

## **INFORMATION ON RADON**

## WHAT IS RADON?

Radon is one of the earth's natural elements. It is a colorless, odorless radioactive gas formed as a result of the radioactive decay of radium which, in turn, results from the decay of uranium. Most soils and rocks emit some radon although concentrations vary widely among towns and neighborhoods. Since it is a gas, radon can easily find its way out of rocks and soils, mix with other soil gases and enter homes and other buildings through cracks and openings in foundations. Some radon can also enter homes through drinking water supplies. Radon can then enter the air after leaving the water during showering, cooking, and other water use activities. Water from private wells may contain much higher levels of radon than public wells.

While California may have, on average, a small percentage of houses expected to have elevated radon it has a huge population. Also there are areas of high radon potential located in densely populated areas of the state. As a result some urban areas may have large numbers of houses with elevated radon levels.

Radon moves from uranium-bearing granite deposits in the soil to atmosphere because there is a lower concentration of radon in the atmosphere than in the soil. Your home is sited in its path and because the house is usually warmer than the surrounding soil, the air pressure is less and soil gases including radon move into the home. The most common routes are spaces between basement walls and slab, cracks in foundations and/or walls, openings around sump pumps and drains, construction joints, crawl spaces, and showers, etc using well water with high radon concentrations

## THE INDOOR RADON ABATEMENT ACT

The Indoor Radon Abatement Act of 1988 directed the U.S. Environmental Protection Agency (EPA) to identify areas of the United States that have the potential to produce elevated levels of radon. EPA along with U.S. Geological Survey (USGS) and the Association of American State Geologists produced a series of maps and documents (EPA's Map of Radon Zones, CALIFORNIA 402-R-93-025). The maps of Radon Zones identify areas of each state that have the highest potential for elevated indoor radon levels (greater than 4 pCi/L) (California map, U.S. map). The maps were designed to assist national, State and local governments and organizations to target their radon program activities and resources and should not be used to determine radon levels of a given area or house within a particular county (see maps below).







