

## Impact of Microbial Pathogen on Aquatic Environment

**Authors :** Muhammad Younis Laghari

**Abstract :** Global climate change has had many effects on the aquatic environment, and the major issue is pollution. Along with the other pollutants, there are a significant number of human microbial pathogens that pollute the water bodies. Another concern about the water quality is that the major aquatic resources bring water-borne pathogens and other related diseases. These resources include industrial effluent, untreated domestic sewage, acid mine drainage, etc. However, these water discharges through various routes may have treatment to eliminate the pathogenic microbes. Therefore, it is essential to control the leakage from sewer systems, residential discharge, and agricultural run-off. These pathogenic microbes have been implicated in the lives of water health (fishes), which is harmful and causes diseases. Mostly, the mortality of aquatic species results because of catastrophic floods due to poor water waste treatment and sanitation that introduce pathogenic bacteria into rivers. Pathogens survive in rivers and remain poorly known but essential to control water-borne diseases. The presence of bacteria in watercourses is diverse and constitutes a complicated subject. Many species are autochthonous and play an important role in aquatic ecosystems, while many others arise from untreated or poorly treated waste from industrial and domestic sources. Further, more investigation is required to know the induction of water-borne pathogens in various water resources and the potential impacts of water resource development on pathogen contamination.

**Keywords :** microbial pathogens, contamination, water resources, river water body

**Conference Title :** ICFA 2024 : International Conference on Fisheries and Aquaculture

**Conference Location :** Tokyo, Japan

**Conference Dates :** March 18-19, 2024