

How to Put Radiation Risk in Perspective?

A complex matter easier addressed by answering questions So if you have a question or concern, please ask

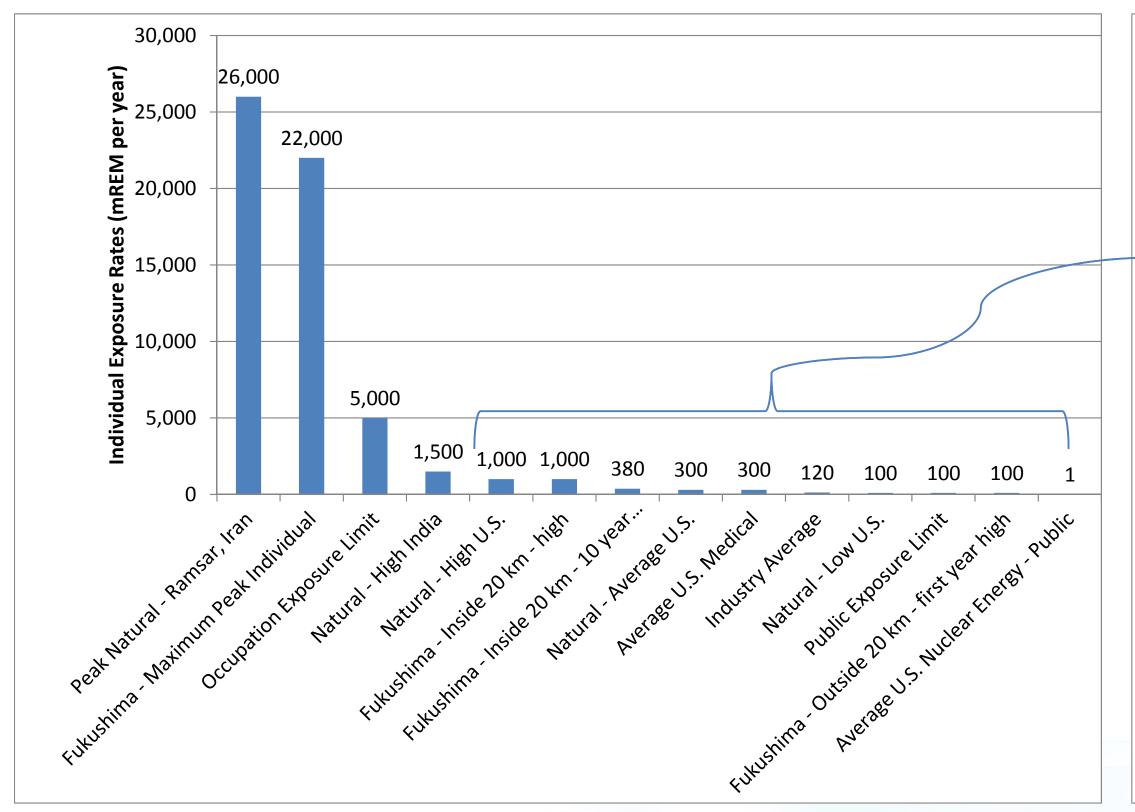
<u>Health Physics Society Position Statement</u> – Radiation Risk in Perspective – Below 5,000 to 10,000 mrem the risks of health effects are either too small to be observed or are nonexistent.

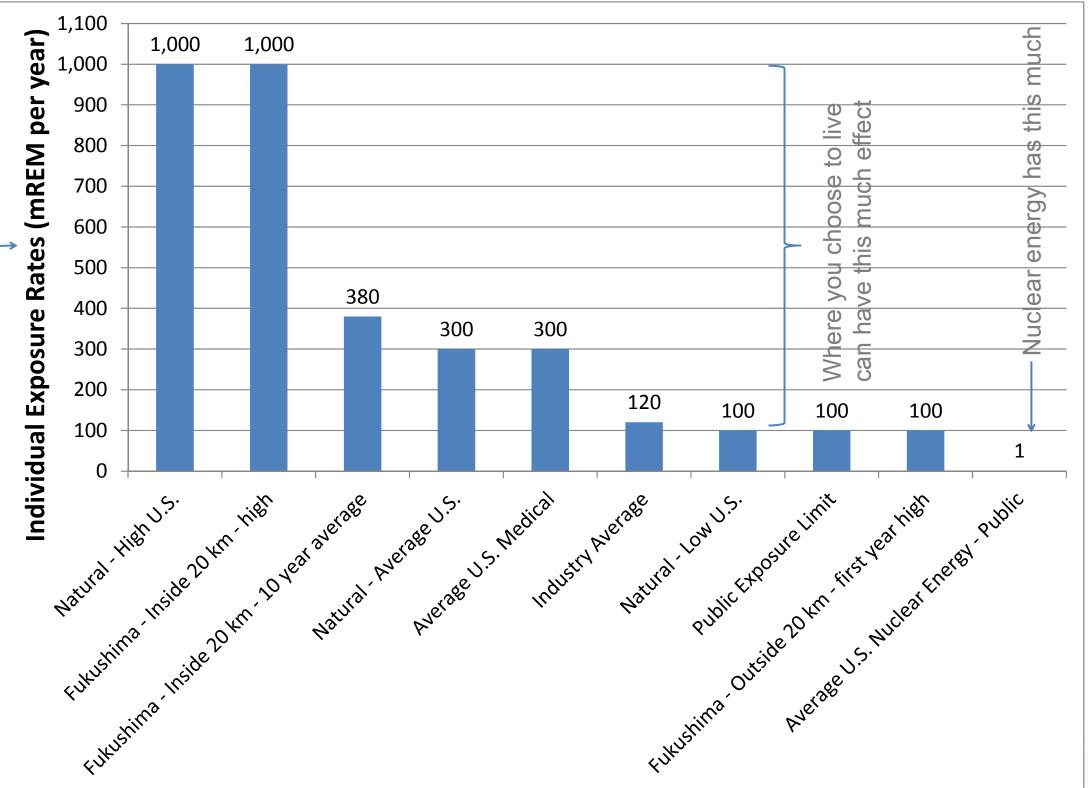
Communication challenge between radiation professionals and layman

Important Issues	Radiation Professional	Layman Perception
Is it safe?	Compare death rates	So I could die?
Linear No Threshold Risk Model	Conservative assumption supported by high dose rate/high dose studies	So you are saying I should worry about even the tiniest amount
ALARA - as low as is reasonably achievable	Conservative approach	They are so scared they want it as low as possible
Latency Period	Too complicated to incorporate	I have no idea what you are talking about
Radiation Protection	Highly conservative approach	Scared by our language and approach
Is it safe?	Would live and raise their families on the fence of any commercial nuclear facility without hesitation	Probably still skeptical – hopefully a better understanding of a complicated technical question

Various Radiation Exposure Levels and Limits in mREM per year

What's a mREM? A unit that puts all types of radiation on the same scale in terms of their radiation risk





Final numbers for Fukushima are approximate and probably not known precisely yet. Other numbers related to doses to populations are also approximate because of many factors (e.g. diet and life style factors) that impact the amount an individual receives as well as measurement uncertainties.



