

scenarios. More than 5,000 articles emerged from a preliminary survey of the five databases. However, less than 1% of them satisfied the extraction criteria, and reviewed PPE for nuclear power plant accidents. Medical responders caring for “exposed” individuals who present at Emergency Departments have minimal exposure once they’re decontaminated, and everyday PPE is maintained. However, data on PPE recommendations for on-site response remains unexplored. Airtight suits and full-face respirators emerged as industry gold standard for protection, but a closer examination of these types of suits, and responders’ self-efficacy utilizing the gear would clarify their actual protective qualities.

Conclusion: While nuclear power plant accidents do not occur often, many remain fearful of their impact. Maintaining proper PPE (including respiratory habiliment) for event responders is one way to minimize the adverse health effects of these nuclear radiological exposures.

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Closer Than We Think: the Management of a European Nuclear Exchange

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Introduction: An exhausted, isolated, increasingly desperate Russia, still in possession of over 4,400 nuclear warheads, puts the world at risk. Since the outbreak of war in Ukraine, Russian rhetoric and military doctrine have evinced an increasing non-chalance toward the employment of tactical nuclear weapons as stockpiles of conventional weapons are depleted. Poor targeting control (or outright perfidy), demonstrated by recent events in Poland possibly violating NATO’s collective defense clause, have only incensed an imminently combustible situation. Given this threat, it behooves medical professionals to gain thorough acquaintance with Acute Radiation Sickness (ARS), including an assessment of sources of exposure, presentation, prognostic indicators, immediate treatments, long-term concerns, and sources of consultant support.

Method: Through thorough review of military and civilian sources, training courses, historical cases, injury mechanisms, first-responder concerns, hospitalization parameters, and laboratory indicators, the ARS spectrum will be explored. Surgical, anesthetic, and intensive care implications will be discussed, as will infection and nutritional concerns. Emerging practices, specialized therapy, and long-term medical sequelae will be covered.

Results: A thorough discussion of potential sources (civil and military), clinical recognition, and presentation of ARS will focus on best clinical guidance, providing the most up-to-date treatment strategies, and will give clear guidance regarding how best to prepare, treat, and obtain specialist consultation.

Conclusion: It is the earnest hope of the presenter (a senior naval physician with nuclear power experience, anesthesiology consultant/board examiner, and intensivist, who studied

radiation safety and injury for much of his career and wrote a Diploma in the Medical Care of Catastrophes dissertation on radiologic injury management) that the audience will never face the horror of a single radiologic casualty. However, the likelihood of such wishful thinking seems as remote as ever. Attendees will not only learn guidance for treatment and prognostication, but will know how to obtain support and expert consultation.

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Will they Panic? The Effect of Risk Messaging on Public Behavior During Non-conventional Terrorism

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Introduction: Non-conventional terrorism (NCT) is laced with uncertainty that can foster fear and lead to unwanted public behavior. One such example is the masses of worried-well overcrowding hospitals. The purpose of this study was to explore public behavioral intentions during NCT and the effect of risk messaging in attenuating unwanted behavior.

Method: An online intervention-based study was conducted among 1,802 adult Israeli participants. Threat perception and behavioral intent before and after exposure to hypothetical NCT scenarios were assessed stratified to the media type, exposure to rumors and fake news, and risk messaging.

Results: Participants perceived the CBRN terrorism threat as low-medium in likelihood, and threat intrusiveness and perceived incident severity were estimated at a medium level. Nearly half (45%) of participants indicated it is highly likely that they would seek medical attention following an NCT incident. Exposure to fake news significantly increased the intention to seek medical attention ($p=0.001$). However, the odds of participants exposed to risk messaging reporting this intention were 0.470 (95% CI: 0.359, 0.615) times that of participants not exposed to risk messaging ($\chi^2=30.366$, $p<0.001$).

Conclusion: This study shows that overcrowding hospitals by worried-well following a non-conventional terror incident can be attenuated by risk messaging. In particular, this study suggests that simple, timely, and clear risk messaging is capable of overcoming fake news that otherwise can increase unwanted behavior. Rumors and fake news have limited power to alter threat perception, but they can significantly change behavioral intent and cause unwanted behavior that could jeopardize crisis management. Rational behavior by the public during NCT can be considered an outcome of rational decision-making by crisis managers, especially risk communicators.

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