Diseases caused by bacteria, viruses, fungi and parasites are major causes of death, disability, and social and economic disruption for millions of people worldwide. More than 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.

Reportable infectious diseases
- In 2015, 2,288 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 95-97 percent of Dakota County kindergarteners and 95-99 percent of 7th grade students were protected by each of the required immunizations, according to parent report for the 2015-2016 school year.
- Two percent of Dakota County kindergarten and one percent of 7th grade students have not received any vaccines due to conscientious objection – the same as the statewide percent.

Diseases preventable by immunization
- Pertussis (whooping cough): In 2015, there were 117 confirmed and probable cases reported in Dakota County residents, 20 percent of the total cases reported in Minnesota.
- Measles: 38 cases reported in Minnesota from 2006-2015. In 2011, 26 cases were reported in Minnesota, including three in Dakota County. This was the highest total since 1991. One measles case was reported in Dakota County in 2014.
- Mumps: four confirmed and probable cases reported in Dakota County residents from 2011 to 2015.

Tuberculosis (TB)
- In 2015, there were 25 cases of active TB and 82 cases of latent TB infection that were managed by Dakota County Public Health.
- In 2014, 24 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 2015, 1,528 cases of STDs were reported in Dakota County residents, excluding AIDS/HIV.
- Chlamydia is the most commonly reported STD, with 1,343 cases reported in Dakota County residents in 2015. The rate increased by 73 percent from 2006 to 2015. 64.5 percent of cases occurred in 15-24 year olds, and 34.5 percent of cases occurred in persons 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 2014, 42.5 percent of Minnesota females and 14 percent of males, aged 13-17, were fully vaccinated.
- There were 55 new cases of cervical cancer in Dakota County residents from 2005-2009. The rate decreased slightly from 2000 to 2007.
- In 2014, 77 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 (75 percent).

AIDS/HIV
- In 2015, there were 21 newly diagnosed cases of HIV or AIDS reported in Dakota County residents. The incidence rate generally increased from 2012 to 2015, after a decrease from 2009 to 2012. The rate is below the rate for the metro area and the state in 2015.
- In 2015, 404 Dakota County residents were living with HIV or AIDS (222 HIV, 182 AIDS). The rate increased from 2006 to 2015, but is below the state and metro in 2015.
- Six Dakota County residents died due to AIDS from 2011 to 2015.

Seasonal influenza
- On average, 5-20 percent of the U.S. population gets seasonal influenza every year.
- Sixty-four percent of Minnesota adults 65 and older reported having a flu shot in the previous year (2014), compared to 61 percent nationwide.
- The Centers for Disease Control and Prevention estimated that 61 percent of Minnesota children 6 months-17 years were fully immunized against the seasonal flu in the 2015-16 influenza season.

Pneumonia
- There were 804 hospitalizations of Dakota County residents in 2014 for pneumonia and influenza. The highest rate of hospitalizations was in adults 65 and older.
- In 2014, 73 percent of Minnesota adults 65 and older reported ever having an immunization that protects against pneumonia, meningitis and other infections, compared to 70 percent nationwide.
- In 2015, 78 percent of Dakota County children 24-35 months received the series of four immunizations that prevent pneumonia, meningitis and other infections.

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