

Development of an infection is dependant upon an uninterrupted process, referred to as – chain of infection. This process is dependant upon the following elements:

- Causative agent (pathogen)
- A reservoir for pathogen growth
- •A portal of exit from the reservoir
- A mode of transmission
- •A portal of entry to the host
- A susceptible host

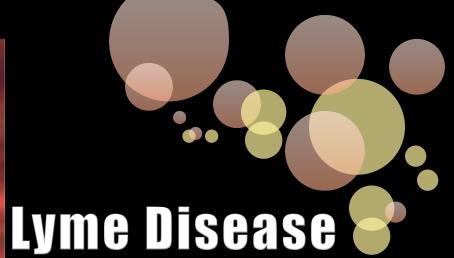
This chain of infection can be broken by infection control measures implemented by health care workers.



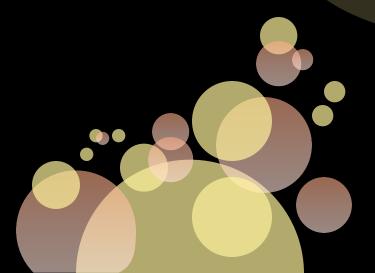
Welcome home! You have recently returned from a 12 day vacation and became ill. Your physician has diagnosed you with a particular type of disease.

- Using the chain of infection diagram, research your diagnosed disease and create a chain of infection for your disease.
- •Create a visual presentation (power point, prezi, poster, etc.) of your disease and chain of infection to share with class.
- •Include information about your disease in each "link" of the chain.





The Story of A Very Unlucky Traveler





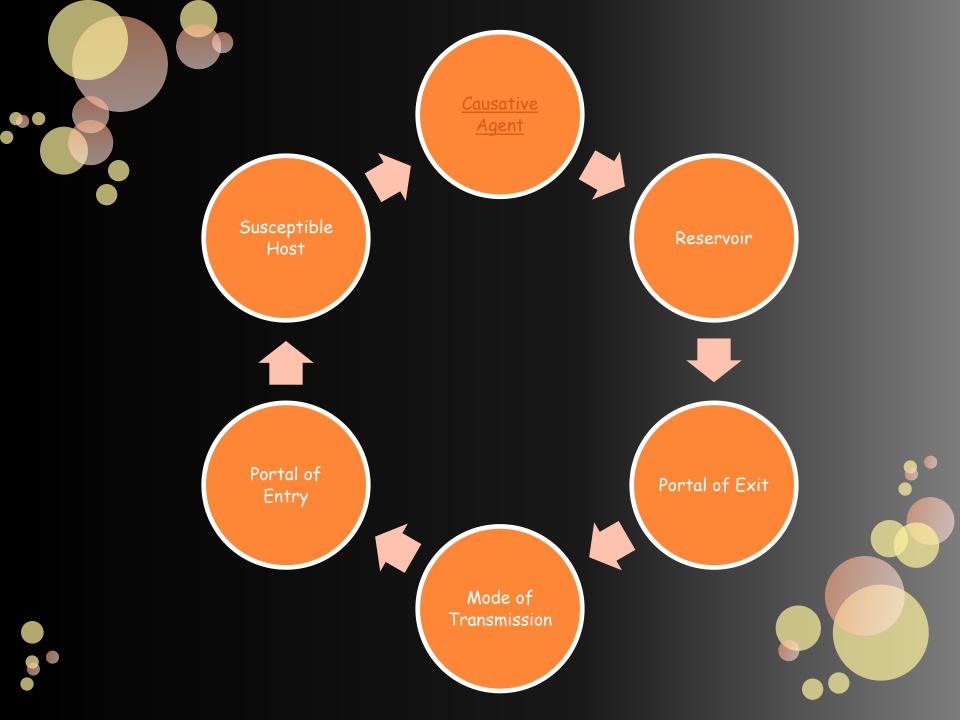
#### My Lovely Trip to Lyme, Connecticut

I decided to visit Lyme, Connecticut. I took a fabulous hike through the Oswegatchie Hills. The scenery was absolutely stunning. Looking back now, I realize that I should have been more cautious. After all, Lyme, Connecticut should have been an alarm.



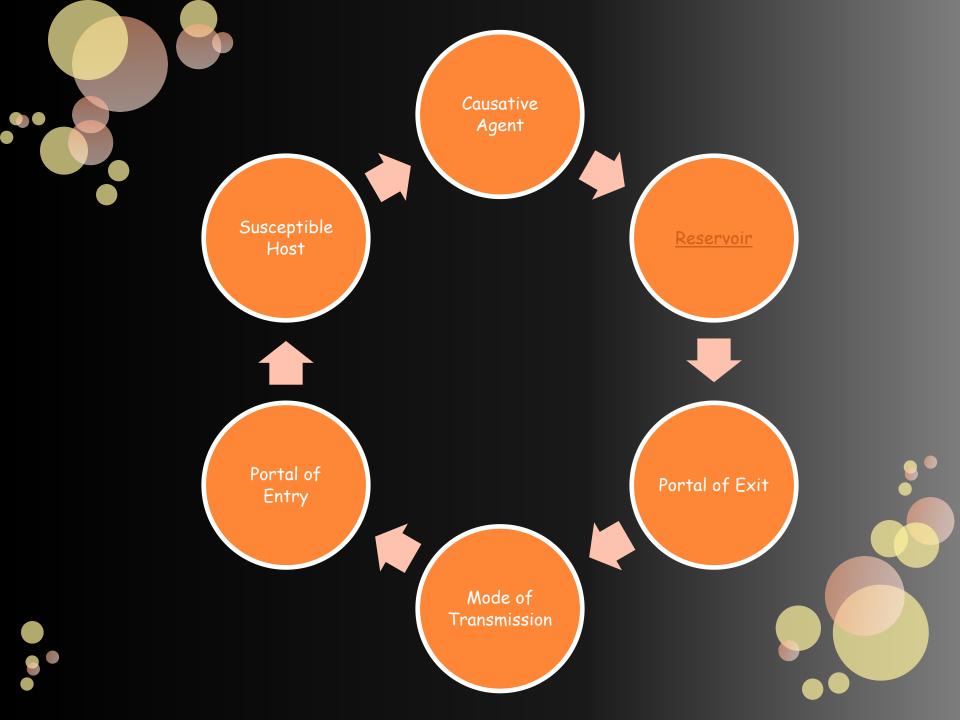
#### **About Lyme Disease**

 Lyme, Connecticut is the namesake for Lyme disease. Lyme disease is a tickborne disease. However, the ticks get the disease from animals such as mice and deer.



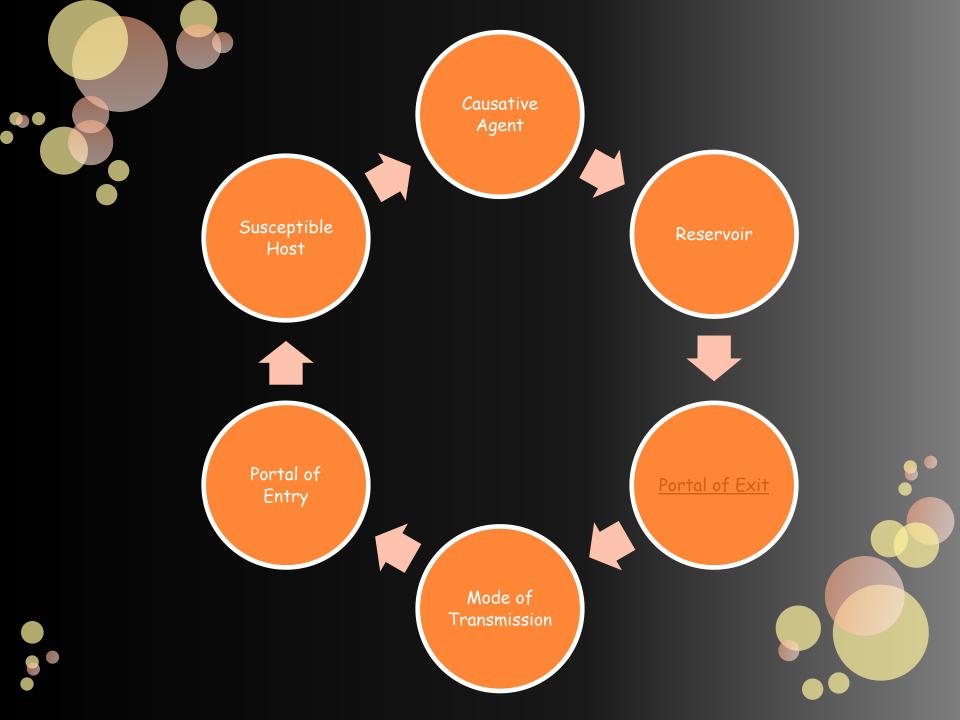
### Causative Agent

 The causative agent is Borrelia burgdorferi or better know as the deer tick.



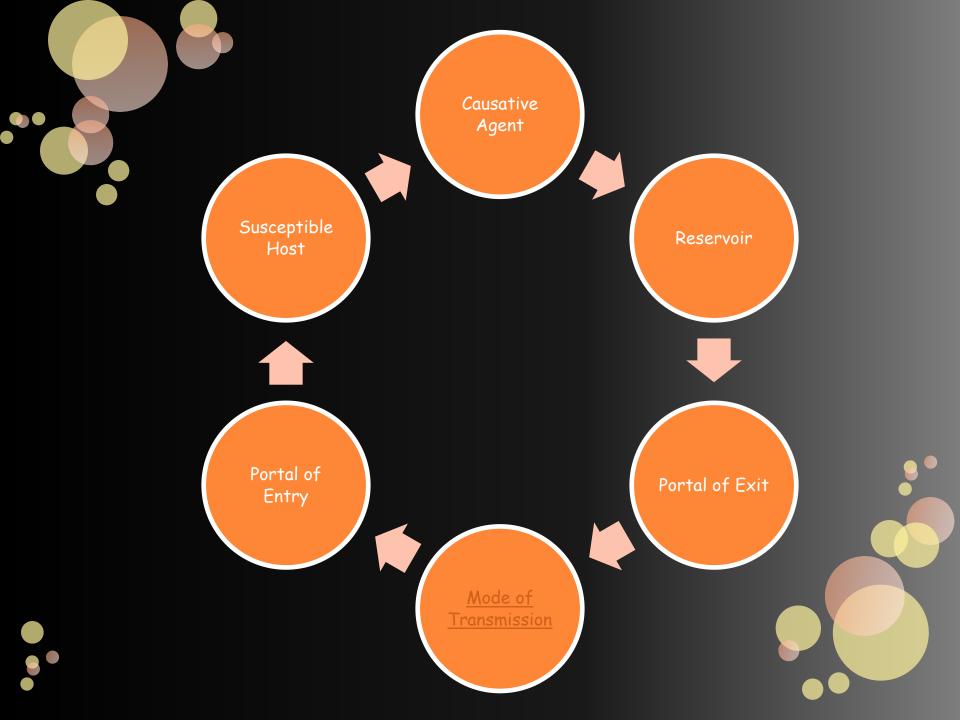


 Any one person or animal that is bitten can become a reservoir for the bacteria.
 No one is immune!

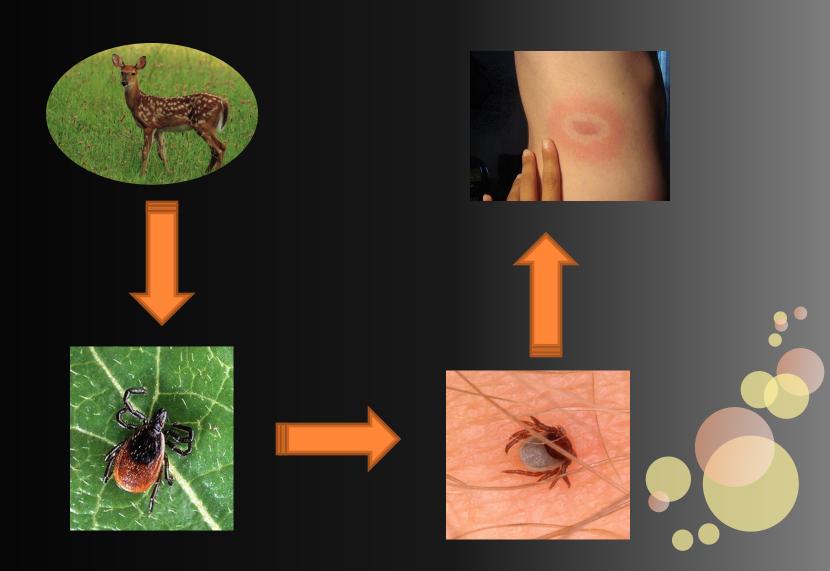


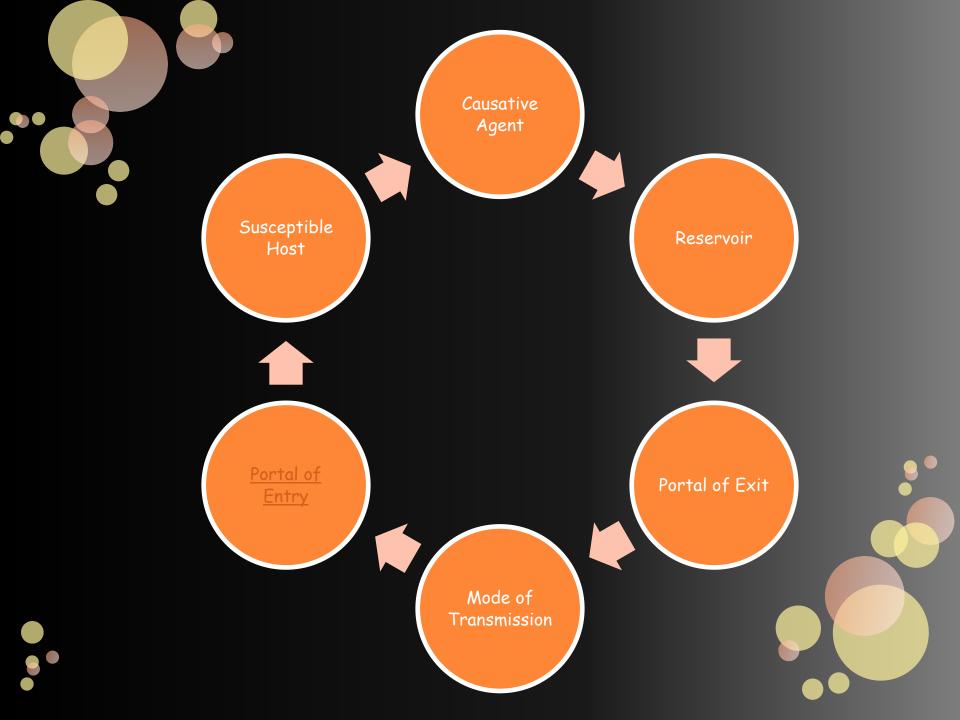


 There is no way for the bacteria to leave your body naturally. Strong antibiotics are always used.



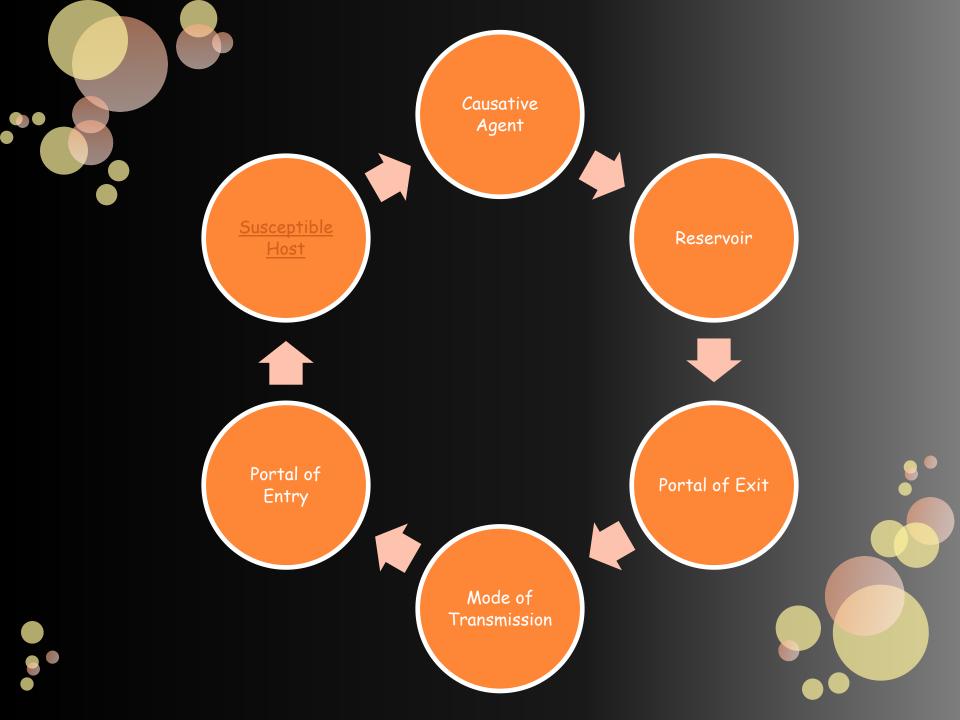
#### **Mode of Transmission**





## Portal of Entry

 A tick bites you. This is how it gets into your body.





• Any one is a susceptible host!!!!

# Sources

- "About Lyme." Lyme Disease Research Foundation of Maryland. Lyme Disease Research Foundation. Web. 14 Feb. 2011.
   <a href="http://www.lymemd.org/aboutlyme.html">http://www.lymemd.org/aboutlyme.html</a>
   .
- "Lyme Disease." KidsHealth the Web's Most Visited Site about Children's Health. Web. 15 Feb. 2011.
  <a href="http://kidshealth.org/teen/infections/skin\_rashes/lyme\_disease.html">http://kidshealth.org/teen/infections/skin\_rashes/lyme\_disease.html</a>.