RAIN: Simplifying Decontamination Response for Hospital First Receivers

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Introduction: Considerations for patient and staff safety are critical during an encounter with an individual who is potentially contaminated by hazardous materials in the hospital setting. Decontamination training for all team members may be ideal, however, there are significant barriers precluding implementation including time-spent, associated costs, and staffing limitations. Studies demonstrate that immediate recognition of potential contaminants and removal of clothing mitigates risks with a best-estimated 85% hazard reduction. Initial risk-reducing best practices like focused training and resources, allow for more adequate decontamination response and improve team training gaps with potential first receivers throughout the hospital setting.
Method: A two-step process was implemented to address a training disparity including a deployment of high-impact resources and the installment of these resources at high-risk locations. First, a slide deck with focused education to both clinical and non-clinical staff was developed from the established decontamination team training program. The focus of this training was to introduce the concept of RAIN (Recognition, Avoidance, Isolation, and Notification). This education highlights how to safely remove potentially contaminated clothing and contain the materials. RAIN kits were created with the items necessary to safely accomplish this while prioritizing patient privacy and safety to patient and staff. The kits included instructions, privacy kits, thermal blankets, and trauma shears. Next, the RAIN kits were deployed at pre-identified locations where potentially contaminated patients may present.
Results: Qualitative improvement in staff satisfaction was noted after the implementation of the abridged, high-impact RAIN kits. The pre-deployed kits at critical high-likelihood locations throughout the hospital created a more accessible model with improved ease of use and effectiveness, reducing current gaps in training. Limitations should be considered when implementing a high-acuity, low-frequency program to clinical and non-clinical staff with support from leadership.
Conclusion: Focused education and pre-deployed kits empower staff to respond in hospital settings for potentially contaminated patients.

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