

**EVE 486  
Public Health**

**HW#11**

**Due: 12 December, 2019 (at the Final Exam)**

1. Determine the DAC for Iodine-131 (a radionuclide ejected during the 1986 explosion of the Chernobyl nuclear facility). Next, compare the DAC you find to peak levels people living in Minsk, Belarus may have been exposed to. Clearly state all assumptions and simplifications.
2. Compare/contrast the following nuclear power station accidents: Fukushima, Chernobyl, Three Mile Island. Be sure to remark on the cause(s), physical damage, public health impact, and cleanup costs. How has each incident influenced the perceived viability of nuclear power?
3. Read the paper by Schmidt (2004) that is linked on the course website and answer the following:
  - a. Why is the notion of “perception” important in the context of risk assessment?
  - b. Which of his (Schmidt’s) “main factors in risk perception” is most relevant for you personally?
  - c. What parallels can you draw between the notions of risk perception and the US response to bioterror?
4. Could effective PSM plans have prevented the accidents at 3 Mile Island and Chernobyl? Explain.