A Complex Web: Everything is Connected Healthcare Facilities

Antibiotic-resistant germs, including new and emerging resistance, can spread within and between healthcare facilities. These germs can cause infections in patients, called healthcare-associated infections (HAIs), and can spread to the community or environment (soil, water).





U.S. Department of Health and Human Services Centers for Disease Control and Prevention

- Antibiotics save lives. However, any time antibiotics are used, the drugs can cause side effects and contribute to the development of antibiotic resistance.
- Germs can survive in plumbing (e.g., sink drains, toilets). The germs can splash back onto people, or move to wastewater treatment plants.
- Without appropriate infection control actions, germs can spread to people from other people on surfaces like bedrails or the hands of healthcare workers.
- Procedures and medical devices (e.g., catheters) help treat patients, but can be pathways for germs to enter the body and cause infections.
- Germs can move with patients when they are transferred from one healthcare facility to another, or go home.
- Germs can cause infections in the community when healthcare settings do not stop their spread.
- Human waste (poop) can carry traces of previously consumed antibiotics and antibiotic-resistant germs. Waste goes to treatment plants and is released as treated waste water. This can contribute to antibiotic resistance in the environment, including contaminating lakes and streams.