

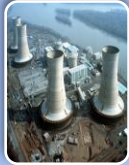
The Role of Public Health in Radiation Preparedness

McHenry County Department of Health



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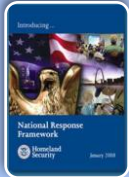
Objectives



Defining the threat



Types of radiation events



Some public health issues to consider



Planning (local and federal)



Resources



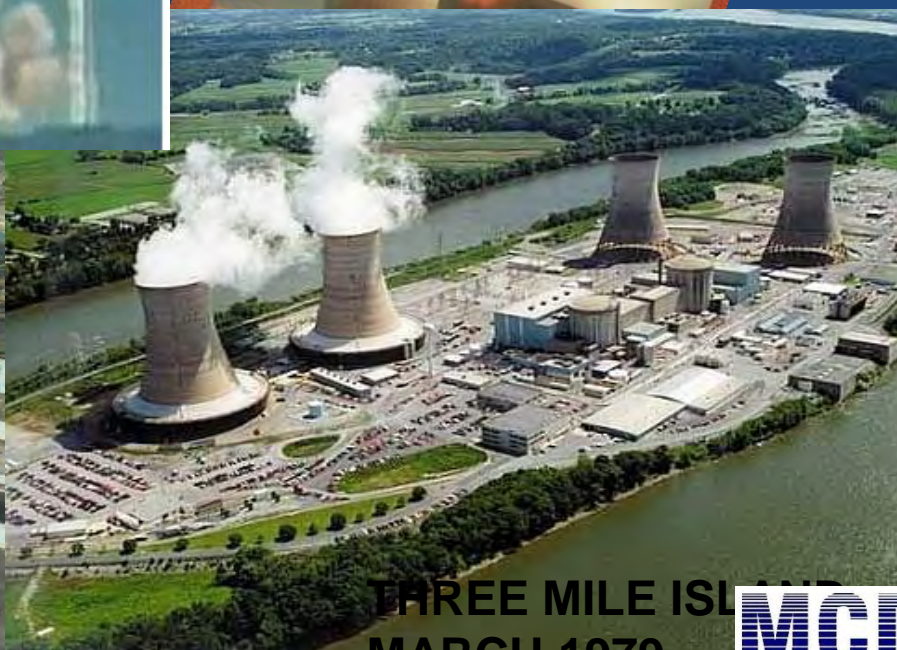
The Threat



**JAPAN
MARCH 2011**



**CHERNOBYL
MARCH 1986**



**THREE MILE ISLAND
MARCH 1979**



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The Threat

- 1970s – 12
- 1980's – 14
- 1990's – 11
- 2000's - 6

RADIATION ACCIDENTS



Other Sources of Radiation

- **IND** = Improvised Nuclear Device

A device incorporating radioactive materials designed to result in the dispersal of radioactive material or in the formation of nuclear-yield reaction. Such devices may be fabricated in a completely improvised manner or may be an improvised modification to a US or foreign nuclear weapon

- **RDD** = Radiation Dispersal Device

Any device, including any weapon or equipment, other than a nuclear explosive device, specifically designed to employ radioactive material by disseminating it to cause destruction, damage, or injury by means of the radiation produced by the decay of such material.

- **RED** = Radiation Emitting Device

A radiation-emitting device is any device that is capable of emitting ionizing radiation when activated.

- **Environmental**



Public Health Responsibilities

1. Provide guidance to partners and the public
2. Provide guidance to the medical and healthcare community
3. Identify people who have been exposed to or contaminated with radiation
4. Population monitoring and follow-up registries
5. Provide K+ or Prussian Blue if indicated
6. Provide linkage for the health system
7. Assist with providing shelters, if indicated
8. Assist with Decontamination



2010 CSTE Assessment of State-level Radiation Emergency Preparedness

- “In nearly every measure of public health capacity and capability, the nation is poorly prepared to respond to a major radiation event.”
- The average subjective preparedness score for a radiation emergency was 4.54 on a scale of 1 to 10.



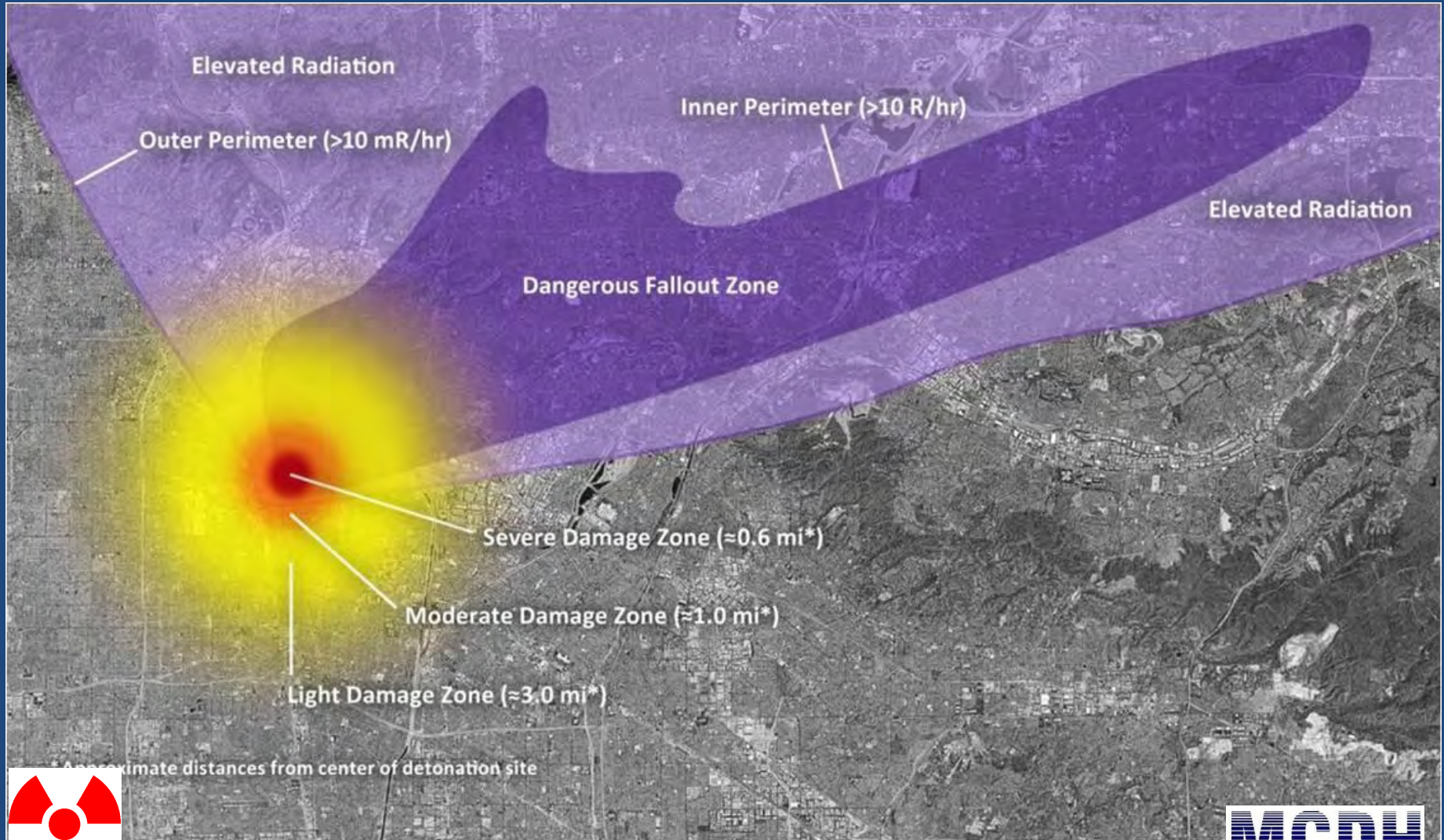
Where do I start?



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Planning

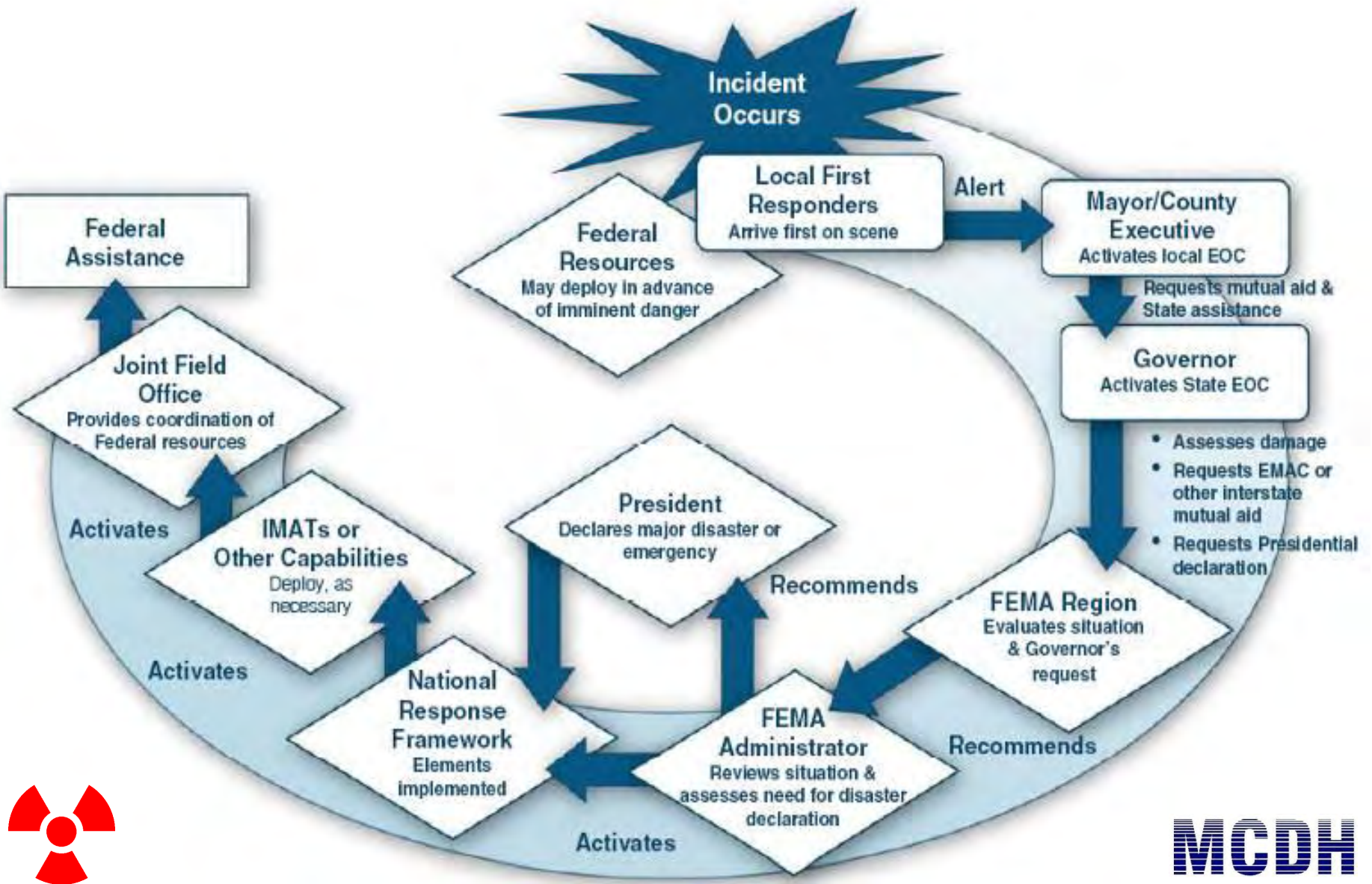


Planning



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Planning

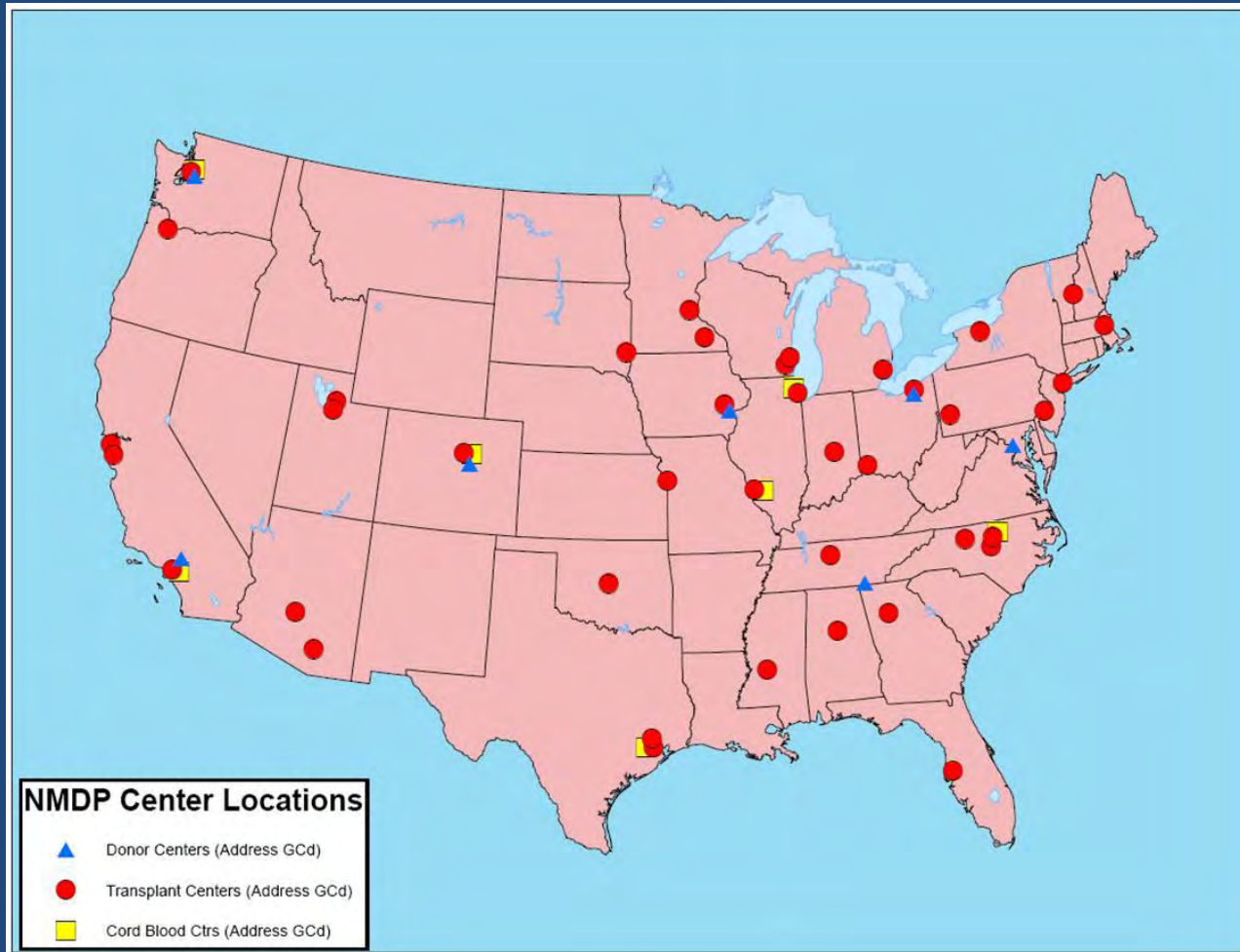


Planning



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Resources



RITN Distribution Across USA



Resources



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Resources



Armed Forces Radiobiology Research Institute
A United States Department of Defense research laboratory



U.S. DEPARTMENT OF HEALTH & HUMAN SERVICES

REMM

RADIATION EMERGENCY MEDICAL MANAGEMENT

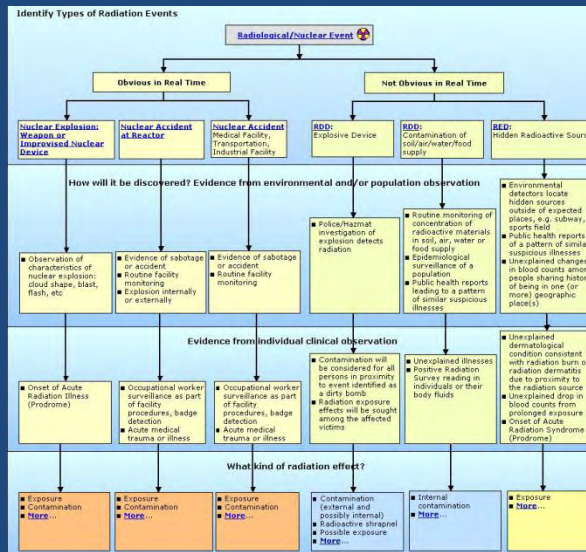
Guidance on Diagnosis & Treatment for Health Care Providers

Radiation Emergency Assistance Center/Training Site (REAC/TS) <http://orise.orau.gov/reacts/>

THE MEDICAL ASPECTS OF RADIATION INCIDENTS



radiation Emergency Assistance Center/Training Site



OSHA BEST PRACTICES

for

HOSPITAL-BASED FIRST RECEIVERS OF VICTIMS from Mass Casualty Incidents Involving the Release of Hazardous Substances



January 2005

OSHA Occupational Safety and Health Administration

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REMM RADIATION EMERGENCY MEDICAL MANAGEMENT www.orise.orau.gov

Resources

- Federal Radiological Monitoring and Assessment Center (FRMAC)
 - DOE Aerial Measuring System (AMS)
 - DOE Accident Response Group (ARG)
 - DOE National Atmospheric Release Advisory Center (NARAC)
 - DOE Radiation Emergency Assistance Center/Training Site (REAC/TS)
 - DOE Radiological Assistance Program (RAP) Team
 - Nuclear Incident Response Team (NIRT)
- Interagency Modeling and Atmospheric Assessment Center (IMAAC)
 - EPA Radiological Emergency Response Team (RERT)
 - EPA RadNet
 - VA Medical Emergency Radiological Response Team
 - DHS Domestic Nuclear Detection Office
 - DOD assets
- Division of Nuclear Safety, Illinois' Emergency Management Agency (IDNS)
- Argonne National Laboratory Radiation Emergency Preparedness (REP)
- City of Chicago Emergency Management Agency (CEMA)
- McHenry County Emergency Management Agency (McEMA)



It's important to recognize that we're not prepared to fully respond to this type of disaster. We will be figuring it out as we go, and incrementally increasing the capacity. -

- Rear Admiral Ali S. Khan, MD, MPH

Director, Office of Public Health Preparedness and Response

Bridging the Gaps: Public Health and Radiation Emergency Preparedness

March 22, 2011



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