

Medical and Trauma Considerations

Medical and trauma assessment/interventions take priority over radiological decontamination.

Early prolonged emesis is closely correlated to higher radiation dose.

Decrease in lymphocyte count correlates to greater radiation dose. Serial CBCs (initial and every 8 hours, as warranted) should be obtained.

Combined injuries negatively impact triage categories.

Countermeasures may be available depending on the involved isotope. Contact REAC/TS for expert consultation.

Dicentric chromosome assay (DCA) may be useful for patients with external exposure. If suspected, draw blood in a lithium heparin (green top) tube without serum separator gel. Sample volume should be 2-10 ml and no special storage is required. Contact REAC/TS for further instructions.



PPE

Personal protective equipment should always be worn and should take into consideration other hazards, such as bloodborne pathogens and chemical agents.

Universal precautions are effective at preventing radioactive substances from making direct contact with, or entering, the body.

Decontamination

Cover any open wounds and protect the patient's airway.

Removing the patient's clothing will eliminate a considerable amount of contamination.

Decontamination efforts should be prioritized to wounds, body orifices, and intact skin.

Contamination on intact skin may be fixed in place with an occlusive dressing.

Stop decontamination efforts if they interfere with medical treatment or the patient becomes unstable.



REAC/TS

Radiation Emergency
Assistance Center/Training Site

Radiological Medical Considerations:

Just-in-Time

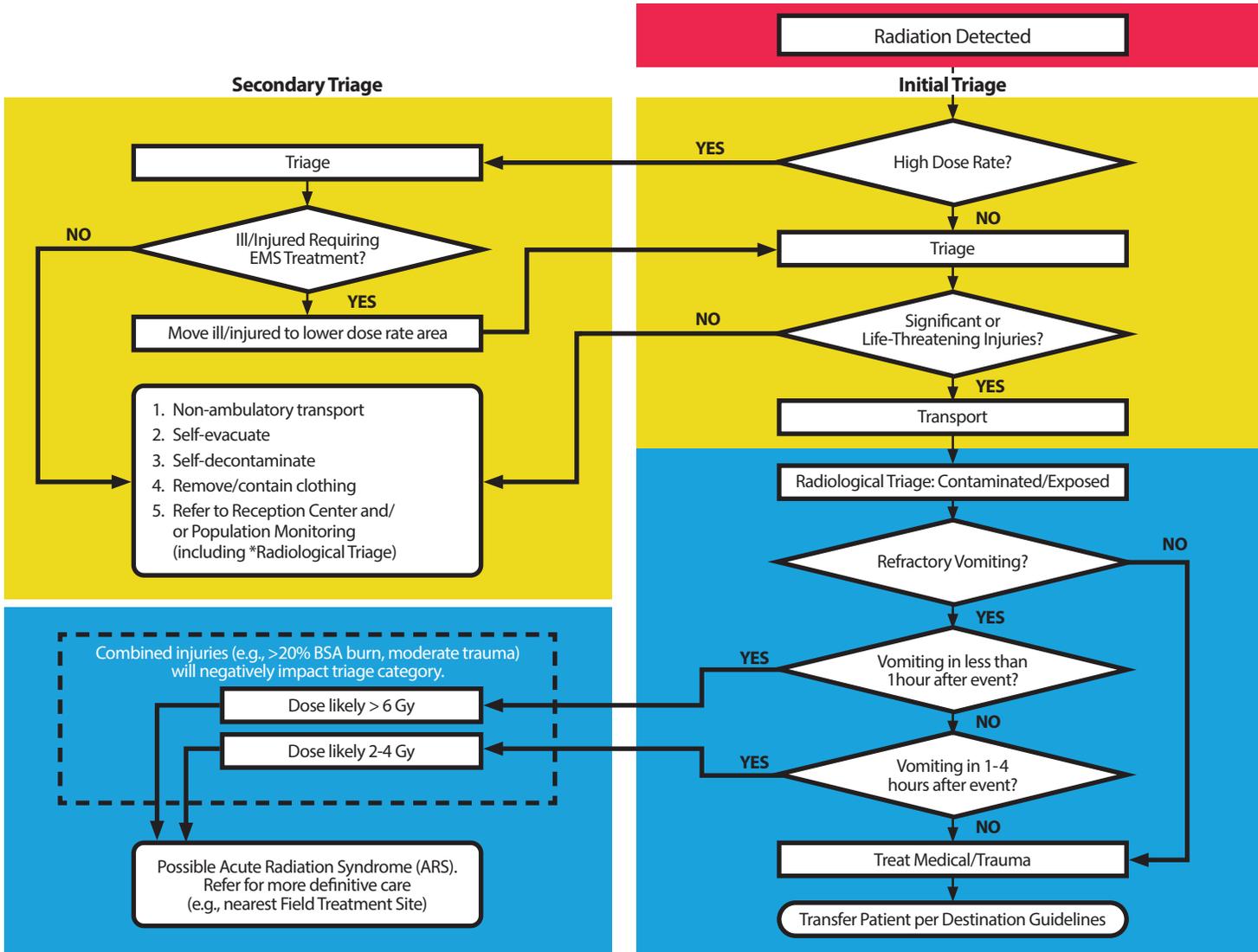
REAC/TS 24/7 Emergency Number:

865-576-1005

REAC/TS Website, Radiation Emergency Resources:

<https://orise.orau.gov/resources/reacts/triage.html>





Radiological Triage

Contamination v. Exposure?

Exposure occurs when someone is close enough to a radioactive source to absorb some of the energy emitted. Exposure-only patients are not radioactive and don't pose a radiological risk to others.

Contamination occurs when someone physically comes in contact with radioactive materials. That material may be transferred to healthcare providers or surfaces.

Radiation type:

- Alpha: May be stopped with a few inches of air or a piece of paper
- Beta: May be stopped by a piece of plastic
- Gamma: May be stopped by several inches of heavy metal, such as lead

If contaminated, how much is present?

Is actual isotope involved known?

Radiological Triage Questions:

Where was victim in relation to event?

How long was victim in that location?

Was victim sheltered? If so, what type of shelter? (basement, windows, etc.) How long were they there?