- 1. **Patient factors**: Most infectious diseases are more prevalent in kittens and puppies, particularly those under 6 months of age.
- Maternally derived antibodies (MDA): The level of maternal/mother protection varies among individuals, so that the age at which a kitten/puppy may be able to fully respond to vaccination will also vary.
- 3. **Aging pets**: As pets age, immunosenescence occurs, which blunts previously established immunity. As a result, even though a pet may have been well vaccinated at an earlier age, vaccination should not be allowed to lapse in this age group.
- 4. **The environment**: Risk of exposure to infectious diseases include population density; opportunity for exposure to other pets; multiple-pet households; pets admitted to boarding, grooming ,training facilities; and pets with access to the outdoors are likely to have a higher risk of infection . However, 'indoor" cats and dogs are not without risk of exposure.
- 5. **Location**: Infectious diseases vary in geographic distribution, resulting in substantially different risks of exposure for pets living in different areas. Determining risk for infectious disease also includes plans for future travel away from home.
- 6. **The infectious agent**: Variables associated with the infectious agent itself, such as virulence, strain variation, challenge dose, and environmental stability, will influence the outcome of infection; these may be difficult to assess.
- 7. **Government regulations**: Rabies vaccination is required by law for dogs in Michigan.