

# Is It a Fungal Infection?

## What are the clinical signs?

### *Blastomycosis*<sup>4,5</sup>

**Lung** pathology in 65-85% cases; cough, tachypnea, lesions

**Lymph nodes** in 30-50% cases

**Eyes** in 20-50% cases; lesions, endophthalmitis

**Skin** in 30-50% cases; lesions; most involved nasal planum, face, nail beds

**Bone** in 30% cases; lameness, lesions

**CNS** infections in 3-6% cases



### *Aspergillosis*<sup>9</sup>

**Sinonasal disease**- hallmark sign is depigmentation on nose  
Destruction of turbinate bones and mucosa  
Purulent discharge  
Facial discomfort, open mouth breathing  
Ulceration  
Inappetence, lethargy



### *Histoplasmosis*<sup>6,7</sup>

Dogs

**Lung** involvement in 50% cases; chronic cough, dyspnea

**Gastrointestinal** in 78% cases; inappetence; bloody or mucousy diarrhea



Cats

Weight loss, lethargy, dehydration

**Lung** involvement in 39% cases; tachypnea, dyspnea

**Eyes** in 24% cases

**Organ** enlargement in 33% cases

### *Cryptococcosis*<sup>8</sup>

Most common in cats

**Respiratory**- sneezing, discharge, swelling

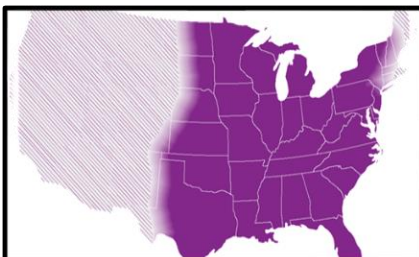
**Sores** resembling fight wounds

**Eye** abnormalities, blindness

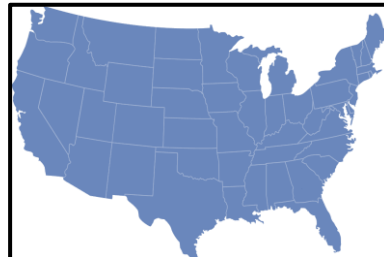


## Where is it endemic?

### *Blastomyces & Histoplasma*<sup>1</sup>



### *Cryptococcus*<sup>2,3</sup> & *Aspergillus*<sup>3</sup>



#### References

<sup>1</sup>More information about the estimated areas with blastomycosis, coccidioidomycosis (Valley fever), and histoplasmosis in the United States. CDC. Last reviewed Jan 8, 2021.

<sup>2</sup>Fig 2. Summers et al. 2021. PMID 33425680

<sup>3</sup><https://tolsura.com/infections-overview/> 2022

<sup>4</sup>Schwartz, I.S. (2018). Blastomycosis in Mammals. In: Seyedmousavi, S., de Hoog, G., Guillot, J., Verweij, P. (eds) Emerging and Epizootic Fungal Infections in Animals. Springer, Cham.

<sup>5</sup>Gaunt MC and Taylor SM. Canine blastomycosis: a review and update on diagnosis and treatment. 2009. DVM360.

<sup>6</sup>Gingerich K and Gupta L. Canine and feline histoplasmosis: a review of a widespread fungus. 2008. DVM360.

<sup>7</sup>Ewald MM, Rankin AJ, Meekins JM, and McCool ES. Disseminated histoplasmosis with ocular adnexal involvement in seven cats. 2020. Vet Ophthalmol 23(5): 905-912.

<sup>8</sup>Gordon J. 2011. Systemic fungal diseases (Proceedings). DVM360.

<sup>9</sup>Cook A. 2010. When to consider aspergillosis in dogs. DVM360.