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Distribution of neoplasms and other diseases in marine fishes relative to the discharge of waste water

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ABSTRACT

The coastal waters off southern California have for many years served as a repository for much of the liquid waste generated by the area's human population. From these waters, many diseased and anomalous fishes have been collected. In the late 1950s and early 1960s, several investigators reported the capture of diseased fishes from areas of heavy waste discharge; they suggested that the diseases could be related to pollution. Since these observations, considerable progress has been made in documenting the occurrence of diseased fish populations, their relation to pollutant distributions, and their responses to changes in waste water treatment and disposal methods. This paper will review this progress. By examining the evenness of the disease distribution patterns and their consistency with time and comparing these factors to the distribution of contaminants, it is possible to set research priorities with respect to determining the contribution of waste discharges to diseases and to identify conditions likely to be affected by changes in discharge practices.