

What do these diseases have in common?

- West Nile Virus
- Hantavirus Pulmonary Syndrome
- Plague
- Rabies
- Club Lamb Fungus
- Ringworm
- Toxoplasmosis
- Rocky Mountain Spotted Fever
- Tapeworm
- Brucellosis
- Bovine tuberculosis
- Trichinosis
- Salmonella
- Leptospirosis

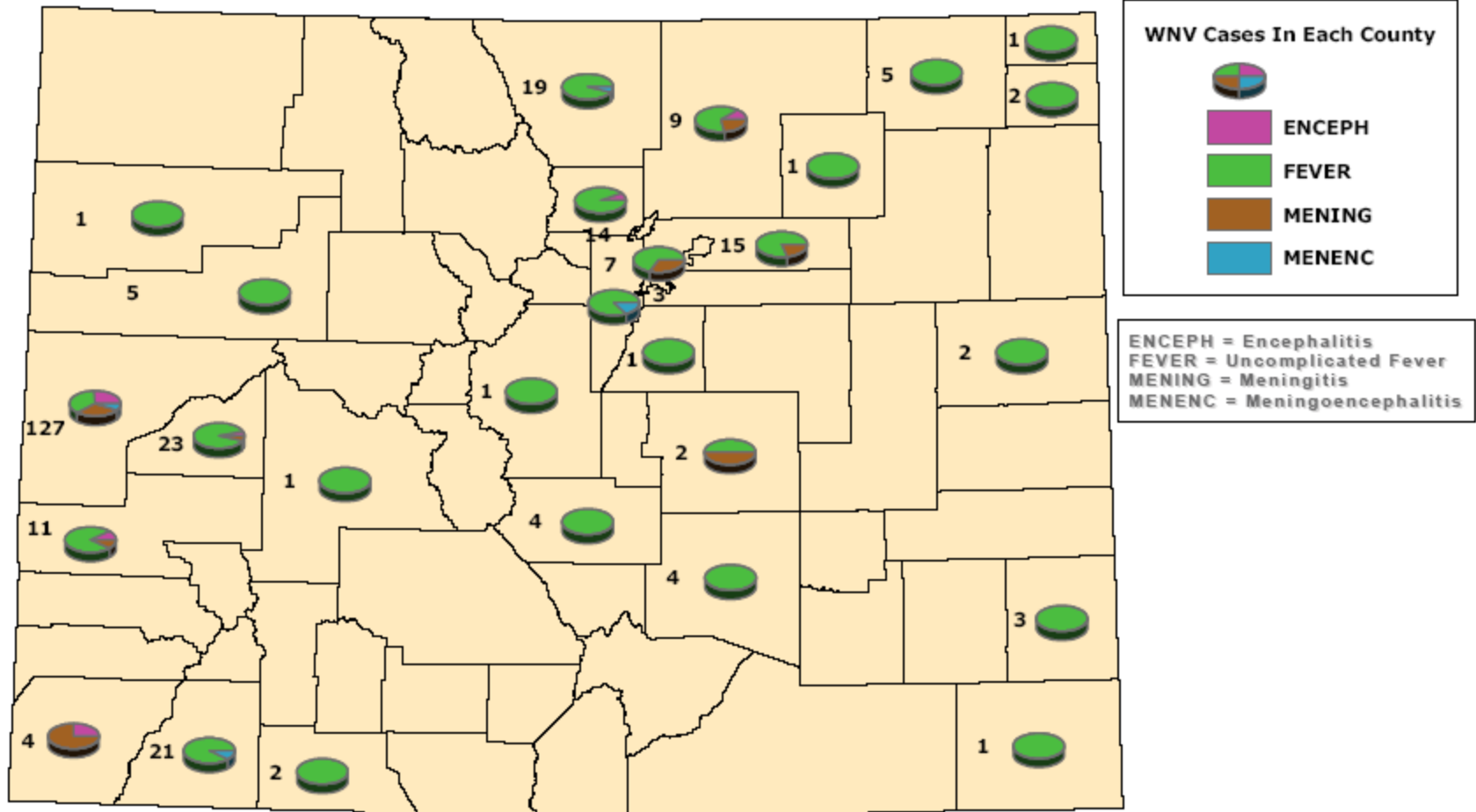
Zoonosis

Diseases shared (transmissible) from animals to humans.

West Nile Virus Information



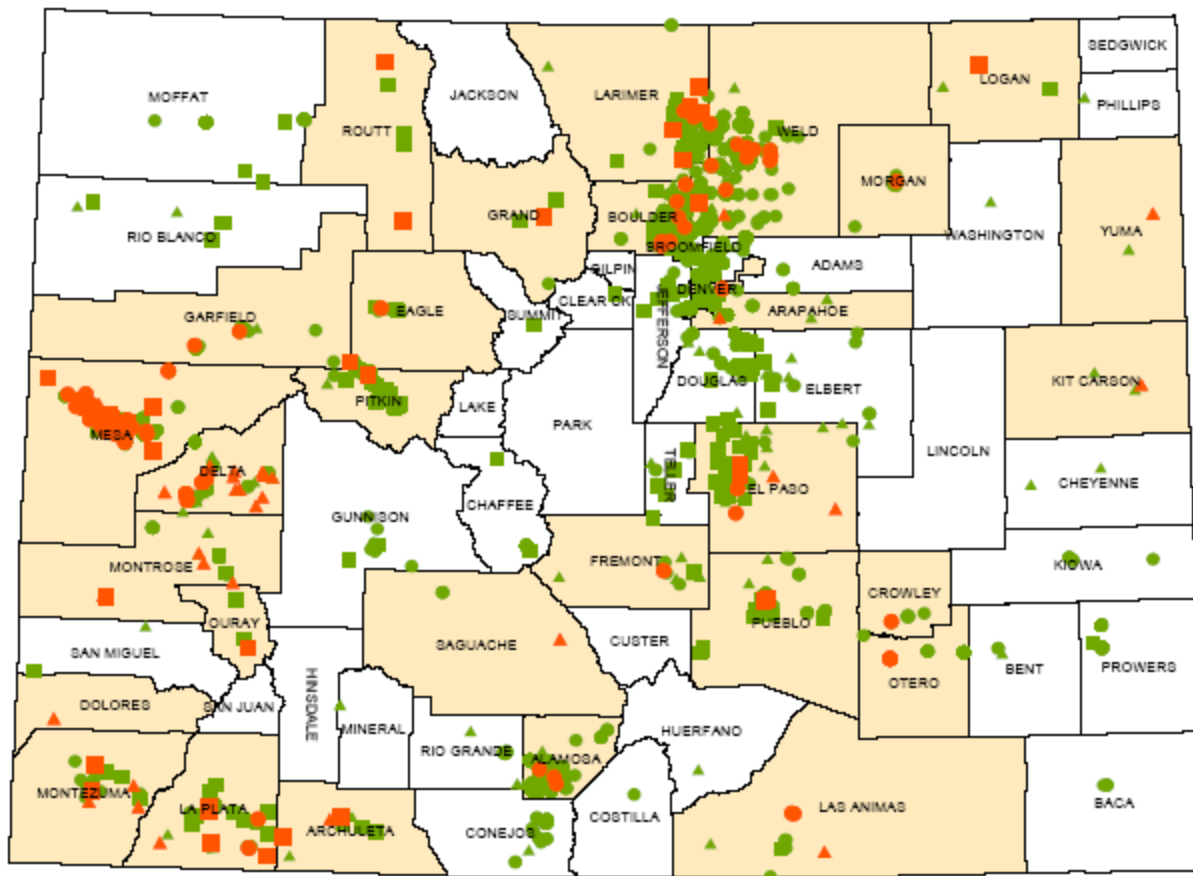
Colorado West Nile Virus 2004 Human Cases Within Each County



N = 289

2004 Colorado West Nile Virus

November 22, 2004
Animal Surveillance



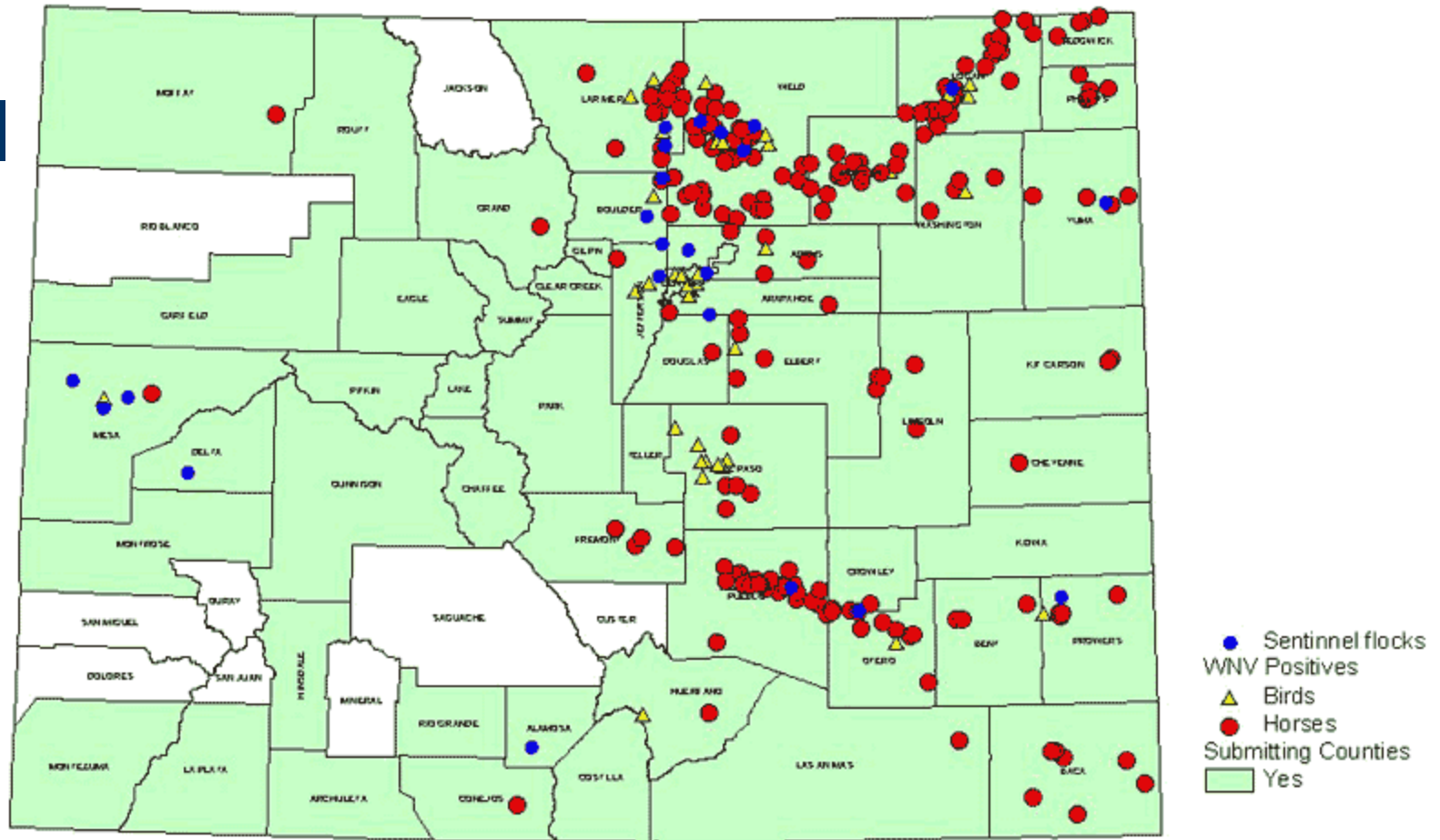
Legend

- Positive Bird
- Positive Horse
- Positive Mosquito
- Negative Bird
- Negative Horse
- Negative Mosquito
- Positive tests



Colorado Department
of Public Health
and Environment

Colorado West Nile Virus Surveillance Final Map - December 2002



West Nile Prevention

Mosquito-Borne Virus Prevention and Control

To decrease exposure to mosquitoes and the viruses they may carry:

- Limit outside activity around dawn and dusk when *Culex tarsalis* mosquitoes feed. This is particularly important for elderly adults and small children.
- Wear protective clothing such as lightweight long pants and long sleeve shirts when outside.
- Apply insect repellent to exposed skin when outside. Repellents with DEET are effective, but should be applied sparingly.

West Nile Prevention

- Products with 10% or less of DEET are recommended for children. Make sure that doors and windows have tight-fitting screens. Repair or replace screens that have tears or holes in them.
- Drain all standing water on private property, no matter how small an amount.
- Stock permanent ponds or fountains with fish that eat mosquito larvae. Change water in birdbaths or wading pools and empty flowerpot saucers of standing water at least once a week.

West Nile Prevention

- Check around faucets and air conditioner units and repair leaks or puddles that remain for several days.
- Make sure roof gutters drain properly and remove any standing water under or around structures or on flat roofs.
- Remove items that could collect water such as old tires, buckets, empty cans, and food and beverage containers.
- Eliminate seepage and standing water from cisterns, cesspools, septic tanks, and animal watering tanks.
- Do not over-water lawns and gardens to prevent standing water

Hantavirus Prevention

- By getting rid of rodents in and around the home
- Rodent-Proof House, Shop and Barn
- Best long-term solution! Even if the structure can't be completely rodent-proofed, the number of rodents entering a structure can be reduced
- Seal holes & cracks 1/4th inch or larger with steel wool, metal sheeting, hardware cloth, or patching plaster
- Insure weather seals under doors are tight & screens are in good repair
- Eliminate Food Sources: More food = More mice!
- Food attracts mice, and food supply affects mouse populations
- Store pet food, feed and bird seed in metal containers

Hantavirus Prevention

- Feed animals only as much as they will consume at one time
- Feed only in daytime, and remove food and water at night
- Clean up spilled feed and seed
- Keep garbage in containers with tight lids
- Clean dishes and sweep floor daily
- DO NOT FEED RODENTS
- Limit Possible Nesting Sites
- Rodents like hiding spots. They avoid open areas where they are more vulnerable to predation
- Remove rodent hiding places: clutter, junk, brush & wood piles, abandoned vehicles, and construction materials
- Store hay, woodpiles and equipment 100 feet from buildings
- Keep grass and vegetation trimmed low within 100 feet of buildings

Hantavirus Prevention

- Store firewood up off the ground to prevent burrowing underneath
- Practice Continuous Rodent Control
- Trapping and poisoning are more effective if above steps are taken
- Apply flea powder to rodent burrows, nests, and hiding places to kill fleas which may transmit plague
- Indoors: use snap traps - allows for easy carcass removal
- Outdoors: use snap traps, multicatch traps, or poisons
- Spray carcasses with disinfectant solution & let soak for 10 minutes
- Use rubber gloves when handling rodent carcasses

Hantavirus Prevention

- Place carcass in bag and deposit in outdoor trash
- Encourage natural predators (hawks, owls, foxes, non-poisonous snakes, etc.) which consume large numbers of rodents

Hantavirus Prevention

- If rodents are present in the home, eliminate them by using "snap-traps" baited with a peanut butter/oatmeal mix. Trapping success will be increased if food sources have been eliminated and entrances to the building sealed to keep new mice from moving in. Continue trapping efforts as long as rodent presence is suspected in the home.
- 1. Use a solution of household bleach (one cup bleach per gallon of water) to disinfect rodents carcasses before handling. Spray the rodent and trap and allow to sit for 5-10 minutes. Wear rubber gloves when handling trapped rodents. Disinfect the gloves and the trap afterward.

Hantavirus Prevention

- 2. Air out rodent infested buildings or areas at least 30 minutes before cleaning. Do not sweep or dry vacuum rodent contaminated surfaces which may stir up the dust and allow potentially contaminated dust to be breathed in. Spray contaminated materials with the bleach solution and allow it to soak in 5-10 minutes before cleaning them with a mop, sponge or wet (shop) vacuum. Wear gloves.
- 3. In heavily rodent infested areas or situations where ventilation and/or wet clean-up can not be effectively done, use a face mask with a high efficiency particulate air (HEPA) filter.
- 4. When camping or sleeping outdoors, avoid disturbing or sleeping near rodent droppings and/or burrows. Sleep in tents with floors, above ground or on a ground cloth, not directly on the ground.

Deer Mouse

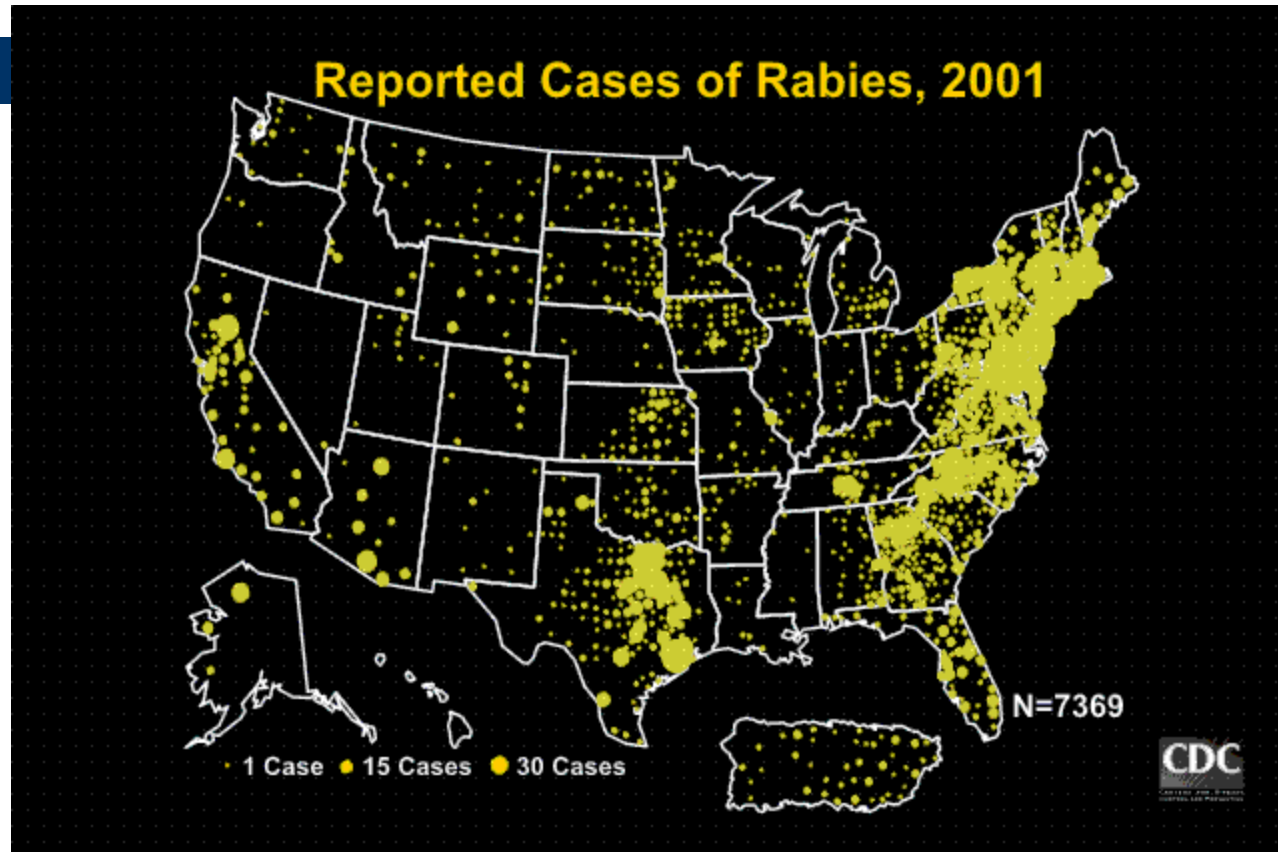


Peromyscus Maniculatus
Reservoir for Sin Nombre Virus

Rabies

- If you are bitten by an animal, please contact your medical provider or local health department to determine the potential for rabies exposure, the need for treatment, and to decide whether or not to test the animal for rabies.

Rabies



Rocky Mountain Tick



How is Rocky Mountain Spotted Fever Diagnosed?

- It is important to notify a physician if you become ill after an exposure to ticks. A diagnosis of Rocky Mountain spotted fever will be based on clinical signs and symptoms and is confirmed by positive laboratory test results.

For Ringworm

- **Use Good Personal Hygiene**
- **Wash your hands after animal contact and before you leave the laboratory or animal facility. Wash your hands after using the restroom.**
- **Do not eat, drink, use tobacco products, take or apply medicine, store human food, handle contact lenses or apply cosmetics in animal facilities and laboratories. Wash your hands before engaging in these activities. Mouth pipetting is prohibited.**

Ringworm



Salmonella

What can I do to prevent salmonellosis?

- Cook poultry, ground beef, and eggs thoroughly before eating.
- Do not eat or drink foods containing raw eggs, or raw unpasteurized milk.
- If you are served undercooked meat, poultry or eggs in a restaurant, don't hesitate to send it back to the kitchen for further cooking.
- Wash hands, kitchen work surfaces, and utensils with soap and water immediately after they have been in contact with raw meat or poultry.

Salmonella

- Be particularly careful with foods prepared for infants, the elderly, and the immuno-compromised.
- Wash hands with soap after handling reptiles or birds, or after contact with pet feces.
- Avoid direct or even indirect contact between reptiles (turtles, iguanas, other lizards, snakes) and infants or immunocompromised persons.
- Don't work with raw poultry or meat, and an infant (e.g., feed, change diaper) at the same time.
- Mother's milk is the safest food for young infants. Breast-feeding prevents salmonellosis and many other health problems.

Leptospirosis

- **Can leptospirosis be prevented?**

The risk of acquiring leptospirosis can be greatly reduced by not swimming or wading in water that might be contaminated with animal urine.

Protective clothing or footwear should be worn by those exposed to contaminated water or soil because of their job or recreational activities.

Club Lamb Fungus



West Nile Virus



Hantavirus Pulmonary Syndrome



Rabies



Club Lamb Fungus



Ringworm



Toxoplasmosis



Rocky Mountain Spotted Fever



Tapeworm



Brucellosis

The image features a solid green background. On the left side, there is a white rounded rectangular shape. The word "Brucellosis" is written in a bold, dark blue font within this white shape. Below the white shape, a thick, dark blue horizontal bar extends across the width of the page.

Bovine tuberculosis



Salmonella



Leptospirosis



Clues to reconsider

