

DEPARTMENT OF HEALTH EDUCATION, AND WELFARE
PUBLIC HEALTH SERVICE
NATIONAL INSTITUTES OF HEALTH

Refer to: PS, CPB-11
October 1969

Bell Laboratories Confirm Noncorrosivity
Of Optimally Fluoridated Water Supplies

This issuance is supplemental to CPB-5, "Fluoridated Water Does Not Cause Corrosion," issued in December 1968.

A company letter issued by the American Telephone and Telegraph Company in February 1969, concerning a corrosion problem in fire extinguishers may have come to your attention. Information subsequently supplied by the Company to the Division of Dental Health and to the American Telephone and Telegraph Plant Managers, after continued tests in the laboratory, shows that fluoride was not the cause of the reported corrosion problem, and that statements to that effect in the February letter were not technically accurate.

Excerpts from a letter furnished to the Division of Dental Health by the American Telephone and Telegraph Company, June 24, 1969, follow:

"In response to your letter of May 20, 1969, concerning the corrosion problem in stainless steel fire extinguishers, I requested the Bell Labs to look into this problem. . ."

"There is no evidence in the literature or in our experience that fluoride ions, at the concentrations found in fluoridated water, 1.5 ppm or less, either aggravate the corrosion of magnesium or inhibit its electrochemical dissolution and action as a sacrificial anode. . ."

"Similarly, there is no evidence that fluoride ions, at the concentrations found in fluoridated water, have any effect on the corrosion of stainless steel. . ."

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U.S. Department of Health, Education and Welfare
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Center for Disease Control
Bureau of State Services
Dental Disease Prevention Activity
Atlanta, Georgia 30333

Division of Dental Health
Community Programs Branch
8120 Woodmont Avenue
Bethesda, Maryland 20014