

Cryptococcosis

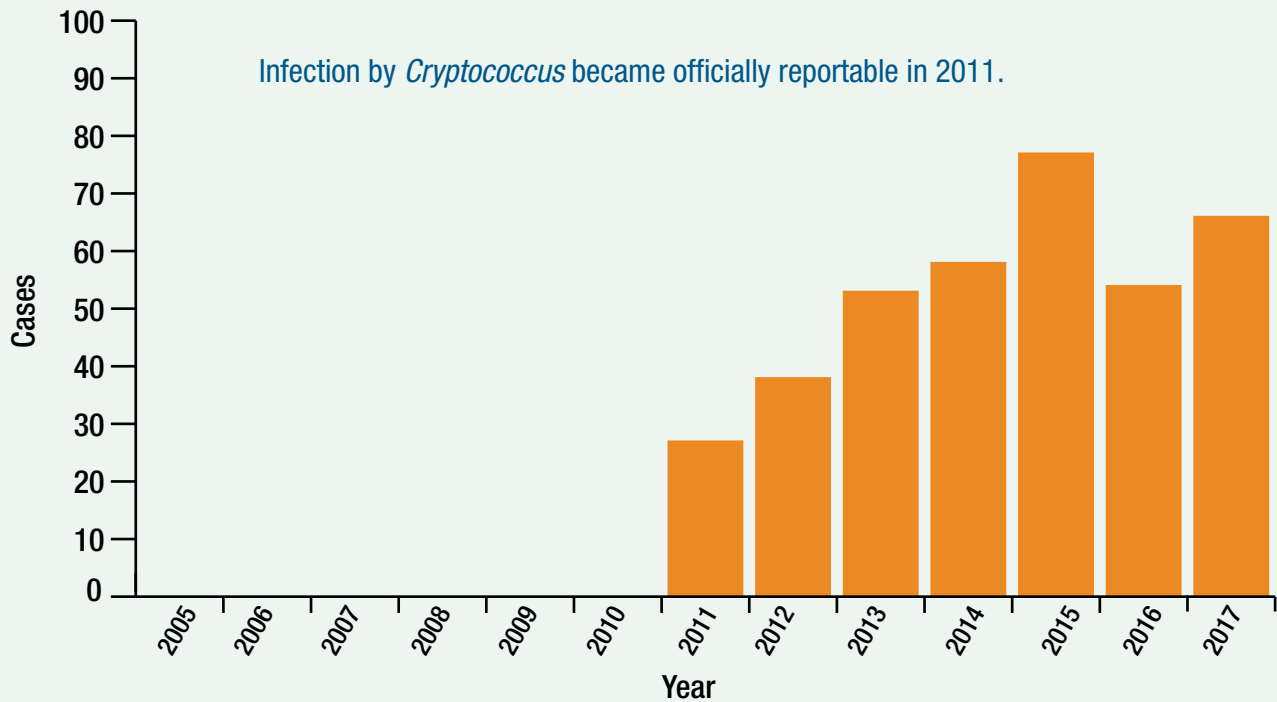
Cryptococcus neoformans has long been identified in humans with immunosuppressive conditions, especially AIDS. Before 1999, *Cryptococcus gattii* (*C. gattii*) infection seemed to be mainly limited to the tropics. During 1999, *C. gattii* began appearing in animals and humans on Vancouver Island in British Columbia, Canada.

Beginning in 2004, it started appearing among mainland British Columbia residents who had no exposure to Vancouver Island. In December 2004, a case of human *C. gattii* infection was reported in Oregon, associated with an outbreak on Vancouver Island and in mainland British Columbia. Infection by *Cryptococcus* became officially reportable in Oregon on Aug. 19, 2011.

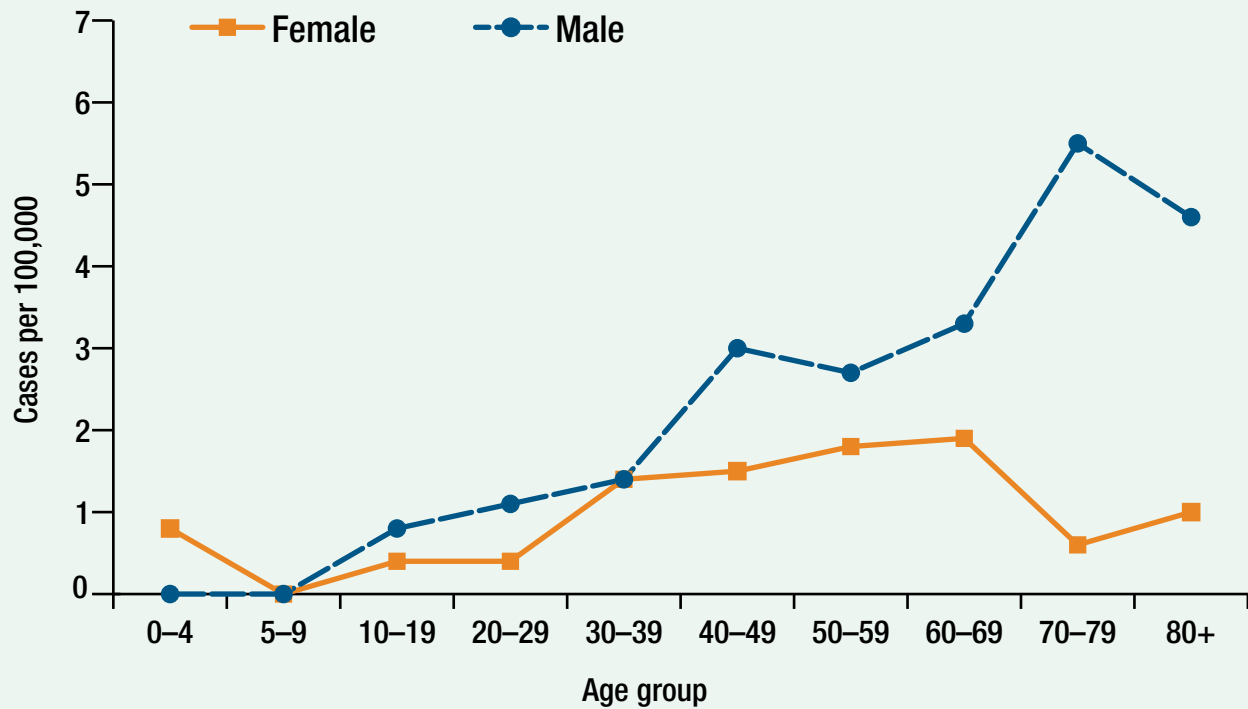
Sixty-five cases occurred among Oregon residents in 2017. The most common infection was *C. neoformans* (20), followed by *C. gattii* (11), *C. albidus* (9), *C. laurentii* (2), and one each of *C. diffluens* and *C. liquefaciens*. Fifteen cases were diagnosed by cryptococcal antigen test that does not differentiate between *C. gattii* and *C. neoformans* and, unfortunately, does not enhance our understanding of the epidemiology of the disease. Studies from British Columbia and elsewhere showed a median incubation period of six to seven months, with a range of between two and 13 months. In addition to testing human specimens, we also test animals and environments where animals are infected with *C. gattii* to localize the environmental reservoirs (they travel less than humans). The bottom line is *C. gattii* appears to be established in Oregon soil and serves as a source of infection. There is no potential for zoonotic transmission.

Healthy persons appear to be at low risk. Most infections are among immunocompromised or chronically ill persons. Over the last few years, detection of cryptococcal infection has changed from culturing the organism to using the cryptococcal antigen, making it impossible to further our knowledge of the epidemiology of *Cryptococcus gattii*. Treatment with extended use of antifungal agents (six months or longer) is recommended. For current treatment information, see guidelines published by the Infectious Disease Society of America.

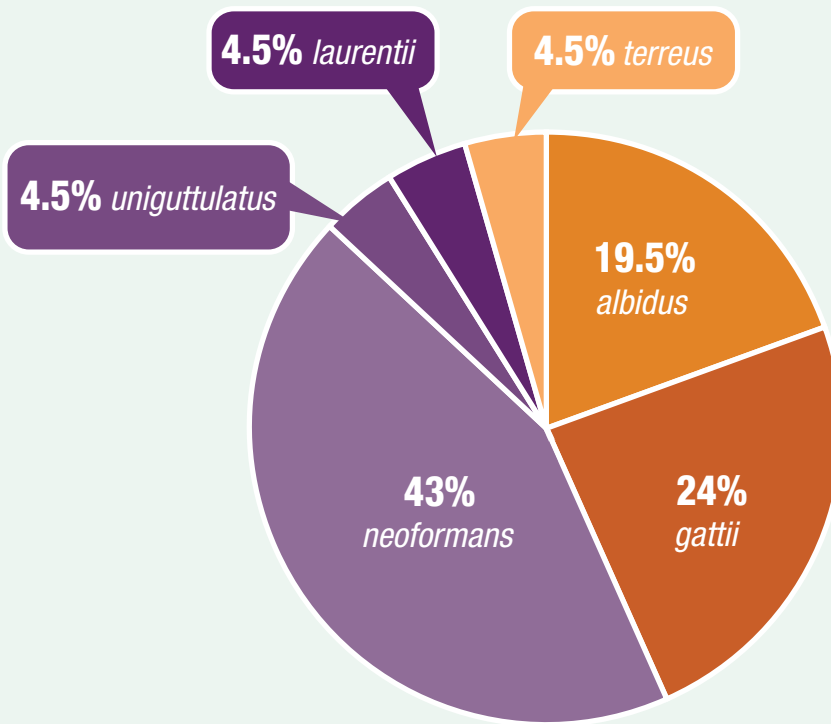
Cryptococcosis by year: Oregon, 2005–2017



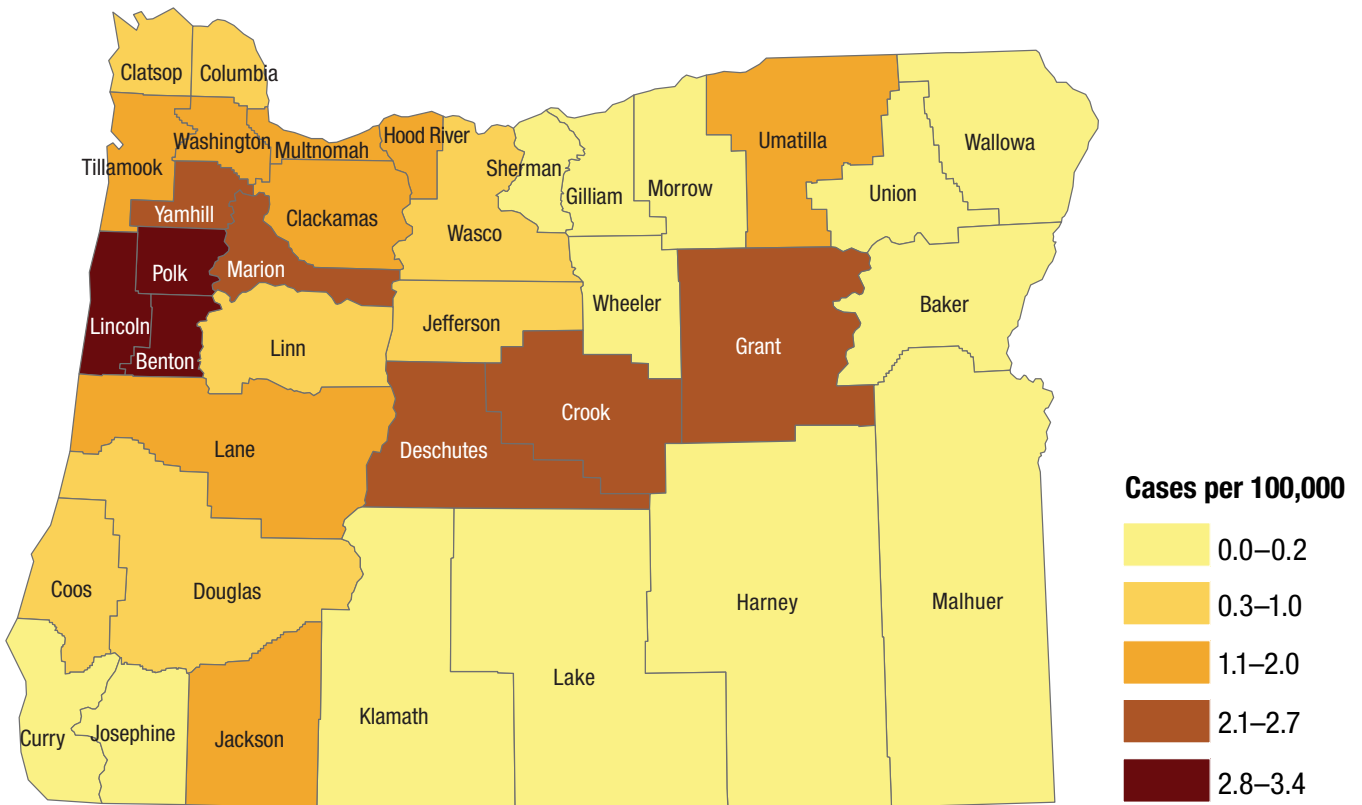
Cryptococcosis by age and sex: Oregon, 2017



Cryptococcosis by species: Oregon, 2017



Incidence of cryptococcosis by county of residence: Oregon, 2013–2017



Prevention

- Regrettably, practical methods for preventing cryptococcosis have not been identified.
- Patients with cryptococcosis can be helped with early diagnosis and treatment with antifungal drugs.