



Glenn T. Seaborg Center Special Event 6th Annual Patricia Durbin Memorial Lecture

“Preparing and Responding To the Health and Medical Consequences of a Nuclear or Radiological Incident: The Essential Roles for Science, Complex Systems and Service”

C. Norman Coleman, M.D.

Radiation Research Program, Division of Cancer Treatment and Diagnosis, National Cancer Institute, NIH and Office of the Assistant Secretary for Preparedness and Response, Department of Health and Human Services, Washington DC

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Refreshments at 3:30 pm

Seminar 4:00 - 5:00 pm

Bldg. 50 Auditorium



The enormous scope of state-sponsored nuclear war and the end of the “cold war” had led to a multi-decade period with limited investment in health and medical preparedness for the public for a large scale nuclear disaster. Building from a) bringing together scientists with expertise in radiation injury shortly after the September 2001 terrorist attacks, b) the US Government National Response Framework and Nuclear/Radiological Incident Annex, c) the 15 National Planning Scenarios and d) contributions from many subject matter experts within the federal government, academia, public service sector and international partners, there has been a compilation of tools, articles, policy and plans that in aggregate is referred to as the “Nuclear Incident Management Enterprise (NIME)” (Health Phys. 2015

Feb;108(2):149-60). Preparedness for a nuclear detonation is particularly challenging due to its being considered a high consequence, low-probability, no-warning incident that would involve a “whole community” response. To remain current with the evolving science of radiation injury, biodosimetry methods, medical countermeasure development, understanding of the physical and medical consequences, and types of nuclear or radiological incidents, a broad spectrum of subject matter experts is necessary. The components of “NIME” have been developed as part of a complex-systems approach such that new knowledge can allow the multiple components to be modified. In addition to the role of subject matter experts for their particular scientific and technological expertise, service to society and the community through participation in public health planning helps government officials and the general public understand radiation and its effects and also provides support and reassurance for planners and responders for dealing with this very complex subject and its potential consequences.

(*This presentation is the opinion of the presenter and does not represent policy or opinion of the NCI, NIH, ASPR, DHHS or any agency of the US Government).