

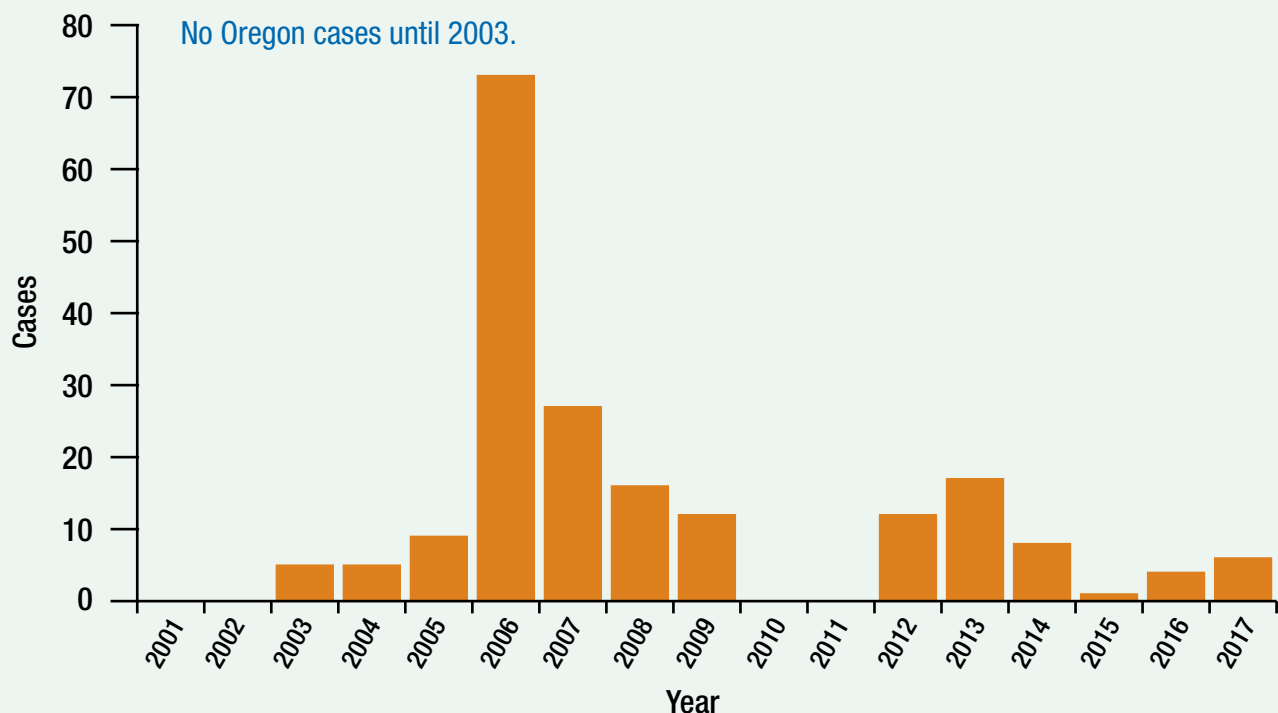
# West Nile virus

West Nile virus (WNV) first appeared in the United States on Long Island in 1999 and then moved westward across the country. In Oregon, the first indigenous case was reported in 2004. West Nile virus is a mosquito-borne *Flavivirus* that affects both animals and humans. Corvid birds (crows, ravens, jays, magpies) are the reservoir; humans and other animals are considered “dead-end” hosts — i.e., they may be infected and develop symptoms, but they do not transmit the infection further. Of human beings infected, only approximately one in five will have any symptoms at all — typically flu-like symptoms such as fever, headache and muscle aches. However, approximately one in 150 infected persons will have symptoms of central nervous system infection that may include neck stiffness, stupor, disorientation, tremors, convulsions, muscle weakness, paralysis and coma.

The risk of getting West Nile virus in Oregon has been very low. Though most cases were in those aged 20–50 years, those >50 years of age have the highest risk of developing serious illness. Incidence is highest in the summer months.

In 2017, seven human cases of West Nile virus occurred in Oregon. In addition, 92 mosquito pools, one bird and five horses tested positive for WNV infection.

## West Nile virus infection by year: Oregon, 2001–2017

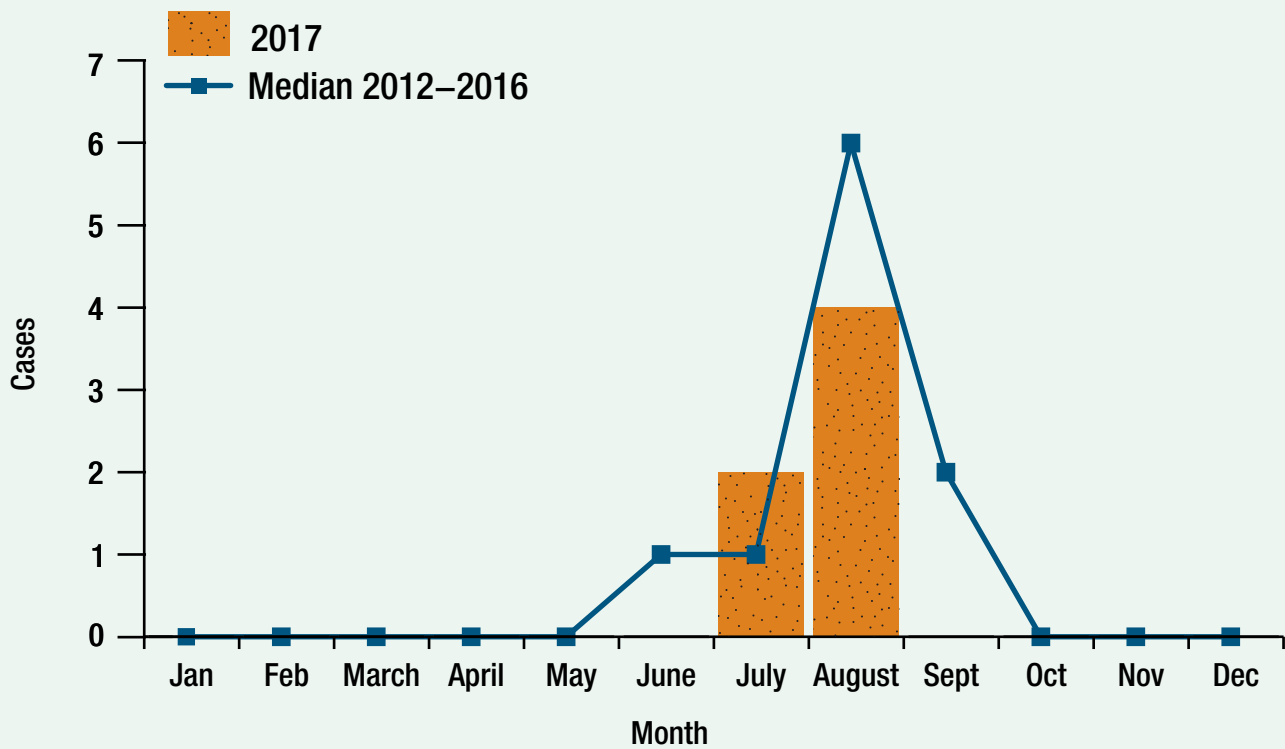


## Confirmed WNV infection in Oregon, 2006–2017

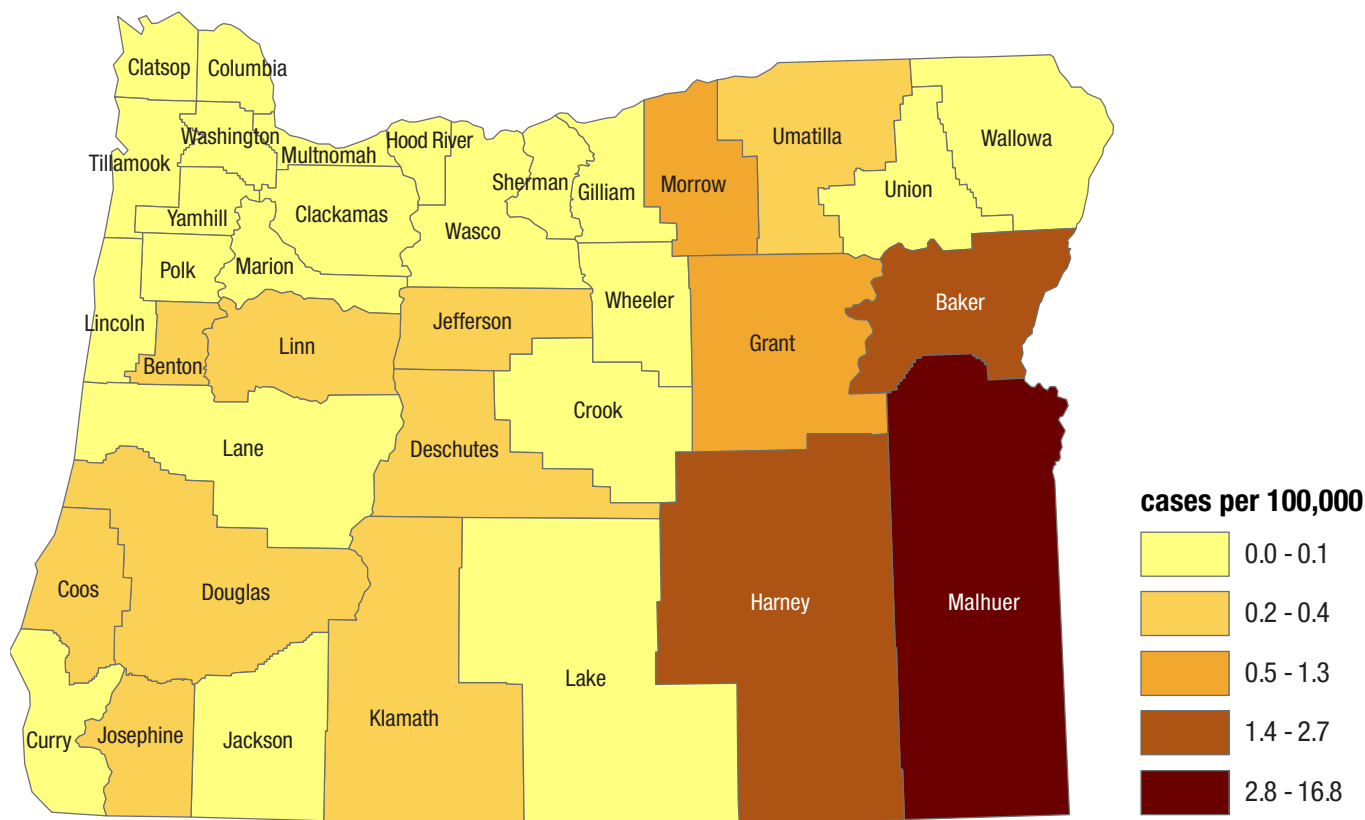
| Group             | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|-------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Human             | 73   | 27   | 16   | 12   | 0    | 0    | 12   | 16   | 8    | 1    | 4    | 7    |
| Horses            | 35   | 16   | 0    | 5    | 0    | 2    | 2    | 6    | 3    | 6    | 6    | 5    |
| Birds             | 25   | 52   | 2    | 16   | 0    | 0    | 2    | 2    | 7    | 11   | 12   | 1    |
| Mosquito pools    | 22   | 28   | 16   | 262  | 4    | 3    | 71   | 89   | 58   | 59   | 51   | 92   |
| Sentinel chickens | 0    | 11   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |

Source: Oregon State University Veterinary Laboratory and Oregon State Public Health Laboratory

### West Nile virus infection by onset month: Oregon, 2017



## Incidence of West Nile virus infection by county of residence: Oregon, 2008–2017



### Prevention

- Avoid mosquito bites:
  - › Use insect repellents when you go outdoors. Repellents containing DEET, picaridin, IR3535, and some oil of lemon eucalyptus and para-menthane-3,8-diol products provide longer-lasting protection. To optimize safety and effectiveness, repellents should be used according to the label instructions.
  - › When weather permits, wear long sleeves, long pants and socks when outdoors.
  - › Take extra care during peak mosquito-biting hours.
- Mosquito-proof your home:
  - › Install or repair screens on windows and doors to keep mosquitoes outside. Use your air conditioning, if you have it.
  - › Reduce the number of mosquitoes around your home by regularly emptying standing water from flowerpots, gutters, buckets, pool covers, pet water dishes, discarded tires and birdbaths.
- Report dead birds to local authorities.