Classroom Activity

10 Big Question: How do we unravel the causes of disease?

Your Radiation Dose

We encounter radiation through various activities and procedures throughout our lives. Generally this exposure is brief and at levels our bodies can handle. For example, while the atmosphere shields us from most of the cosmic radiation bombarding our Earth, taking a plane flight brings you into parts of the atmosphere where radiation exposure is higher, but only for the relatively short duration of the journey. This means the odd plane flight is not of concern for most people. On the other hand, if you were a pilot, a member of the cabin crew or someone that flies all the time, your exposure would be much more frequent.

If you are curious to see what your personal radiation exposure is, there are a number of online calculators and worksheets which help you calculate an approximate annual value. Background radiation largely depends on your location, so you'll need to find out the height above sea level and the terrestrial radiation of the area in which you live, among other things. Most of the information is available online, but to make this easier we've supplied several regional versions of the calculator below.

- Australia:
  http://firstyear.chem.usyd.edu.au/calculators/radiation_dose.shtml
- United States:
  www.nrc.gov/reading-rm/basic-ref/teachers/average-dose-worksheet.pdf
- United Kingdom:
  www.nuffieldfoundation.org/sites/default/files/1-7-estimating-radiation-dose-final-241.pdf