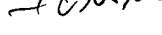


Franovich, Mike

From: Franovich, Mike 
Sent: Monday, February 07, 2011 2:26 PM
To: Bowman, Gregory
Subject: RE: FYI - Early Fatality Definition

Greg, thank you. This is very helpful.

From: Bowman, Gregory
Sent: Monday, February 07, 2011 1:05 PM
To: Franovich, Mike
Subject: FYI - Early Fatality Definition

Two types of health consequences are measured in SOARCA – early fatality risk and long-term cancer fatality risk. I found a definition for “early fatality risk” in the draft SOARCA information brochure. Here’s what’s provided:

Early Fatality Risk - Individual deaths that occur shortly (usually within a few weeks or months) after exposure to large doses of radiation.

RES checked with Sandia and they provided the following definitions/explanations for both:

Early Fatality Risk - The risk and the severity of the symptoms both increase with dose. There is a distinct and significant threshold below which no symptoms occur for any member of the population. These health effects are referred to as non-stochastic and occur within days or weeks of the exposure.

Latent Cancer Risk - The risk increases with dose but the severity is independent of dose. Latent cancers are referred to as stochastic health effects. They have a period of latency before the health effect can be detected that is generally a number of years.

I hope that helps, but if not or if you need any additional information, please let me know.

