DISEASE

2013 Report

RAMSEY COUNTY
Saint Paul – Ramsey County Public Health

Introduction

For an electronic copy of the 2013 Disease Report

www.co.ramsey.mn.us/ph

The 2013 Disease Report provides final numbers, rates and trends for selected reportable diseases among Ramsey County residents for the year 2013. The source of information is a disease surveillance and reporting system maintained by the Minnesota Department of Health in conjunction with local jurisdictions, including Saint Paul – Ramsey County Public Health. The system is authorized by a State of Minnesota disease reporting rule (Minnesota Rules 4605.7000 - 4605.7800) and includes confirmed reports of disease from laboratories, clinics, schools and other partners throughout Minnesota. Multiple sources describe the analytic processes used in this report.[1-3]

[1] Roush, S. (2011). Manual for the surveillance of vaccine-preventable diseases (5th ed.). Centers for Disease Control and Prevention. Retrieved from http://www.cdc.gov/vaccines/pubs/surv-manual/chpt20-analysis-surv.html

[2] Nelson, K. (2007). Infectious disease epidemiology: Theory and practice (2nd ed.). Sudbury, Mass.: Jones and Bartlett.

[3] Minnesota Department of Health. Disease Control Newsletter. Retrieved from http://www.health.state.mn.us/divs/idepc/newsletters/dcn/index.html

Contents

Sexually Transmitted Diseases

The number of cases of sexually transmitted diseases (STDs) reported is affected by several factors, including the availability of screening resources and programs in a community, changes in the type and accuracy of diagnostic tests and completeness of case reporting. Because of these factors, it can be difficult to interpret the reason for changes in the rates of STDs.

Clinic 555 (sexual health services) of Saint Paul – Ramsey County Public Health, along with community clinics and other community health care providers, offer many services related to the prevention and treatment of STDs.

Primary and Secondary Syphilis

Syphilis surveillance data for primary and secondary syphilis are used to monitor morbidity trends because they represent recently acquired infections.[1] In 2013, there were 23 cases of primary/ secondary syphilis in Ramsey County (4.5 cases per 100,000 persons). This represents an increase of 9.5% compared to 2012, when 21 cases were reported (4.1 per 100,000 persons). Similar to the epidemiology of chlamydia and gonorrhea, the burden of disease is much greater in the City of Saint Paul. The City of Saint Paul accounted for 87% (20 cases) of reported cases of primary/secondary syphilis, compared to 3 cases in the rest of Ramsey County.[2] Despite the large percentage of cases in Saint Paul, the incidence trends of primary/ secondary syphilis in the City of Saint Paul follow closely with the trends in Minnesota and the United States.[1-3] The incidence of primary/secondary syphilis is consistently and dramatically higher in Minneapolis than other jurisdictions.[1] In 2013, the incidence in Minneapolis (26.1 per 100,000 persons) was 3.7 times greater than the incidence in Saint Paul.[2]

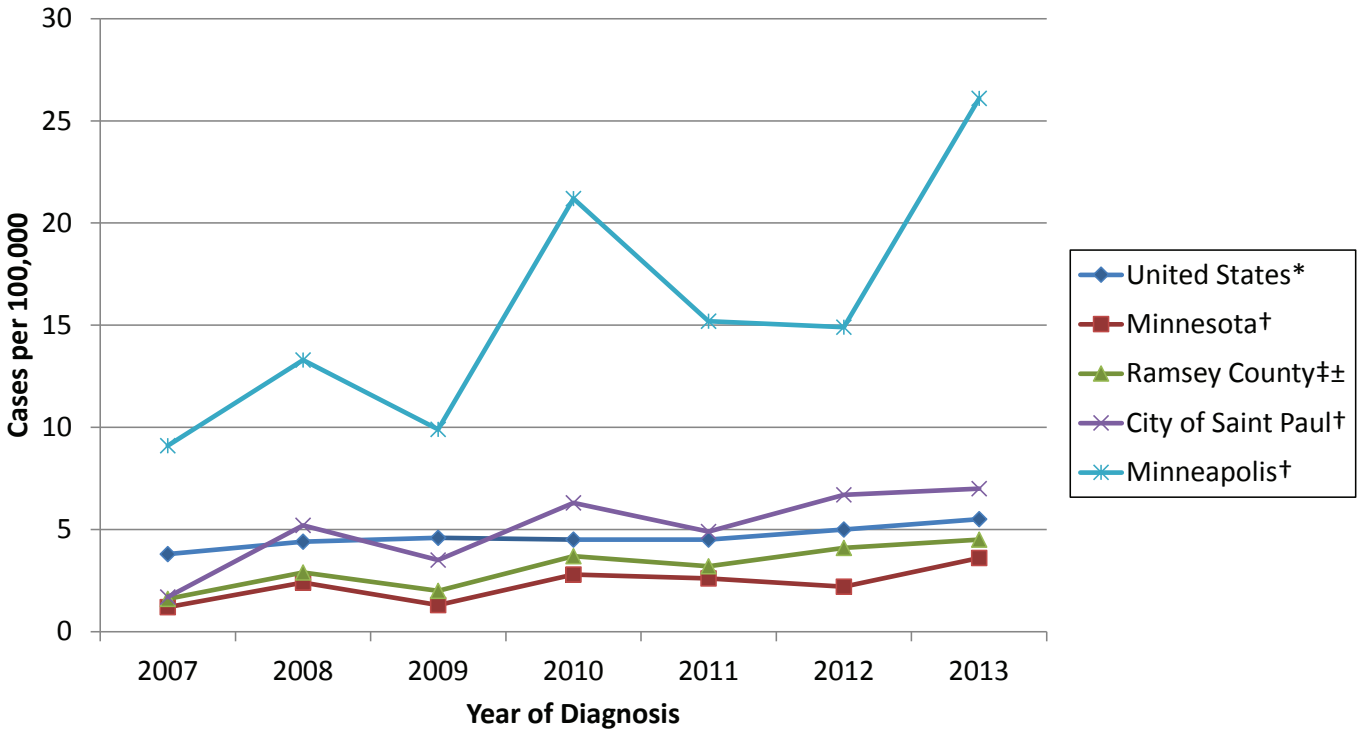
While a modest increase in cases (9.5%) was seen in Ramsey County from 2012 to 2013, a dramatic increase of 64% was seen across Minnesota.[1,2]

The incidence of primary/secondary syphilis in Minnesota has remained elevated since an outbreak began in 2002 among men who have sex with men (MSM).[1] While a modest increase in cases (9.5%) was seen in Ramsey County from 2012 to 2013, a dramatic increase of 64% was seen across Minnesota (193 cases in 2013 and 118 cases in 2012).[1,2] A concerning increase has been seen across the United States as well. In 2013, the rate of reported primary/secondary syphilis in the United States was 5.3 cases per 100,000 persons, more than double the lowest-ever rate of 2.1 in 2000.[3]

Primary/secondary syphilis disproportionately impacts men and is highly concentrated among MSM. Of the cases in Ramsey County in 2013, 21 (91%) were men, the majority of whom reported having sex with other men.[2]

In 2013, ages ranged from 21 to 71 years. Unlike the epidemiology of chlamydia, which disproportionately impacts adolescents and young adults, primary/secondary syphilis cases are distributed fairly evenly among adult age groups. The mean and median age of cases was 36 and 34 years, respectively.[2]

Primary/Secondary Syphilis Incidence per 100,000 Population, Select Populations, 2007 - 2013



*Source: http://www.cdc.gov/std/stats13/tables/1.htm
†Source: http://www.health.state.mn.us/divs/idepc/dtopics/stds/stdstatistics.html
±Source: Saint Paul – Ramsey County Public Health, Epidemiology
‡Includes City of Saint Paul

[1] Minnesota Department of Health. (2013). Annual summary of communicable diseases reported to the minnesota department of health, 2013. Retrieved from http://www.health.state.mn.us/divs/idepc/newsletters/dcn/sum13/index.html

[2] Saint Paul - Ramsey County Public Health, Epidemiology. (2013)

[3] Centers for Disease Control and Prevention. (2014). Primary and secondary syphilis - United States, 2005-2013. MMWR / 63(18);402-06. Retrieved from http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6318a4.htm

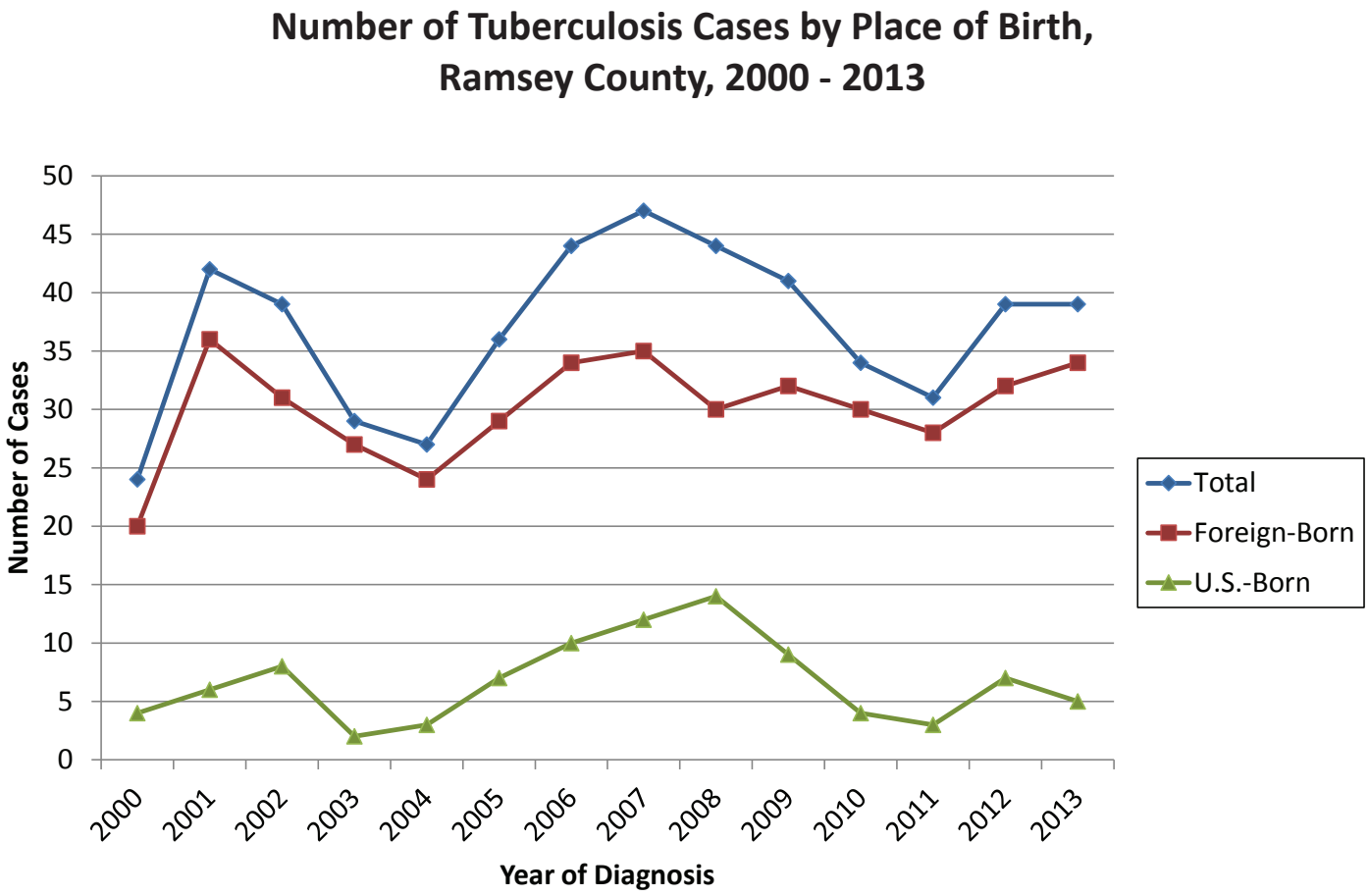
Tuberculosis

Reported cases of tuberculosis (TB) remained the same in 2013. Thirty-nine cases of active TB were reported in Ramsey County. This corresponds to an incidence rate of 7.5 cases per 100,000 persons, which is the highest incidence rate of any county in Minnesota.[1,2] Ramsey County continues to have higher rates than Minnesota (2.8 cases per 100,000 persons) and the United States (3.0 cases per 100,000 persons).[1] The rates of TB in Ramsey County, Minnesota and nationally have not met the Healthy People 2020 goal of 1.0 cases per 100,000 persons.[3] The largest percentage (38.5%) of these cases were initially identified and reported by local public health departments including Saint Paul - Ramsey County Public Health (SPRCPH). Other surveillance sites responsible for reporting a large percentage of cases included hospitals, private health care providers, and laboratories. Due to the complexities of managing patients with active tuberculosis infections, nearly all patients are managed by local public health departments that have clinic capacity. SPRCPH has a tuberculosis clinic with medical providers who specialize in tuberculosis treatment. In 2013, 34 (87%) of the 39 tuberculosis cases in Ramsey County residents received treatment through SPRCPH.[2]

Ramsey County has the highest incidence rate of tuberculosis of any county in Minnesota.[1,2]

In Ramsey County, the majority of cases continue to be in persons born in countries where active TB is common. In 2013, 87% of active TB cases were in persons born outside of the United States, which is higher than the average over the last decade (82%). Of the 34 cases born outside of the U.S., 17% were diagnosed with TB disease before residing in the U.S. for a full year.[2] These cases stress the importance of considering TB disease in patients who recently immigrated to the U.S. Early identification and treatment can greatly reduce the duration of contagiousness and can help reduce transmission of TB in the community. Sixty-eight percent of foreign-born TB cases had resided in the U.S. for three years or longer prior to being diagnosed with TB disease.[2] These cases show the potential impact that domestic screening and treatment of latent TB infection in recently arrived refugees, immigrants, and other foreign-born persons could have on TB disease in Ramsey County. Cases born in the United States often report other risk factors including immunosuppression due to certain therapies or illnesses, substance abuse, and to a lesser extent being homeless, an inmate of a correctional facility, or a resident of a nursing home.[1]

Of the new cases identified in 2013, 7 (26%) of 27 tested for drug sensitivities were resistant to one or more first line anti-TB medications. None of the 7 resistant cases were multidrug-resistant, which is defined as resistance to at least isoniazid and rifampin.[2]



Source: Saint Paul - Ramsey County Public Health, Epidemiology.

[1] Minnesota Department of Health, Tuberculosis Prevention and Control Program. (2013). The epidemiology of tuberculosis in Minnesota, 2009-2013. Retrieved from http://www.health.state.mn.us/divs/idepc/diseases/tb/stats/

[2] Saint Paul - Ramsey County Public Health, Epidemiology. (2013)

[3] U. S. Department of Health and Human Services. Healthy people 2020. Retrieved from http://www.healthypeople.gov/2020/topics-objectives/topic/immunization-and-infectious-diseases/objectives

Pertussis

In 2013, 173 cases of pertussis ("whooping cough") were reported in Ramsey County, which accounts for 20% of all cases reported in Minnesota and represents the highest number of cases reported of any county in the state.[1,2] While this reflects a decrease of 25% from the previous year, the number of cases remains elevated compared to 2011, when only 56 cases were reported. The majority of cases occurred during the second half of the year; June through December.[1] Minnesota experienced a 79% decline in cases in 2013 following a dramatic increase in 2012, but data show that we continue to see a level of pertussis activity in the state that is proportional to the pre-vaccine era in the 1940s.[2]

Ramsey County had the highest number of cases of pertussis of any county in the state.[1,2]

The City of Saint Paul accounted for two-thirds of the cases in Ramsey County (114 cases), which represents an incidence rate of 40.0 cases per 100,000 persons. Most of the cities in Ramsey County experienced a decrease in cases from 2012 to 2013, with the exception of Little Canada, which saw a slight increase, and North Oaks and Shoreview, which reported the same number of cases in both years.[1] Overall, the incidence of pertussis was 34.0 cases per 100,000 persons in Ramsey County and 16.0 per 100,000 persons in Minnesota.[1,2]

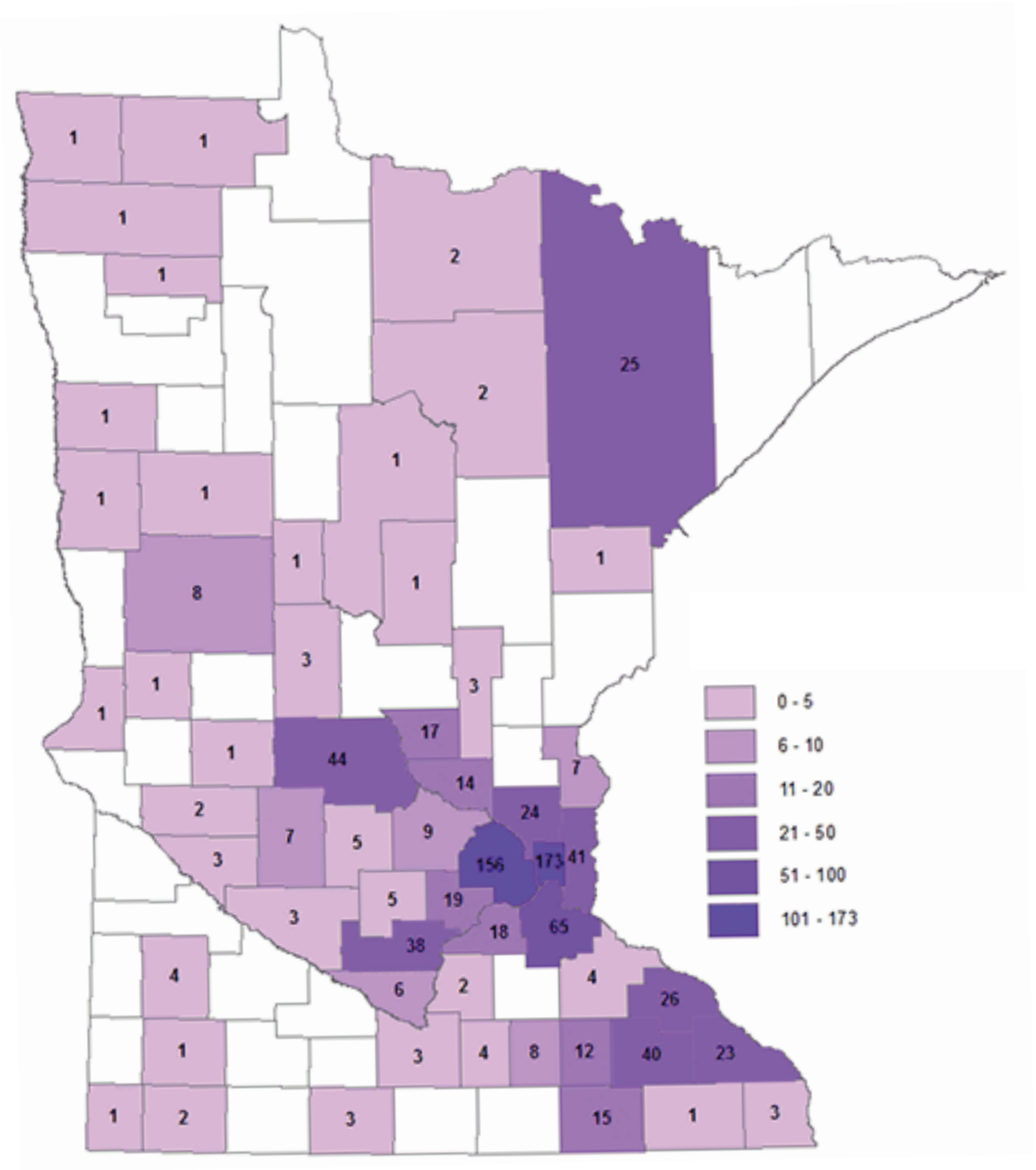
Pertussis impacts people of all ages. In 2013, ages ranged from 29 days to 85 years and the median age was 12.3 years. Despite the large range in ages, the majority of pertussis cases are reported in people 18 years or younger.[1] While pertussis affects people of all ages, infants are at greatest risk of complications. In order to protect them, Tdap vaccine is recommended for any woman who might become pregnant. Experts prefer that women receive Tdap vaccine before becoming pregnant. If a woman is not vaccinated prior to pregnancy, experts recommend that they receive a dose of Tdap vaccine in the third trimester.

Recent studies suggest that while the vaccine provides excellent protection shortly after administration, immunity wanes in the few years following the last dose.[2]

[1] Saint Paul - Ramsey County Public Health, Epidemiology. (2013)

[2] Minnesota Department of Health. (2013). Annual summary of communicable diseases reported to the minnesota department of health, 2013. Retrieved from http://www.health.state.mn.us/divs/idepc/newsletters/dcn/sum13/index.html

Counties with Confirmed and Probable Pertussis, 2013



Source: Minnesota Department of Health

Contact Information

Saint Paul - Ramsey County Public Health has programs that detect and manage communicable diseases, provide childhood and adult immunizations, and promote positive sexual health behaviors.
For more information about public health programs | **651.266.2400**

The Epidemiology Program monitors the occurence of disease, provides information and consultation on control of communicable diseases, and investigates acute disease outbreaks.
For more information about this disease report | **651.266.1277**