

ABSTRACT

This study attempts to determine the linearity between elevated radon levels collected by the State of Wyoming and lung cancer utilizing residential radon samples from 15,184 residents of Wyoming. Further, United States Geological Survey (USGS) and Environmental Protection Agency (EPA) data further support this study by providing information relating to geologic formations and elevated radon areas.

Lung cancer data was derived from the National Cancer Institute Wyoming profile utilizing lung and bronchus trends for male and female residents. Statistical analysis of data calculating mean radon level by county demonstrated the number of cases with a minimum and maximum range of radon levels. Key findings of this study indicate no relationship between mean radon levels and corresponding lung cancer incidence.

Data analysis and limitations warrant further investigation and review of radon exposure as it relates to lung cancer. In large, the review of radon levels and lung cancer throughout the nation should spur further investigation as a leading preventable public health intervention.