

E. coli in Recreational Waters



Lakes and ponds can become contaminated with coliform bacteria, including *E. coli*, from both point and non-point sources. Sewage discharges are one example of a point source contamination. Urban and agricultural runoff, septic systems, wildlife waste, and pet fecal matter are all examples of non-point sources. Fecal matter on beaches can be washed into the water by waves[2]. Bodies of water not secured from wild animals are at a higher risk of contamination.

Before coming in contact with water in a lake or pond, check for posted warnings. In addition, call the local health department or check the Utah Department of Environmental Quality website for recreation restrictions.



Health Impacts

Unintentional ingestion of contaminated water due to prolonged exposure can cause gastrointestinal illness, varying in severity. Common symptoms include diarrhea, fever, nausea, vomiting, and cramps. More severe cases can include a high fever and bloody stools resulting in hospitalization [1].

Outbreak Prevention

The best way to prevent *E. coli* outbreaks is to eliminate the sources of contamination. As a recreator, be sure not to swim if sick, and be sure to change and properly dispose of soiled baby diapers. Do not rinse diapers in pond or lake water [1]. Pick up pet fecal matter, and respect the designated use for the body of water.

References

- [1] Craun, G. F., Calderon, R. L., & Craun, M. F. (2005). Outbreaks associated with recreational water in the United States. *International Journal of Environmental Health Research*, 15(4), 243–262. <https://doi.org/10.1080/09603120500155716>
- [2] Palmer, J. A., Law, J.-Y., & Soupier, M. L. (2020). Spatial and temporal distribution of *E. coli* contamination on three inland lake and recreational beach systems in the upper midwestern United States. *Science of the Total Environment*, 722, 137846. <https://doi.org/10.1016/j.scitotenv.2020.137846>

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