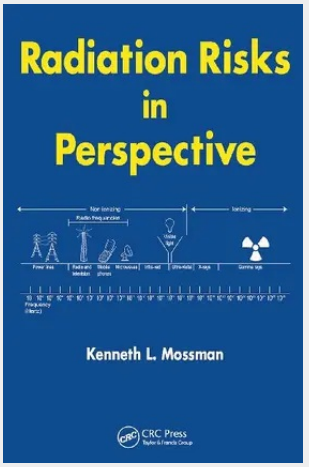
Mossman

Radiation Risks in Perspective



Public misperception of radiological risk consistently directs limited resources toward managing minimal or even phantom risks at great cost to government and industry with no measurable benefit to overall public health. The public's inability to comprehend small theoretical risks arrived at through inherently uncertain formulae, coupled with an irrational push to eliminate all risk with no contextual understanding of overall benefit, results in a forfeiture of valuable advances in technology in favor of an illusion of safety. Radiation Risks in Perspective uses general concepts underlying radiological risk as a model to illuminate the fundamental problems in public perception, reaction, and policy when faced with possible health risks. Presenting three distinct themes, the author summarizes the causes for the failure of the current system and proposes methods for correction. Beginning with a discussion of the methods used to measure threat, the author weighs the nebulous assessment of risk with the use of a quantifiable assessment of hazardous dose, which uses actual numbers that the public can readily understand and that decision makers can confidently use to enact policy and measure success. Secondly, the author addresses the contextual balancing of cost versus benefit when prioritizing expenditure, specifically emphasizing that it is inappropriate to analyze and discuss individual risks without regard to the presence of other risks. Finally, the author analyzes the public's tendency to push toward zero risk tolerance, an extremist approach that leads to unreasonable restrictions on technologies, excessive regulatory compliance costs, and the ultimate loss of goods and services. With detailed explanations and illustrative case studies, Radiation Risks in Perspective offers scientists, lawyers, engineers, policy makers, and public health professionals, the skills they need for a rational evaluation of risk.

This lively, highly readable work uses radiological risk as a model to illuminate the fundamental problems and possible solutions to public perception, reaction, and policy when facing health risks posed by radiation. The book discusses the methods used to measure threat, the contextual balancing of cost versus benefit when prioritizing expenditure, and the public's extremist tendency to push toward zero risk tolerance, which results in a forfeiture of valuable advances in favor of an illusion of safety. Filled with detailed explanations and illustrative case studies, this book clearly articulates the problems in current risk assessment processes and presenting viable management solutions.

106,90 €
106,90 € (zzgl. MwSt.)

Lieferfrist: bis zu 10 Tage

Artikelnummer: 9780367453435
Medium: Buch
ISBN: 978-0-367-45343-5
Verlag: CRC Press
Erscheinungstermin: 02.12.2019
Sprache(n): Englisch
Auflage: 1. Auflage 2019
Produktform: Kartoniert
Gewicht: 368 g
Seiten: 207
Format (B x H): 156 x 234 mm