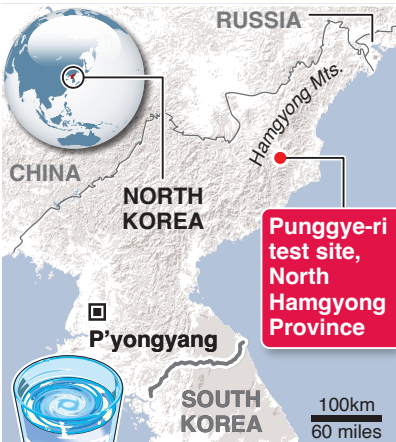
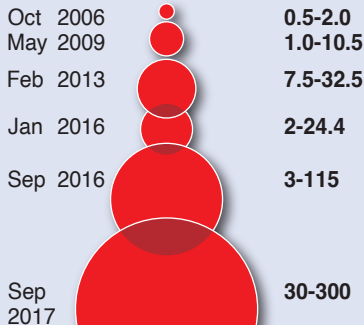


# North Korean groundwater risk

Tests conducted on 40 North Korean defectors from the Punggye-ri nuclear test site found that at least nine had abnormalities indicating radiation exposure from groundwater



## Nuclear tests (yield in kilotons\*)



\*Estimates by American Geophysical Union

**North Hamgyong Province:** Census data show that nearly one in every six households within 40km radius of Punggye-ri drink groundwater, waterhole or spring water

## Exposure levels to cause abnormalities (millisieverts)

**2017:** Four of 30 North Korean escapees found with chromosomal damage

**2018:** Five of 10 escapees found with chromosomal damage

