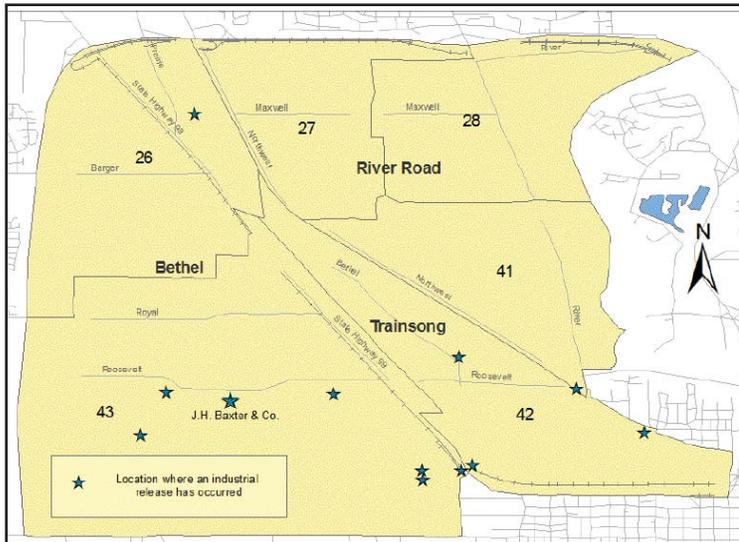


May 2007



Map of census tracts and neighborhoods:
A more detailed map can be found in the full report.

Purpose

The Superfund Health INvestigation and Education Program (SHINE) has released a follow-up report called "Cancer Investigation in Three Neighborhoods Surrounding JH Baxter & Co. and Other Industrial Sites," originally released in September 2006. The purpose of both reports is to discuss the investigation of acute myelogenous leukemia (AML), brain, lung, and nasal cancer cases in the Bethel, River Road, and Trainsong neighborhoods. The current report takes into account new data and comes to different conclusions. (See below for info on how to access the full report).

Background

SHINE's original report looked at cancer cases from 1996-2002 and found no significant elevations for the time period. Since then, the Oregon State Cancer Registry (OSCaR) has provided SHINE with more updated cancer data. This follow up report provides an analysis of cancer cases for the period 1996-2004.

SHINE invites you to read the report and send us your comments. You can find SHINE's report at:
-SHINE's website: www.healthoregon.org/superfund
-Eugene Public Library, 100 W. 10th, Eugene
Information on how to submit comments is included in the report. We will be accepting comments until 6/30/07.

What were SHINE's findings?

- Nasal Cancer: No significant elevation in cases for the overall period (1996-2004)
- Brain Cancer: No significant elevations for the overall period. During 2001 and 2002, there were a higher number than expected. However, since 2002 there have been no new reported cases.
- Acute Myelogenous Leukemia (AML): No significant elevations for the overall period. However, for the period of 2002-2004 there was a significant elevation, particularly in census tract 43. A review of medical charts indicate that all of the cases had a history of smoking.
- Lung Cancer: Significant elevation of lung cancer cases in all census tracts combined and in census tract 42 specifically. Medical history of these cases indicate that 28 of the 29 cases had a history of smoking.

What do these findings mean?

- Lung cancer: Given the medical history and residency information gathered from a review of the individual cases, SHINE is concluding that it is unlikely that these lung cancer cases are attributable to a common environmental exposure.
- AML: SHINE cannot rule out the possibility that the elevation in AML cases have an environmental exposure in common. Further investigation into each of the cases medical and occupational histories is needed.
- Brain cancer: Based on the data, it does not appear that brain cancer rates in these neighborhoods are of concern. In response to community concerns, however, OSCaR will monitor the brain cancer rate in census tract 26 as case information becomes available for 2005 and 2006 to verify that the elevations noted in 2000 and 2001 were due to chance and not ongoing.

Cancer Clusters 101*

What is a cancer cluster?

A cancer cluster is the occurrence of a greater than expected number of cancer cases within a small area and within a short period of time. Cancer clusters are sometimes reported when people learn that friends, family, neighbors or co-workers have been diagnosed with cancer. Cancer clusters do occur, and there have been several well documented clusters such as a cluster of childhood leukemia in Woburn, MA. However, because cancer is so common, it is difficult to prove if a reported increase is in fact a cancer cluster due to an environmental exposure.

Cancer Clusters Can Be Divided Into Three Types

Suspected Cancer Cluster: When someone is diagnosed with cancer, their neighbors and family reach out to provide comfort and support. Through this "networking" of persons and families touched by cancer, sometimes people learn of many other cases of cancer in their community. This apparent clustering of cancers may be reported to the health authorities or media. However, in order to determine whether the apparent cluster is meaningful, further investigation is needed.

Statistical Cancer Cluster: Cancer is very common in the U.S. -- it strikes one-of-two men and one-of-three women. When several cancers occur within a limited area in a short time period, this may represent a statistical cluster, but it is not necessarily the result of a common environmental exposure. Examples of statistical cancer clusters are the clusters of AML and lung cancer discussed in this report.. Using statistical tests, SHINE found that the elevation of observed cases above expected for both of these types of cancer in this area was high enough to be considered "significant."

Confirmed Cancer Cluster: These are the type of cluster reports that are the most important to public health. They represent a group of people at an unusually high risk of developing cancer due to a common environmental exposure. If a common exposure is found across the cases, a statistical cluster is confirmed. In this investigation, SHINE reviewed information from individual lung cancer and AML cases. Based on that information, SHINE concluded that the statistical lung cancer cluster is not due to a common environmental exposure, rather likely due to an increased rate of tobacco use among the cases. Based on the AML case information, SHINE was not able to confirm out rule out the existence of an AML cancer cluster. More in-depth investigation is needed.

Throughout the U.S., investigations of hundreds of cancer cluster reports over many years have shown that **SUSPECTED** clusters make up 80% of all the cluster reports received. **STATISTICAL** clusters make up 15% of reports and less than 5% of all cluster reports are **MEANINGFUL**.

For more information regarding SHINE's report, please contact:

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Oregon Public Health Division, DHS
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For more information on *Cancer and the Environment*

Websites

-American Cancer Society: www.cancer.org

Publications

-Cancer and the Environment
www.niehs.nih.gov/oc/factsheets/cancer-environment.pdf

Environmental and Occupational Causes of Cancer

-<http://www.sustainableproduction.org/downloads/StateoftheScienceFinalDownloadable.pdf>

*SHINE acknowledges the Connecticut Department of Health for the use of information from their cancer cluster fact sheet.