

Appl Microbiol. 1973 Sep;26(3):391-3.

**Sensitivity of three selected bacterial species to ozone. Broadwater WT, Hoehn RC, King PH.**

THE MINIMAL LETHAL CONCENTRATION OF OZONE IN WATER WAS DETERMINED FOR THREE BACTERIAL SPECIES: *Escherichia coli*, *Bacillus cereus*, and *Bacillus megaterium*. A contact period of 5 min was selected. The lethal threshold concentration for the cells of *B. cereus* was 0.12 mg/liter while that for *E. coli* and *B. megaterium* was 0.19 mg/liter. Low concentrations of ozone were ineffective when organic matter was present to interfere with the action of ozone on the bacterial cells. Also determined during the study was the sensitivity of spores of *B. cereus* and *B. megaterium* to ozone in water. The threshold concentration required to kill the spores of both species was 2.29 mg/liter. The cells and spores of these organisms exhibited the "all-or-none" die-away phenomenon normally associated with ozone treatment.