

The Correlation between Presence of Radon Gas in Residences and Diagnosis of Type 1 Diabetes

Sherman, Julia

Radon is a colorless, odorless gas that seeps through cracks in the foundations of homes and buildings, poisoning the air inside. As a known carcinogen, most research surrounding the toxin focuses on its ability to cause lung cancer, among other respiratory complications. However, radiation has been proven to cause Cytokine miscommunications within the immune system which can lead to induced-Beta Cell death. This immune system deficiency implies a possible link between the effects of radiation and a consequential diagnosis of Type 1 Diabetes. In order to expand previous knowledge of toxins and air pollution in Salt Lake, this analysis compares the presence of Radon Gas to the prevalence of diagnoses of Type 1 Diabetes across the Salt Lake Valley, aiming to bring society closer to understanding what may be triggering the auto-immune deficiency that results in diagnoses of this disease all over the world.