

Spring 2017 Modern Physics Project – Human Exposure to Radiation test 3/14/2017

1) What are Sieverts, Grays, rem, rad, and Becquerels and how are they related?

2) What is the average yearly dose received by US residents? What is radon, where does it come from, why is it harmful?

3) How much dose will increase the probability of an average person getting cancer by 5.5%?

4) What is a TLD badge? Why do people who work with radiation wear them? Do they shield the workers from radiation?

5) Explain why people who work with radiation wear latex gloves and coveralls?

6) After a nuclear accident why do people take large amounts of iodine?

7) What are the yearly and career max doses for workers?

8) What is the difference between absorbed dose, equivalent dose, and effective dose?

9) At what dose are the first symptoms of ARS usually seen?

10) What does “linear no-threshold model for stochastic effects” mean?