

AbstractID: 10101 Title: Radiation Emergency Preparedness in the DOE (NNSA) with a General Overview of REAC/TS and It's Role in the NNSA –FRMAC Emergency Response

The general radiological emergency response in the USA is primarily managed by the US Dept. of Energy , National Nuclear Security Administration (NNSA) Office of Emergency Response through an interagency federal emergency response group called the Federal Radiological Monitoring and Assessment Center (FRMAC) ,headquartered at Nellis Air Force Base, Nevada. A discussion of FRMAC, its interagency components, and how it coordinates with and provides assistance to the state and local radiological emergency response will be presented in the format of a brief NNSA-FRMAC video.

The Radiation Emergency Assistance Center/Training Site (REAC/TS) provides the US Department of Energy (DOE)- NNSA with medical and health physics advice/consultation on radiation accidents.

Since 1976 REAC/TS has responded to thousands of calls for medical advice/consultation on the medical management of internal and external radiological contamination, as well as to other types of whole body and partial body exposures to ionizing radiations.

REAC/TS also maintains 24/7 medical radiological emergency response teams capable of 4 hours (national) and 6 hours (international) response, as directed by NNSA.

These teams are routinely deployed as a part of FRMAC operations (but, may be deployed independent of FRMAC, to support any operation of interest by NNSA) and are deployed with the equipment and personnel necessary to provide “on site” radiation emergency medicine and health physics advice /consultation, as well as basic medical emergency response, including special radiation countermeasure drugs (such as Ca, Zn DTPA and Prussian Blue) for the treatment of a limited number of people.

REAC/TS has a Cytogenetic Bio-Dosimetry Laboratory whose capabilities have been tested in a national exercise.

REAC/TS is a WHO Collaborating Center with significant past participation in international radiation emergency response incidents, exercises and training, as well as support to the IAEA RANET and IAEA on documents development and accident investigations.

REAC/ TS provides many CME training courses per year in radiation emergency medicine and health physics with realistic drills on site at Oak Ridge ,as well as multiple briefer courses off site, to a wide variety of federal, state and local groups, including CDC, DOD, and NASA..

REAC/TS also began a Radiation Accident Registry in the 1970,s as a means of collecting data on radiological/nuclear accidents and incidents so that REAC/TS , DOE and interested scientists could analyze these events. Analysis of such accidents is important since we must learn, even from these rare, but often tragic events.

A few examples of various types of accidents from the REAC/TS Registry will be discussed.