



Epizootic Hemorrhagic Disease (EHD) in New Jersey



New Jersey Division of Fish and Wildlife

- EHD is the most important viral disease of whitetail deer in the U.S.
- The EHD virus is transmitted by biting midges in the genus *Culicoides*.

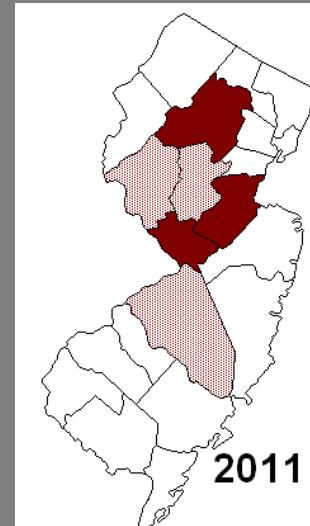
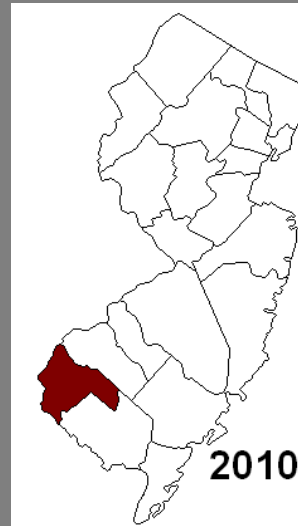
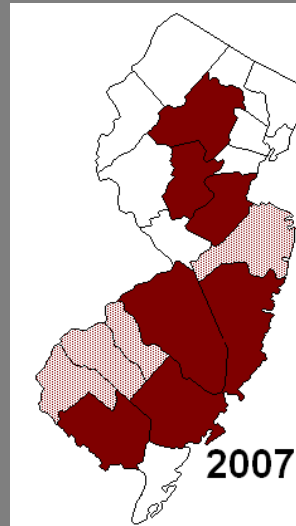
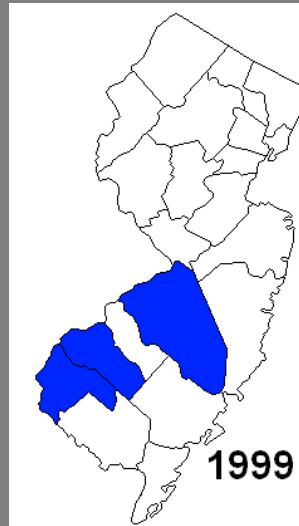
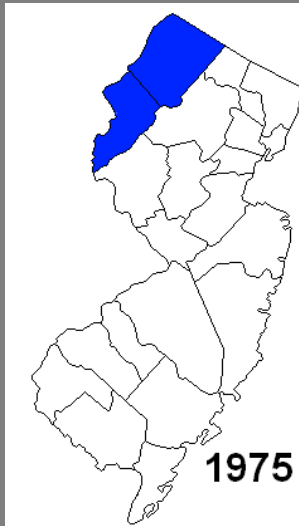
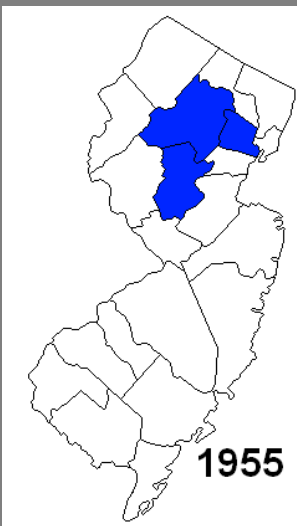


- Often mistakenly referred to as “bluetongue”, a closely related hemorrhagic disease.
- Outbreaks occur in the late summer/early fall but are unpredictable on an annual basis.

Major Rivers of New Jersey



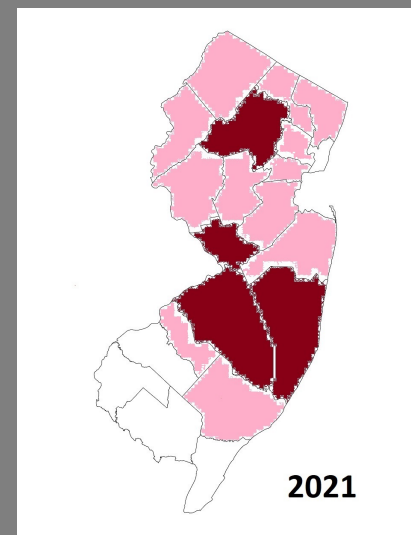
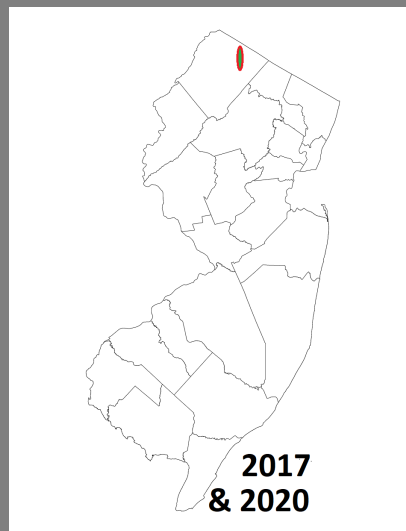
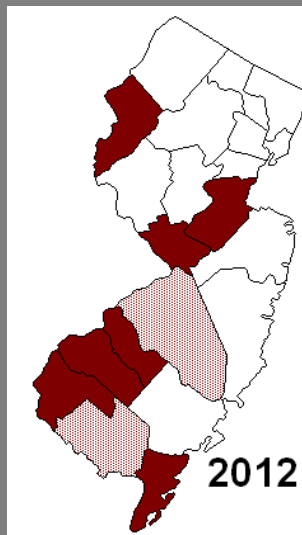
EHD Outbreaks in New Jersey



EHDV-1

EHDV-2

EHDV-6



2021 EHD Outbreak

Idaho

Indiana

Michigan

Mississippi

New Jersey

New York

North Dakota

South Dakota

Vermont?

Washington

Wyoming (WT deer, pronghorn)

(as of 10.07.21)

Species Susceptible to EHD

- Infectious to various wild ruminants, especially white-tailed deer and mule deer
- EHDV does not infect humans – no risk from handling or eating infected deer
- Not currently considered a significant cattle pathogen. Most infections are sub-clinical or cause mild symptoms. However, cases in yaks and alpacas were reported in New Jersey in 2021.

Three Forms of EHD

- Peracute
- Acute
- Chronic



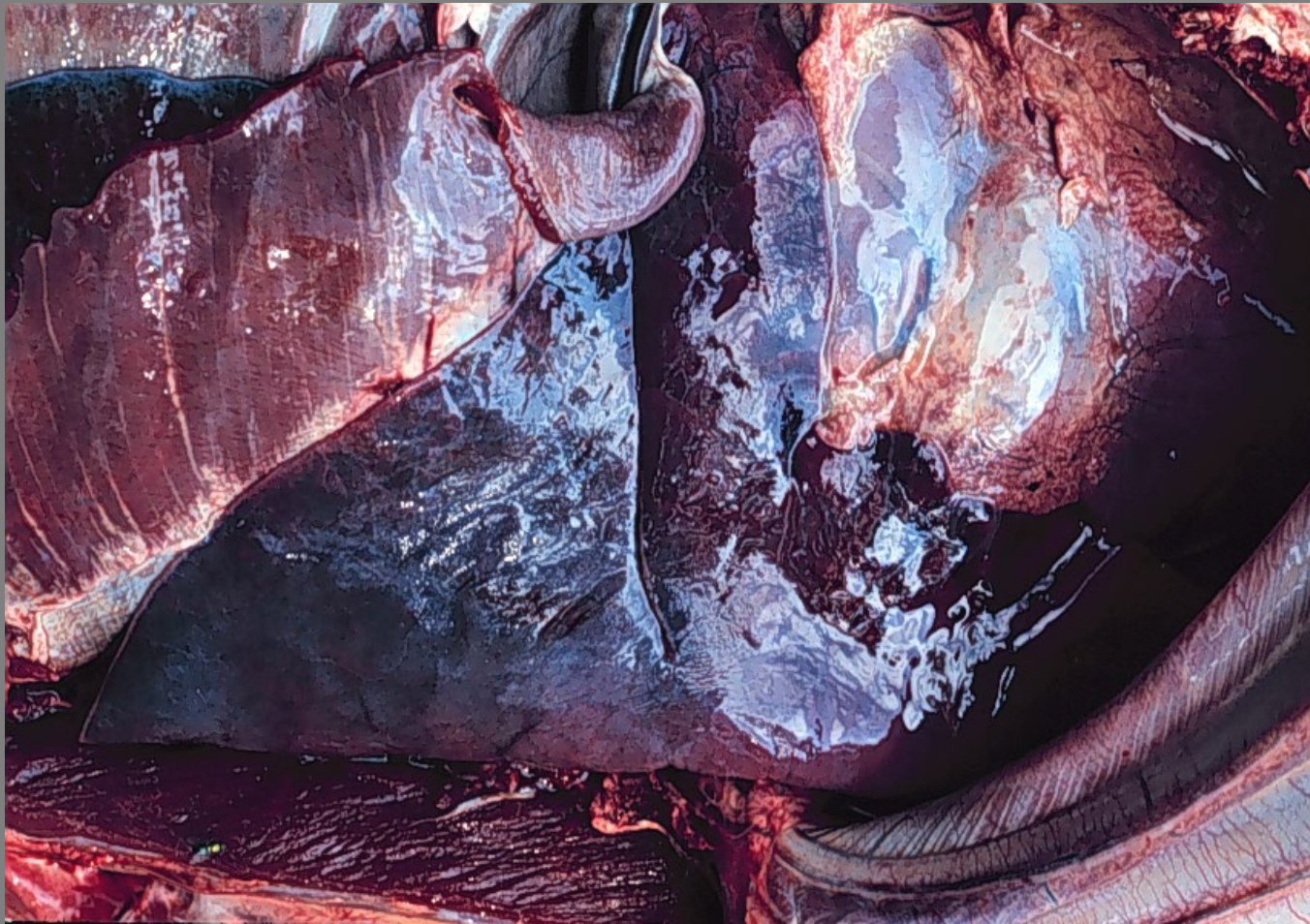
Peracute Form

- Rapid death in 1-3 days
- Weakness, appetite loss, high fever, difficulty breathing, swelling of the head, neck, tongue, and eyelids
- Some animals may be found dead with few clinical signs

Acute Form

- Infected deer live somewhat longer and develop “classic” hemorrhagic symptoms
- Hemorrhage or congestion in tongue, eyelids, multiple internal organs
- Ulcerations of the tongue, dental plate, and stomach

Congested Lungs



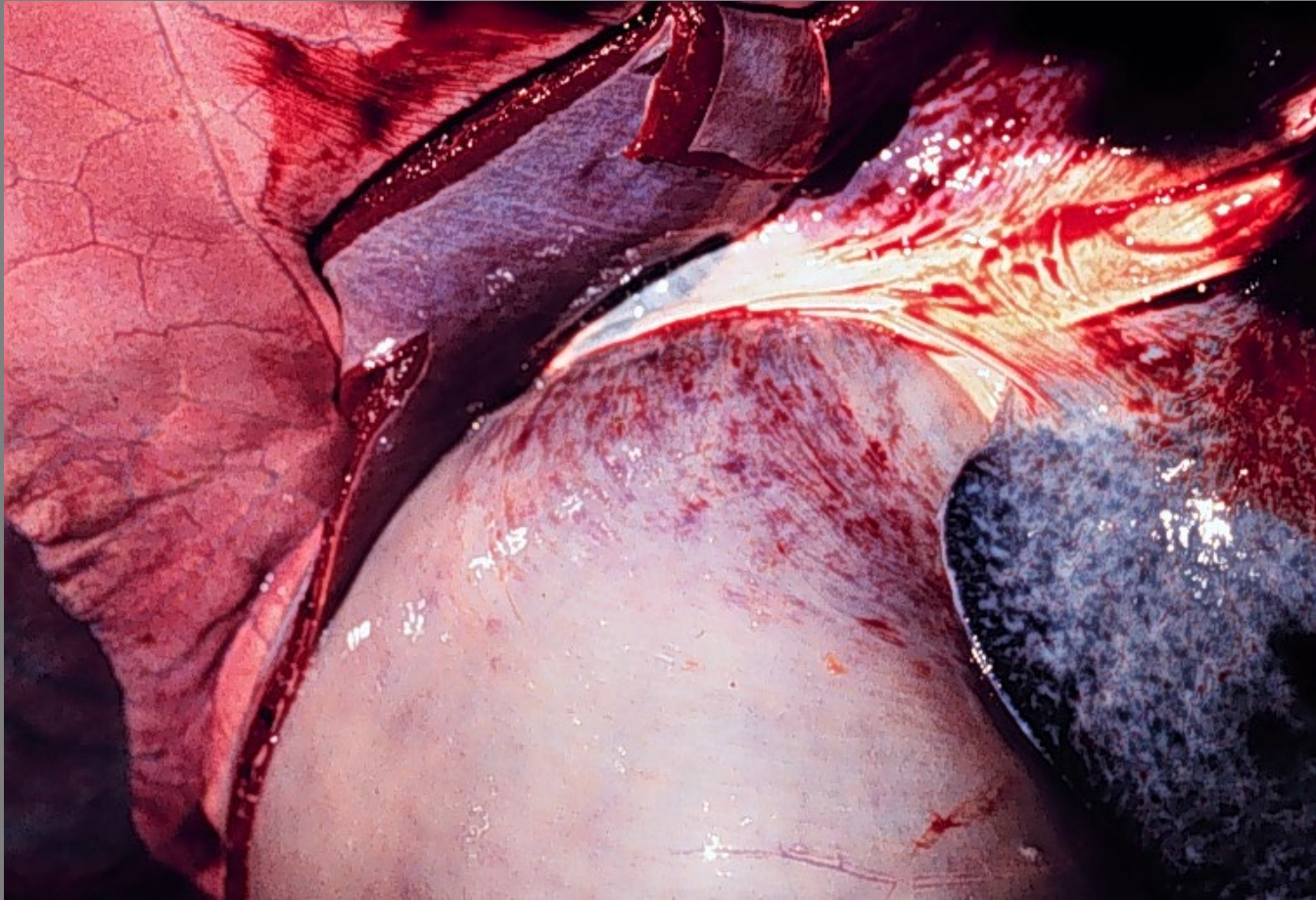
Nasal Hemorrhage



Hemorrhage in the Eyelid



Hemorrhage in the Rumen



Other Common Signs of EHD

- Deer develop a high fever and are often found dead near water
- Salivate excessively
- Lose fear of people
- Clinical signs can be highly variable

Chronic Form

- A small percentage of deer may survive the initial infection
- These deer may be seen in late fall and winter with emaciation and sloughing or peeling of the hooves

Hoof Lesions

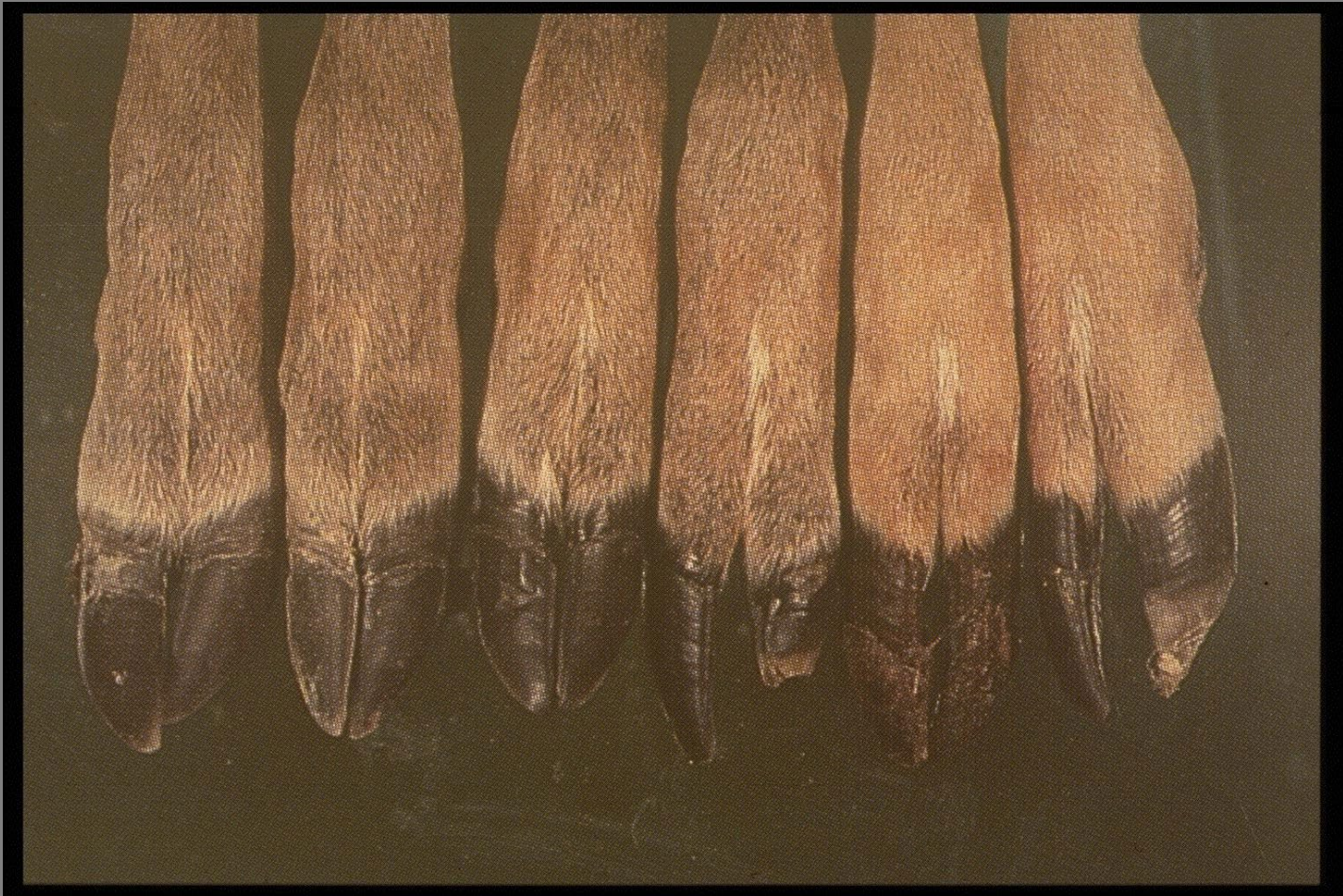


Photo by the Southeastern Cooperative Wildlife Disease Study

Population Impacts of EHD

- Mortality is variable but can be severe (>50%) in localized areas
- Long term population declines as a result of EHD have not been reported

Questions?

