

16.3: One Health

One Health

One Health is a worldwide concept and strategy recognizing that the health of people, animals, and the environment are all connected. For example, the Centers for Disease Control and Prevention (CDC) works with physicians, veterinarians, ecologists, and many others to monitor and control public health threats and to learn about how diseases spread among people, animals, and the environment.

Link Between Human, Animal, and Environmental Health

One Health is important at the local, regional, national, and global levels, and there are many examples of its importance. One example of how human, animal, and environmental health are linked involves bacteria, cows, farms, food, lettuce, and humans:

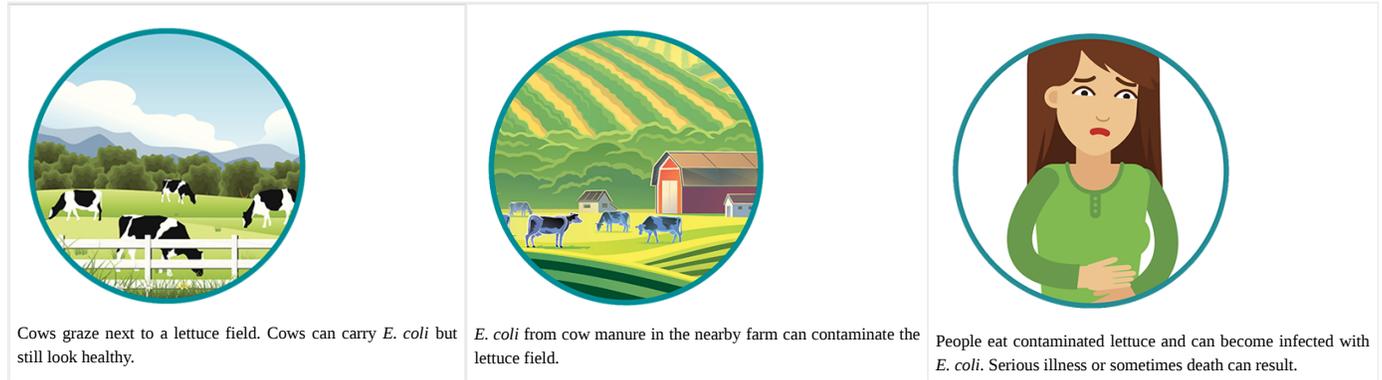


Figure 16.3.1 Human, animal, and environmental health are linked
(Image Source: CDC - [original image](#))

Another example of One Health involving animals and humans is the shared susceptibility to some diseases and environmental hazards. Animals can serve as early warning signs of potential human illness. An example is birds dying from West Nile virus before people in the same areas get sick from exposures to this virus.

Factors that Affect Human and Animal Health

Some interactions between people, animals, and the environment have changed in recent years and these changes have impacted animal and human health.

Factor (Cause)	Change (Effect)
Human populations are growing and expanding into new geographic areas.	More people live in close contact with wild and domestic animals. Close contact provides more opportunities for diseases to pass between animals and people.
The earth has experienced changes in climate and land use, such as deforestation and intensive farming practices.	Disruptions in environmental conditions and habitats provide new opportunities for diseases to pass to animals.
International travel and trade have increased.	Diseases can spread quickly across the globe.

Table 16.3.1 Factors that affect human and animal health
(Source: [CDC: One Health Basics](#))

Learn more about One Health

- U.S. CDC: "One Health: From Concept to Action" - <https://youtu.be/TG0pduAYESA>
- U.S. CDC: "One Health Basics" - <https://www.cdc.gov/onehealth/basics/index.html>
- World Organization for Animal Health (OIE): "One Health: By Protecting Animals, We Preserve Our Future [PDF]" - http://www.oie.int/fileadmin/Home/eng/Media_Center/img/Infographies/A4-EN-WEB.pdf
- U.S. FDA: "One Health: It's for All of Us" - <https://www.fda.gov/AnimalVeterinary/ResourcesforYou/AnimalHealthLiteracy/ucm278139.htm>

Knowledge Check

1) One Health is a concept and strategy recognizing that the health of _____, _____, and _____ are all connected.

- People, plants, the environment
- People, animals, the environment
- People, animals, microbes

Answer

People, animals, the environment - **This is the correct answer.**

One Health is a concept and strategy recognizing that the health of people, animals, and the environment are all connected.

2) Which of the following factors that affect human and animal health is not correct?

- Fewer people in recent years live in close contact with wild and domestic animals

- b) Disruptions in environmental conditions and habitats provide new opportunities for diseases to pass to animals
- c) International travel and trade have increased, and diseases can spread quickly across the globe

Answer

Fewer people in recent years live in close contact with wild and domestic animals - **This is the correct answer.**
The statement "Fewer people in recent years live in close contact with wild and domestic animals" is incorrect.

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