

Cancer Incidence Study Results

Evaluation of Cancer Incidence Among Marines and Navy Personnel and Civilian Workers Exposed to Contaminated Drinking Water at USMC Base Camp Lejeune: A Cohort Study

To read the study's findings, visit <https://www.medrxiv.org/content/10.1101/2024.01.27.24301873v1?ct=>. CDC/ATSDR has published this study on a preprint server. In addition to scientific review at CDC/ATSDR, the study has also been externally peer reviewed as part of standard manuscript preparation at CDC/ATSDR prior to its posting on a preprint server. The paper has also been submitted for publication in a peer-reviewed publication.

STUDY PURPOSE

The cancer incidence study of Camp Lejeune Marines and Navy personnel, as well as civilian workers, was designed to investigate whether exposure to contaminated water at Camp Lejeune increased cancer risk.

WHAT WAS STUDIED

Cancer incidence among Marines and Navy personnel, as well as civilian workers, who were stationed at or worked at Camp Lejeune between the mid-1970s and mid-1980s, (population size=154,821) was compared to Marines and Navy personnel and civilian workers at Camp Pendleton, California (population size=163,484) during the same period.

The Camp Lejeune and Camp Pendleton cohorts were similar in their demographics, socioeconomic status, training activities, and civilian employee occupations. However, in contrast to Camp Lejeune, Camp Pendleton drinking water was not known to be contaminated prior to 1986.

FEATURES OF THIS STUDY

This is one of the largest cancer incidence cohort studies conducted in the United States, using data linkages from cancer registries in all 50 states, the District of Columbia, Puerto Rico, the Pacific Islands, the U.S. Department of Defense, and the U.S. Department of Veterans Affairs.



**U.S. Department of
Health and Human Services**
Agency for Toxic Substances
and Disease Registry

CONCLUSIONS AND KEY RESULTS

Increased risk of several cancers was observed among Marines/Navy personnel and civilian workers likely exposed to contaminated drinking water at Camp Lejeune compared to personnel at Camp Pendleton.

- In Marines/Navy personnel, increased risk was found for some types of leukemia, lymphoma, and cancers of the lung, breast, larynx, esophagus, thyroid, and soft tissues.
- Among civilian workers, increased risk was observed for myeloid cancers and some cancers of the breast and lung.

TESTING/TREATMENT

ATSDR recommends that those who think they may be affected have regular medical check-ups to monitor their health. ATSDR also encourages those affected to discuss their exposure with their medical provider, who can advise them on their personal health questions.

