OKLAHOMA DEPARTMENT OF HEALTH REPORT SAYS NO INCREASE OF STOMACH CANCER INCIDENCE IN NORMAN

Findings should allay fears of chromium danger in Norman drinking water

A study conducted by the Oklahoma State Department of Health has found that the Norman area has a slightly lower incidence of stomach cancer than the State of Oklahoma as a whole. It also indicated that the five-county area including Cleveland, Lincoln, Logan, Oklahoma and Pottawatomie counties have a lower incidence than Tulsa County, which was selected as a standard population for comparison.

These findings are significant and particularly relevant to Norman-area residents who may have been concerned about the presence of naturally-occurring Hexavalent chromium in Norman's drinking water. According to the study, there is some evidence supporting the selection of stomach cancer as the type of cancer associated with human ingestion of hexavalent chromium. Hexavalent chromium is also known as Chromium-6.

However, Cleveland County showed an incidence rate of stomach cancer of 5.5 cases per 100,000 population, which is slightly lower than the State of Oklahoma's incidence rate of 5.8 per 100,000. The statistics covered the period of 1997 to 2007. The five-county area around Norman showed an incidence rate of 5.9 cases per 100,000 population compared to 6.1 cases per 100,000 in Tulsa County.

The report notes stomach cancer rates in Cleveland County and the five-county area were not elevated compared to the rates in the standard populations. The report also notes that the study was done in response to a recent report released by an environmental group that indicated Norman's drinking water contained the highest concentration of hexavalent chromium compared to other cities across the country.

Subsequently the City of Norman completed a new round of testing to measure the amount of Chromium-6 in the water supply. Results showed levels consistently below the EPA threshold of 100 parts per billion from all wells and other facilities.

"These tests confirmed what we already knew and had reported to the public in the past," said City Manager Steve Lewis. "Norman water is safe for everyone to drink, as it always has been. Nothing has changed."

01/19/2011

Oklahoma State Department of Health
Creating a State of Health

Summary Report of Stomach Cancer Incidence in Cleveland County and the Five-County Surrounding Area, 1997-2007

In response to a December 2010 report by the Environmental Working Group concerning the level of hexavalent chromium in drinking water from many public systems across the United States, the Oklahoma State Department of Health reviewed existing data from the Oklahoma Central Cancer Registry to determine if there was an elevated occurrence of stomach cancer among residents of areas served by water from the Garber Wellington aquifer. Stomach cancer was chosen for analysis because this is the only type of cancer where there is existing research and peer-reviewed publication of a study demonstrating a possible link between hexavalent chromium drinking water exposure and cancer in humans.

The data demonstrates that stomach cancer rates were not elevated in either Cleveland County or in the five-county area (Cleveland, Lincoln, Logan, Oklahoma and Pottawatomie) served by the aquifer when compared to the statewide rate or to rates in comparable counties in Oklahoma.

	Cleveland County Age-Adjusted Incidence Rate (95% Confidence Interval)	**State of Oklahoma** Age-Adjusted Incidence Rate (95% Confidence Interval)
Stomach Cancer	5.5 cases per 100,000 population (4.4-6.6)	5.8 cases per 100,000 population (5.5-6.0)

	5-County Area Age-Adjusted Incidence Rate (95% Confidence Interval)	**Tulsa County** Age-Adjusted Incidence Rate (95% Confidence Interval)
Stomach Cancer	5.9 cases per 100,000 population (5.4-6.3)	6.1 cases per 100,000 population (5.5-6.8)

The Oklahoma Central Cancer Registry is the central database of information on all cancers diagnosed or treated in Oklahoma since January 1, 1997. The statewide registry enables researchers, policymakers, and consumers to obtain cancer incidence data. In addition, the information allows both private and public health agencies to study cancer trends and develop cancer prevention and/or control programs based on data. The Oklahoma Central Cancer Registry is designed to describe the incidence and distribution of cancer among Oklahomans. To determine any specific links between certain types of environmental exposures, such as ingesting hexavalent chromium in drinking water, and cancer risk requires more specialized, in-depth epidemiologic studies.