

Appendix K- Nuclear

Objectives:

- Early recognition and appropriate intervention of patients injured following a nuclear event.
- Protect responders from inhalational exposure to radioisotopes during patient care

General Information:

- **Treatment of seriously injured or ill radiologically contaminated patients takes priority over all other activities, including decontamination. Do not delay advanced life support to assess contamination status. Perform required emergency care**
- The use of Potassium Iodide (KI) is only useful in the prevention of thyroid cancer following internal contamination of radioactive iodine. Radioactive iodine may be generated by:
 - a) Nuclear Power Plant loss-of-coolant accident (LOCA)
 - b) Improvised Nuclear Device (not typical RDD)
- For the first dose to be effective, time is of the essence
- The Hampton Roads MMRS program WMD Antidote Kits each contain:
 - a) 4 – Potassium iodide tablet, 130 mg, 14/container
 - b) 1 – Potassium iodide solution 65 mg/ml, 30 ml bottle
 - c) 1 – Tablet cutter (for KI tablets)
 - d) 30 – Medicine cup, 30 ml (for KI solution)
- A single dose of KI protects the thyroid gland for 24 hours.



Warnings/Alerts:

- Responders should wear a minimum of N 95 respirators when responding to non-specific explosions to reduce the chance of internal contamination
- Contaminated patients from a nuclear event present a low risk of exposure to health care providers
- It may be harmful for some people to take KI because of the high levels of iodine in this medicine. If they are allergic to iodine (If you are unsure about this, consult medical control; a seafood or shellfish allergy does not necessarily mean that they are allergic to iodine.) or they have certain skin disorders (such as dermatitis herpetiformis or urticaria vasculitis)

OMD Notes:

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References:

- Department of Health and Human Services, Center for Disease Control and Prevention, Potassium Iodide Fact Sheet, February, 2006
- Pediatric Emergency Preparedness for Natural Disasters, Terrorism and Public Health Emergencies, A National Consensus Conference, National Center for Disaster Preparedness, Mailman School of Public Health. March, 2007

Performance Indicators:

Signs and Symptoms indicating exposure

Vital Signs

Treatment and Response to Treatment

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