Over the years, many people concerned about cancer have contacted the Colorado Department of Public Health and Environment to get more information. Sometimes they were concerned about the number of people in their neighborhood, workplace or school who had cancer diagnoses. Other times people were worried about something in their local environment that might be affecting their health, or the health of their friends, family or neighbors. This document describes how cancer is investigated in a community.

Understanding Cancer
Cancer is not a single disease, but a group of over 100 different diseases that share some common characteristics. Cancer is common; it is the second leading cause of death in Colorado and in the United States. One out of every three people is expected to be diagnosed with cancer in their lifetime. Three of every five cancer deaths are due to tobacco use, being overweight, lack of physical activity, and poor nutrition. The most common risk factors for cancer are:

- Growing older
- Tobacco
- Excessive exposure to the sun
- Ionizing radiation
- Certain chemicals and other substances
- Some viruses and bacteria
- Certain hormones
- Family history of cancer
- Alcohol
- Poor diet, lack of physical activity, or obesity

Overall, a relatively small number of cancers are linked to toxic substances in the environment or workplace. Even for certain cancers that are known to be related to toxic substances, the risk of developing cancer depends on both the amount and duration of exposure.

How are cancers in a community investigated?
If there is concern about the numbers of cancer in a community, the Colorado Department of Public Health and Environment will work with local agencies to gather the important information needed to perform an investigation. This information may include details about the specific geographical area, environmental exposures, and specific cancer types of concern.

This is combined with information from the Colorado Central Cancer Registry which collects data on all cases of cancer (except non-melanoma skin cancer) diagnosed in Colorado to the CCCR. This information is analyzed to help answer important questions about cancer incidence, prevention and treatment in Colorado. The CCCR is located within the Colorado Department of Public Health and Environment.

What is the Colorado Central Cancer Registry (CCCR)?
The Colorado Board of Health Rules require that hospitals, clinics, physicians and laboratories report detailed information about all cases of cancer (except non-melanoma skin cancer) diagnosed in Colorado to the CCCR. This information is analyzed to help answer important questions about cancer incidence, prevention and treatment in Colorado. The CCCR is located within the Colorado Department of Public Health and Environment.

What is a cancer cluster?
Multiple cases of cancer occurring near each other are sometimes referred to as a “cluster.” Cancer clusters may be reported when people report that several family members, friends, neighbors, or coworkers have been diagnosed with cancer. Clusters are commonly reported by individuals who see their family members, friends, neighbors, and co-workers diagnosed with cancer.

After further investigation, most reported clusters are revealed to be the coincidental occurrence of a variety of different types of cancer. The number of each different type of cancer reported is often typical for the group of people in which they are diagnosed. Sometimes a cluster may be related to important public health factors which may place people at greater risk and warrant a more in-depth investigation.
What information is required for a cancer investigation?

- Case Confirmation: Each reported cancer case in the community must be confirmed. This requires reviewing medical information to identify specific details about the case of cancer.

- Type of Cancer: Since cancer is actually many different diseases, it is not sufficient to group all cancers together. Different types of cancer are expected to occur at different rates. Therefore, it is important to consider the number of each type of cancer.

- Study Population: The study population must be defined by geographic boundaries, such as zip codes or U.S. Census Bureau-defined census tracts or block groups, because population counts by age, sex and race/ethnicity are available for these areas.

What are the possible outcomes of a cancer investigation?

There are three possible outcomes of a cancer investigation:

1. The numbers and types of cancer in the community are the same or similar to other communities in Colorado. This type of outcome, while not definitive, argues against any type of community-specific risk factor.

2. Specific types of cancer in the community are elevated compared to other communities in Colorado, but there are clear differences in general cancer risk factors between the community being studied and the comparison area. This type of outcome often occurs when the community being studied has higher rates of smoking or obesity compared to the Colorado average. In this situation, it is usually not possible to determine whether the elevated numbers of cancer are due to the community-specific risk factor of interest (such as environmental exposure) or due to the differences in general risk factors (such as smoking, obesity, etc.).

3. Specific types of cancer in the community are elevated compared to other communities in Colorado, and there are no clear differences in general cancer risk factors between the community being studied and the comparison area. This type of outcome suggests a community-specific risk factor and typically initiates further investigation.

What happens if a community cancer is elevated?

Preventing disease and protecting the health of Coloradans is our highest priority. Colorado Department of Public Health and Environment will work with local agencies, providing technical assistance, data and outreach, in order to look more closely at communities with higher than expected rates of cancer.

Where should I report a suspected community cancer or cancer cluster?

In Colorado, a suspected cancer cluster should be reported to the Colorado Department of Public Health and Environment’s Colorado Central Cancer Registry (CCCR). The State Health Department has the information and expertise to investigate these concerns. CCCR staff review medical records for each cancer patient to confirm the accuracy and completeness of the reports. All patient, physician and hospital information is kept private and confidential, as required by state law. Information reported to the CCCR also includes the age, sex and race/ethnicity of each person diagnosed and residence at the time of diagnosis.

What can I do to reduce my risk of getting cancer?

Adopting a healthy lifestyle that includes avoiding tobacco use, excessive alcohol consumption, and sun exposure can greatly reduce your risk of cancer. Increasing physical activity, maintaining a recommended body weight, eating a healthful and nutritious diet, and taking advantage of cancer screening will also reduce your risk.

Contact Us

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For more information please contact the Colorado Central Cancer Registry
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