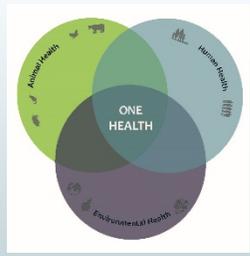


One Health

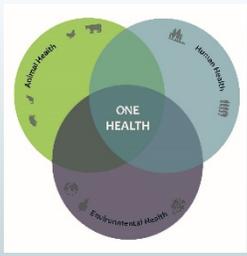
Connecting the Dots

...



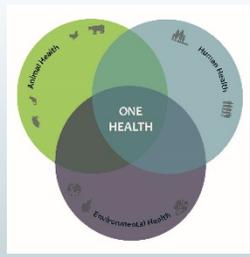
One Health: Connecting the Dots

- One Health – poll question: have attendees have heard of this concept? [yes, no]
- Exciting, but difficult to identify how to contribute in a meaningful way.



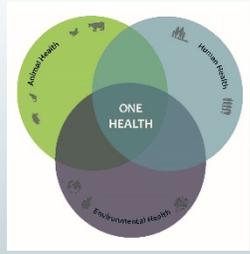
One Health: Connecting the Dots

- One Health is “...a movement to forge **co-equal**, all-inclusive collaborations between physicians, osteopathic physicians, veterinarians, dentists, nurses and other scientific-health and environmentally related disciplines” including ecologists, epidemiologists, microbiologists, public health professionals, etc.
- 2013 MLA in Boston: “One Health: Information in an Interdependent World”
- Interprofessional Education (IPE) – collaboration among diverse disciplines. IPE trained providers have more tools to solve health care problems.
- One Health, as envisioned by its founders back in 2008, might be thought of as the ultimate IPE, a global collaboration with the potential to truly improve health worldwide.



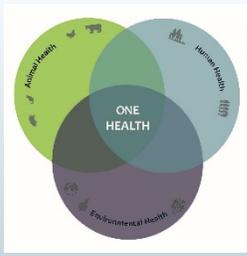
One Health: Connecting the Dots

- Why am I so passionate about One Health? Here's a trick question...
- What do health science libraries, animal rescue, therapy dogs, and zoos have in common? [chat box]



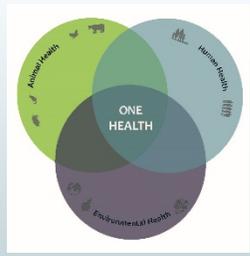
One Health: Connecting the Dots

- Short answer, at least in Buffalo: I'm involved in all four arenas that have somehow happily collided.
- The intersection of these seeming disparate fields actually took place over the last ten years or so:
 - Many years of cat rescue led to my doing research for my own vet
 - Being a Zoo Docent led to doing research for the Zoo vet
 - Connections with UB Anthropology (my undergrad degree) led to adjunct faculty appointment for our then Zoo President to access library resources
 - Having a therapy dog and planning for stress relief events for students led to the introduction and subsequent proliferation of therapy dogs on campus



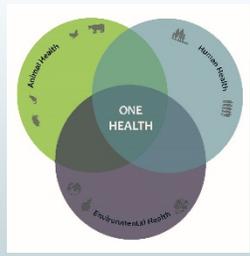
One Health: Connecting the Dots

- Being a part of each of these fields I am familiar with their unique terminology
- Understanding different fields of practice gives a wider view: e.g. treatments developed for animals may be applied to humans and vice versa
- Collaboration and formal/informal IPE – synergy and discovery



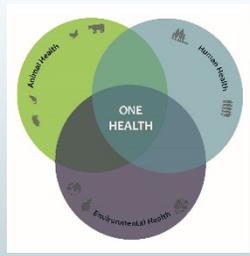
One Health: Connecting the Dots

- Human-animal connections
 - At least as old as first emergence of Homo sapiens
 - Animal Assisted Activities (prescribed therapeutic use of animals)
 - 800 AD physically disabled cared for farm animals as therapy
 - 1860 Florence Nightingale advocated for small pets for chronic invalids
 - 1933 Sigmund Freud used one of his Chows in therapy sessions
 - Major policy changes in Red Cross procedures altered when people refused to leave pets behind after Hurricane Katrina
 - Therapy animals now widespread from hospitals to senior residence to schools, universities and offices



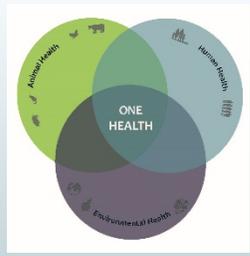
One Health: Connecting the Dots

- Health of people directly connected to and dependent on the health of animals
 - Raising of cattle, sheep, pigs, chickens, and other animals
 - Drugs tested on animals first
 - Veterinarians key players
 - Vaccinations
 - Zoonotic diseases
 - Proper administration of antibiotics
 - Use of alternatives – e.g. oregano in water (Perdue advertisement)



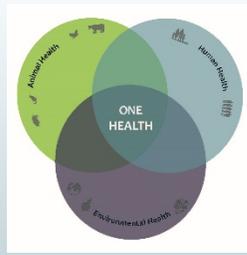
One Health: Connecting the Dots

- Health of people directly connected to and dependent on the health of the environment and its ecosystems
 - Agricultural and manufacturing practices
 - Animal waste and chemical contamination
 - Most food-borne disease traced to manure contamination
 - Emerging vectors of disease due to habitat loss by humans



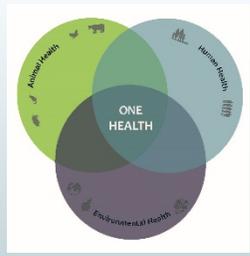
One Health: Connecting the Dots

- Poll question:
- What percent of human disease arises from animal reservoirs?
 - 20%
 - 30%
 - 70%
 - 90%



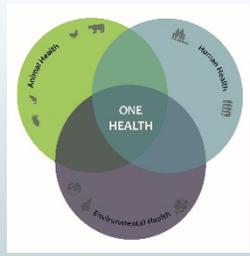
One Health: Connecting the Dots

- Nature affects emotional human health
 - Nature-deficit disorder first identified in “Last Child in the Woods” by Louv (2008)
 - Humans innate need to connect with other living things –E.O. Wilson’s “Biophilia” (1984)
- Antibiotics and Resistance key theme
 - Unregulated in many countries – available OTC
 - Less focus on developing new antibiotics so resistance mounts
 - No system yet in place to track globally
 - Modern medicines becoming obsolete
 - Overprescribing and patients not taking properly
 - Unnecessary use in agriculture
 - Poor infection control and poor hygiene



One Health: Connecting the Dots

- Exhibit at the Health Sciences Library, University at Buffalo is at <https://library.buffalo.edu/PDFs/onehealth.pdf> (also linked from our Exhibits page <https://library.buffalo.edu/exhibitions/>)
- Major focus: antibiotic resistance and the Microbiome
- Microbiome extends to plants as well (2017 article by Posey)



One Health: Connecting the Dots

- VERY exciting article just appeared yesterday in Medscape: “Harvard Zoo Experiment: animals Educating Future Doctors” – Harvard medical students rotating through the Franklin Park Zoo treating animals
- Cultural competence applies in non-human arenas as well
- Librarians can facilitate through collection development, research, LibGuides, events, data management and recognizing possible connections