

Bexar County 2007 Communicable Diseases

Several new reportable disease concerns emerged in 2007, while others basically remained at the same level. In 2007, there were 16 Bexar County residents that were diagnosed with WNV which had neurological involvement. This was one of the most active years for West Nile infections that we have ever experienced. It is noted that a few of these cases had profound, long-term neurological problems requiring extensive therapy. Of course, for every symptomatic case, there are possibly as many as 100 or more sub-clinical infections that go undetected.

Salmonella continues to be our most frequent reportable bacterial pathogen to cause diarrheal illness, with 174 culture-confirmed cases. Thirty percent of these cases were under the age of 5 years. While this number may seem high, it probably represents only the tip of the iceberg, with national estimates running as high as thirty times greater than the actual reported numbers. Salmonella can be transmitted from person-to-person via the fecal-oral route or via the ingestion of contaminated food products, with an incubation period of 6-72 hours. The spectrum of infection ranges from asymptomatic cases to bacteremia, with sepsis or even death. While the chronic carrier state is rare in humans, it is fairly common in a wide variety of domestic and wild animals such as birds, dogs, cats and some exotic pets like iguanas, snakes, rodents, and turtles.

In 2007, we experienced a 65% increase of Campylobacter infections over the previous year. Campylobacter is usually the third most common reportable bacterial pathogen to cause diarrheal illness in Bexar County, surpassed only by Salmonella and Shigella on any given year. But, in 2007 Campylobacteriosis was the second most common diarrheal illness, only behind Salmonella. While all age groups are susceptible to infection, one-third of our cases were under the age of 10 years.

The number of Shigella case reports for 2007 was unusual since it was the first year in recent memory that we did not register more than 100 cases. Shigella is a very infective disease with a dose of only 10-100 organisms required to cause infection. Unlike Salmonella, Shigella does not infect wild or domestic animals, with only humans and primates serving as the host. This infection is basically spread from person to person, and in 2007, 70% of the Bexar County cases occurred in children under the age of 10 years.

In 2007, we continued to see a decline in Hepatitis-A virus (HAV) case reports from health providers. This decrease has continued among both children and adults ever since HAV vaccination was required for school attendance. A total of 12 cases, all adults, were reported to our immunization section. While not every case is always reported, Metro Health receives reports for the majority of identified cases. This is a good indication that HAV infections have greatly decreased over previous years.

There was a 29% decrease in Pertussis cases as well - from 73 cases in 2006 to 52 cases in 2007. Of these 52 cases, 7 were in children under the age of 2 months, thus not eligible for vaccination. It is generally recognized that many of the children that are not eligible for vaccination are infected by adults with Pertussis infections. We now have a Pertussis vaccine for adolescents and adults, and it is recommended that a booster shot be given to this age group in order to protect them and reduce possible exposure of newborns to Pertussis.

In addition, 2007 also marked the first time in recent memory that Measles (Rubeola) transmission occurred in Bexar County. The last reported case of Measles prior to 2007 occurred in 1995 when 10 cases were reported. In the spring of 2007, three cases were traced to a young woman that had recently returned from Japan where a Measles outbreak was occurring. The young woman had onset of symptoms a few days after arriving. She lived with a family that had a religious objection to immunizations and consequently exposed three children that were not immunized. All three developed measles and all three survived.

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