While there are many microorganisms present in our environment, some can be of special concern based on their ability to spread rapidly or cause severe disease; some can be new or “emerging” threats. Fortunately most can be avoided by understanding the risks and taking basic preventive measures.

**Emerging & Zoonotic Diseases**

- **Emerging diseases**
  - Diseases that are newly discovered, have increased in occurrence or have spread to new locations or species.
  - Examples include: West Nile virus, Lyme disease.

- **Zoonotic diseases**
  - Diseases of animals that can be transferred to people.
  - Many of the recent emerging diseases of humans are also considered zoonotic diseases.
  - Examples include: rabies, ringworm, salmonellosis.

**Hand washing and Hygiene**

Hand washing is one of the most effective ways to prevent the spread of disease.

- **Wash your hands often.**
  - Use soap and warm water for at least 20 seconds.
  - Antimicrobial hand gels can be effective when hands are not visibly dirty.
  - Teach children about proper hand washing.
  - Wash hands before preparing food or eating.
  - Wash hands after contacting pets or other animals, cleaning pet waste or cages, using the restroom, and coughing or blowing your nose.

**Personal Protection While Outdoors**

Insects and wildlife can serve as sources for some emerging and zoonotic diseases.

- **Take precautions when going outdoors.**
  - Avoid contact with wild animals or waterfowl.
  - Avoid insect bites while outdoors.
    - Avoid being outside during the peak activity times (e.g., dusk and dawn for mosquitoes).
    - Wear insect repellent containing DEET.

- **Remove insect breeding areas around your home.**
  - Stagnant water sources are mosquito breeding grounds.
  - Tall vegetation can harbor ticks.
  - Animal feces attracts flies and other insects.

- **Rodent-proof your home.**
  - Keep pet food in containers with tight lids.

**Food Safety**

- **Handle and prepare foods safely.**
  - Don’t eat raw or undercooked meat or eggs.
  - Cook foods thoroughly until the internal temperature is 160°F.
  - Wash fruits and vegetables before eating.
  - Avoid raw milk or unpasteurized dairy products.
  - Store foods at the proper temperature.
  - Avoid cross contamination by using separate cutting boards and knives for meat items, and fruits and vegetables.

**Children and Animals**

Children, especially those under 5 years of age and persons with weakened immune systems can be at greater risk for diseases, including zoonotic diseases.

- Children under five years old should never be left unsupervised with animals.
- Teach children to avoid rough play with pets, to avoid being bitten.
- Monitor children’s contact with animals. Don’t let children put their hands or other objects into their mouths after playing with pets.
- Don’t allow children to kiss pets or allow pets to lick the children’s face.
- Be sure children wash their hands after contact with animals and pet food or treats.

**Pet Health**

Maintaining good health in your pets, not only keeps them healthy, but reduces the risk for zoonotic diseases to you and your family.

- Have your pet checked at least twice a year by a veterinarian.
- Keep your pets’ vaccinations current.
- Check your pet regularly for parasites.
- Use recommended flea and tick prevention products.
- Do not allow pets to interact with wildlife.
- Do not allow your pet to eat other animals’ feces.
- Do not feed raw or undercooked meat to your pets.

*For more information and resources, see [www.Prep4AgThreats.org](http://www.Prep4AgThreats.org)*