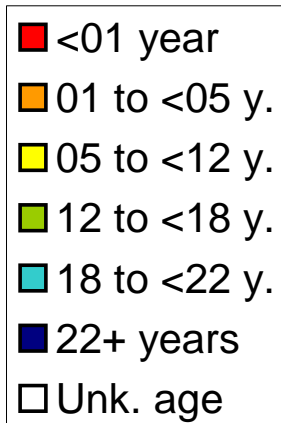
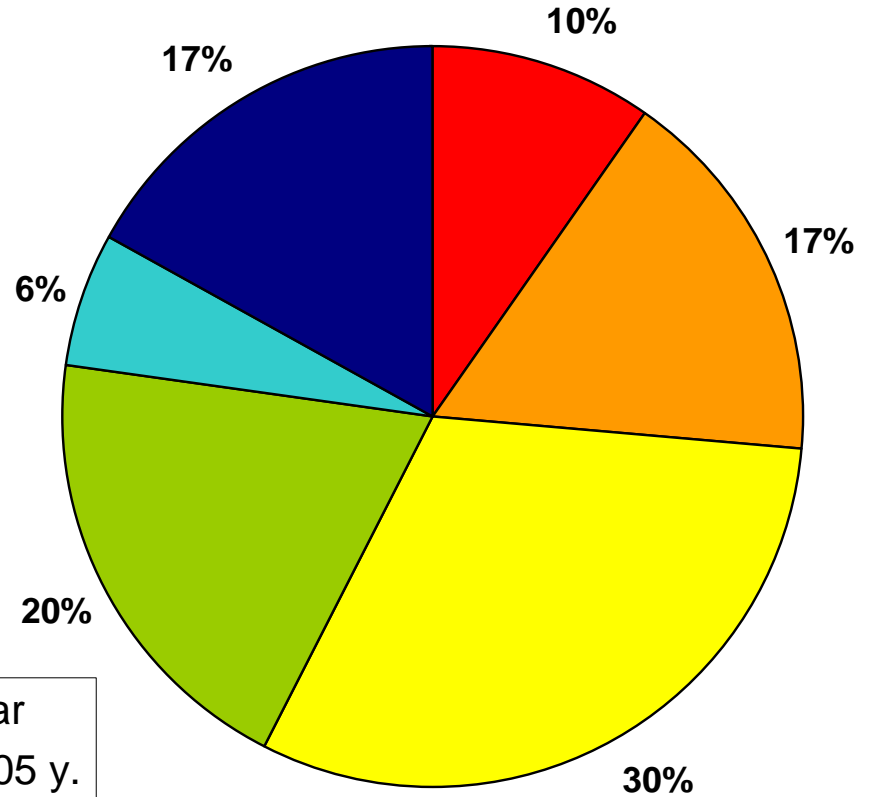
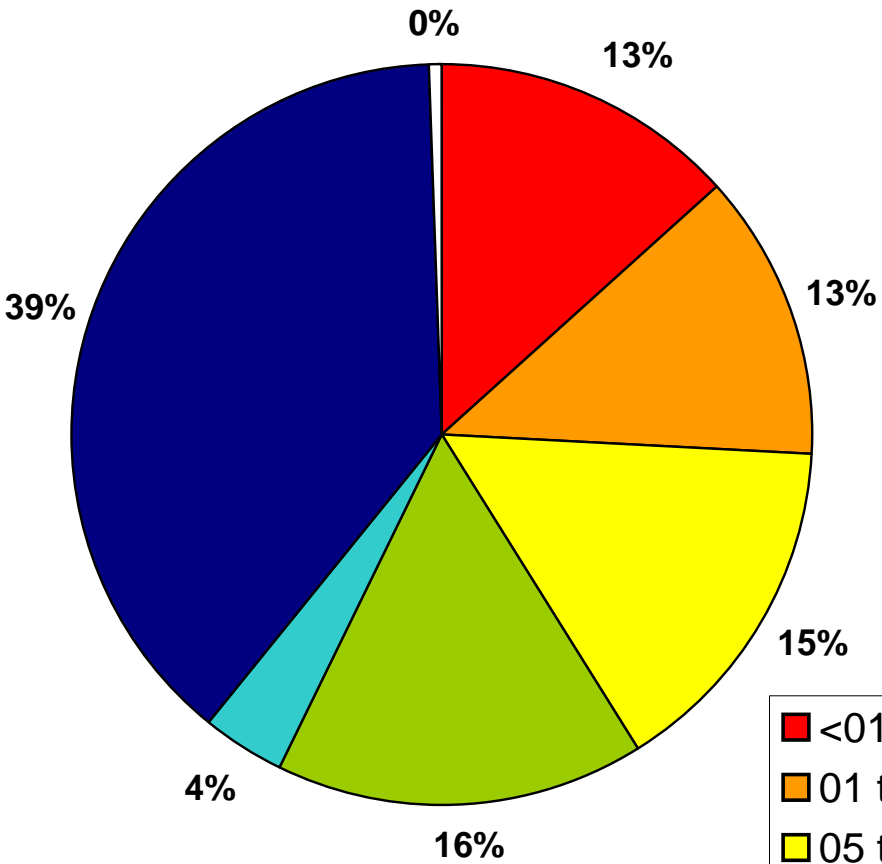


Epi curve for pertussis in Kalamazoo County, by year and week of onset



Age dist. of pertussis cases, Michigan (excluding Kalamazoo)

Age dist. of Kalamazoo pertussis cases, 2006



Acknowledgements

Michelle Thorne, Kalamazoo County Health Dept.

Joel Blostein, Mich. Dept. Comm. Health

Questions?

Kyle Enger

engerk@michigan.gov