

Title	IMDG Code 2016 / SUPPLEMENT / MFAG / Table 20
Effective Date	1-1-2012
Invalid from	1-1-2014
Note	Incorporating Amendment 35-10

TABLE 20

RADIOACTIVE MATERIAL

Hazards may come from either the radioactive nature of the material or its chemical nature. The radioactive nature of the material may result in external radiation or internal radiation if the substance is inhaled, ingested or absorbed through the skin.

The acute effects of radiation exposure may include:

- Vomiting
- Weakness
- Headache
- Diarrhoea

Onset and severity of signs indicate the course of illness. After a period of one to three weeks with few symptoms, loss of hair, complicating infections, diffuse bleeding and uncontrollable diarrhoea may be seen in severe cases.

LIFE IS IN DANGER.

- **Rescue personnel should wear full chemically protective clothing and breathing apparatus.**

In all cases of contamination treat the casualty as follows:

- Remove persons from the source of radiation as far away as possible.
- Give first aid to any immediate life-threatening problems such as not breathing, heart stopped or serious bleeding.
- Institute CPR, if necessary. Use an oxygen resuscitator. **Do not use mouth-to-nose or mouth-to-mouth resuscitation** to prevent the rescuer from being exposed.
- Wrap stabilised or less injured casualties in blankets to contain contamination whilst you treat any seriously injured casualties.
- Remove the casualty's clothing and personal items which may be contaminated and place them in a plastic bag or sealed box. Label and hold it in a secure place that is not near any occupied space on board until the assistance of radiation experts is available to evaluate them. Treat non life-threatening injuries at this time. Allow wounds/cuts that are not life-threatening to bleed briefly and then treat.
- Have the casualty blow his nose and gently swab the nasal passages and ears to remove any contaminated particles. Save swabs and nose blows, treat as if contaminated. Rinse the mouth thoroughly.
- If the injuries of an exposed person do not prevent it, have the casualty shower or wash thoroughly including body hair and eyes as soon as possible after being removed from the affected area. Hair shampoo may be used during the showering. Take care not to damage the skin when washing.
- Care should be taken to prevent the spread of contaminated washing water. Store any towels, blankets, brushes, etc., used in the decontamination.
- Apply first aid dressings to minor injuries after the decontamination washing.
- Rescue personnel wearing protective clothing and breathing apparatus should be hosed down with water for 10 minutes and should remove and store their clothing, as above and thoroughly shower using shampoo after completing assistance to casualties.
- As soon as possible, take a specimen of urine from every person who has been in direct or indirect contact with the radioactive substance. Keep the urine in a closed receptacle for further analysis.
- **RADIO FOR MEDICAL ADVICE**
- Do not give any treatment for possible ingestion, inhalation or absorption through the skin of radioactive material except on the advice of a physician.

SIGNS & SYMPTOMS

Nausea, weakness, sleepiness, loss of appetite

TREATMENT

- **RADIO FOR MEDICAL ADVICE**
- The casualty should be kept at rest under observation in a warm cabin or in the ship's hospital.
- If no vomiting occurs during 2-3 days, the casualty should be put under medical supervision at the next port of call.

SIGNS & SYMPTOMS

Vomiting within 2-3 days after exposure

TREATMENT

- Give 10 mg metoclopramide intramuscularly; repeat two hours later if vomiting persists.

An earlier onset of frequent and prolonged vomiting is a bad sign.

- Be prepared to administer shock treatment.

- **RADIO FOR MEDICAL ADVICE AND TRANSFER THE CASUALTY TO A SHORE HOSPITAL AS SOON AS POSSIBLE.**