Diseases caused by bacteria, viruses, fungi and parasites are major causes of death, disability, and social and economic disruption for millions of people worldwide. Nearly 70,000 Americans die each year from infectious diseases. Effective public health interventions, such as immunizations and improved sanitation, have significantly decreased infectious disease deaths in the U.S. since the early 20th century. However, trends since the 1980s, including new and re-emerging infections, antibiotic resistance, and increased global travel, have raised the importance of continued vigilance with respect to infectious diseases.

There is increasing concern about the health risk posed by new and re-emerging diseases.

Immunization rates are high in Dakota County school-aged children. Difficulties remain in effectively implementing new immunization requirements which contributes to continued occurrence of disease.

Chlamydia has increased in Dakota County residents.

Tuberculosis (TB) cases and contact investigations have become more complex.

Reportable infectious diseases

- In 2017, 2,948 cases of infectious diseases in Dakota County residents were reported to the Minnesota Department of Health.
- Many infectious diseases are not reportable and some that are reportable, like sexually transmitted infections, may go undetected.

Immunizations

- Twelve immunization series are currently recommended for children birth-18 years. Seven are required for school entry in Minnesota.
- From 94-96 percent of Dakota County kindergarteners and 95-98 percent of 7th grade students were protected by each of the required immunizations, according to parent report for the 2017-2018 school year. Two percent of kindergarteners and one percent of 7th graders are not vaccinated due to conscientious objection.
- Sixty-five percent of Dakota County children aged 24-35 months are up-to-date on all immunizations, slightly below the state (68 percent).

Diseases preventable by immunization

- Pertussis (whooping cough): In 2017, there were 42 confirmed and probable cases reported in Dakota County residents, six percent of the total cases reported in Minnesota.
- Measles: 83 cases reported in Minnesota from 2013-2017. Minnesota experienced its largest outbreak since 1990 in 2017 (75 cases). There has been one measles case reported in Dakota County since 2013.
- Mumps: 12 confirmed and probable cases reported in Dakota County residents from 2013 to 2017.
Tuberculosis (TB)
• In 2018, there were 24 cases of active TB and 65 cases of latent TB infection that were managed by Dakota County Public Health.
• In 2016, 21 percent of new culture-confirmed cases in Minnesota residents that were tested were resistant to at least one first-line TB drug.

Sexually transmitted diseases (STDs)
• In 2017, 1,887 cases of STDs were reported in Dakota County residents, excluding AIDS/HIV.
• Chlamydia is the most commonly reported STD, with 1,506 cases reported in Dakota County residents in 2017. The rate increased by 80 percent from 2008 to 2017. Sixty-three percent of cases occurred in 15-24 year olds, and 42 percent of cases occurred in persons of color.

Chlamydia Incidence Rates 2007-2016

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</table>

Source: Minnesota Department of Health, STD Surveillance

• There were 334 cases of gonorrhea reported in Dakota County residents in 2017. The rate increased by 186 percent since 2008. Forty-nine percent of cases occurred in 15-24 year olds, and 47 percent of cases occurred in people of color.

Cervical cancer
• Human papillomavirus (HPV) can cause changes in cells which increase the risk of cervical cancer. In 2006, a vaccine was developed that prevents types of HPV that most commonly cause cervical cancer. In 2018, 19 percent of Dakota County adolescents aged 13-19 were fully vaccinated for HPV, slightly below the state (20 percent).
• In 2016, 82 percent of Minnesota women 18 and older said they had a Pap test to detect cervical cancer in the previous three years, below the national goal of 93 percent, but above the U.S. overall rate (80 percent).

AIDS/HIV
• In 2017, there were 20 newly diagnosed cases of HIV or AIDS reported in Dakota County residents. The incidence rate generally decreased from 2014 to 2017, after an increase from 2012 to 2014. The rate is below the rate for the state in 2017.
• In 2017, 458 Dakota County residents were living with HIV or AIDS (249 HIV, 209 AIDS). The rate increased from 2008 to 2017, but is below the state and metro in 2017.
• Five Dakota County residents died due to AIDS from 2013 to 2017.

Seasonal influenza
• On average, 5-20 percent of the U.S. population gets seasonal influenza every year.
• Sixty-five percent of Minnesota adults 65 and older reported having a flu shot in the previous year (2017), compared to 61 percent nationwide.
• The Centers for Disease Control and Prevention estimated that 62 percent of Minnesota children 6 months-17 years were fully immunized against the seasonal flu in the 2017-18 influenza season.

Pneumonia
• There were 717 hospitalizations of Dakota County residents in 2016 for pneumonia and influenza. The highest rate of hospitalizations was in adults 75 and older.
• In 2017, 78 percent of Minnesota adults 65 and older reported ever having an immunization that protects against pneumonia, meningitis and other infections, compared to 75 percent nationwide.
• In 2018, 80 percent of Dakota County children 24-35 months received the series of four immunizations that prevent pneumonia, meningitis and other infections.

For more information:
• Centers for Disease Control and Prevention [www.cdc.gov](http://www.cdc.gov)
• Minnesota Department of Health [www.health.state.mn.us](http://www.health.state.mn.us)
• World Health Organization (WHO) [www.who.int/en](http://www.who.int/en)
• American Academy of Pediatrics [www.aap.org](http://www.aap.org)

The Dakota County Public Health Department is accredited by the national Public Health Accreditation Board.

For more information about the Dakota County community health assessment, email public.health@co.dakota.mn.us or call 651.554.6100.