

STATE OF COLORADO

**Preventative Radiological and
Nuclear Detection**

PROGRAM STRATEGY



December 22, 2014



COLORADO

**Division of Homeland Security
& Emergency Management**

Department of Public Safety

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**COLORADO PREVENTATIVE RADIOLOGICAL AND NUCLEAR DETECTION
PROGRAM STRATEGY**

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Acronym Key

DHSEM	Colorado Department of Homeland Security and Emergency Management
DNDO	Domestic Nuclear Detection Office
EOC	Emergency Operations Center
HSEEP	Homeland Security Exercise and Evaluation Program
IED	Improvised Explosive Device
IND	Improvised Nuclear Device
PRND	Preventative Radiological/Nuclear Detection
RDD	Radiological Disposal Device
TEP	Training and Exercise Plan
WMD	Weapon of Mass Destruction

Overview

“No matter how diligent our intelligence agencies are in collecting threat information, it is nonetheless imperfect. Dealing with the risk of attack requires understanding our limitations and focusing on the best things we do to prevent one...”

State of Colorado Homeland Security & All-Hazards Strategic Framework 2014-2016

Colorado’s vision for homeland security is to prevent, protect, mitigate, respond and recover from All-Hazards incidents, including acts of terrorism, enabling Colorado communities to be the most resilient in the nation. The State of Colorado 2014-2016 Homeland Security and All-Hazards Strategic Framework identified goals and strategies to address all-hazard and terrorism risks faced by Colorado with an understanding that capabilities enhanced to combat terrorism often enhance the ability to also manage natural disasters. These goals are reinforced by the 2014 Colorado Department of Public Safety Division of Homeland Security and Emergency Management Strategic Plan.

State of Colorado 2014-2016 Homeland Security & All-Hazards Strategic Framework

Goal 1: Reduce the risks to the citizens of Colorado, their businesses, and their local governments from significant All-Hazards incidents.

Strategies:

- a. *Develop and implement an information-sharing system(s) for the State of Colorado*
- b. *Conduct an annual threat assessment*
- c. *Mitigate identified risks*
- d. *Develop a risk communication program for citizen education and awareness.*
- e. *Make strategic investments to produce safer communities in Colorado that will attract and/or keep new economic development, which is required for a strong future.*

2014 Colorado Department of Public Safety Division of Homeland Security and Emergency Management Strategic Plan

2. Prevention Goal - Ensure an environment safe and secure from threats, hazards and incidents.

- 2.1. *Collect, assess and disseminate information regarding threats to the public’s safety and provide timely recommendations that are realistic and actionable.*
- 2.2. *Engage community members to be active participants in the prevention of acts of terrorism and disaster events.*
- 2.3. *Provide and promote an integrated, multi-disciplined, information sharing network to collect, analyze and disseminate information.*
- 2.4. *Assess threats to critical infrastructure and key resources and associated vulnerability through outreach, threat assessments and timely communication.*
- 2.5. *Provide analysis on suspicious activity reports and share information about suspected and known threats.*
- 2.6. *Provide support to agencies requesting assistance or resources for information-gathering, analysis, the development of intelligence products or investigation support.*
- 2.7. *Provide early warning through daily reports, special reports, and incident reports to numerous agencies representing a multitude of disciplines, taking an all-crimes all-hazard approach.*

The State of Colorado recognizes that radiological and nuclear threats exist and is striving to detect and report unauthorized attempts to import, possess, store, implement, or transport nuclear or radiological material. To counter this threat, Colorado has partnered with the Department of Homeland Security's Domestic Nuclear (DHS) Detection Office (DNDO) to implement a robust and coherent radiological/nuclear detection architecture. This partnership is part of a layered national defense system.

Colorado took the first step in this process in March 2014 by establishing a Preventative Radiological and Nuclear Detection (PRND) program, the development of which was managed by a PRND Working Group comprised of Federal, State and local agencies from across the Colorado public safety, public health and environmental protection disciplines. This working group will continue to provide the leadership required for this program to function in a collaborative and effective manner through implementation and sustainment.

The concept of the PRND program is to have a protection strategy resourced with the capability to perform intelligence, threat, and risk-driven public safety interdiction, and surveillance and detection throughout Colorado. The PRND program will provide a state-level reporting mechanism that will allow Colorado partners to share radiological data. This data will help identify a metric to inform resource deployment decisions and reduce the risk of radiation exposure to first responders and the public.

The complex and potentially catastrophic nature of the threat requires expertise and capabilities from a variety of disciplines. There is broad participation in the PRND program among police, fire, emergency management, and health disciplines throughout the state, the extent of which depends on jurisdictional authorities and funding.

The following program basis and sustainment structure were created through the multi-agency working group meetings facilitated by DNDO, as part of the 2014 Colorado PRND program development effort. This Strategy is a living document; it will be updated as needed to address changes in program strategy, goals, and risk information.

PRND Risk Management

Whether or not terrorist organizations are able to acquire nuclear or radiological material, their desire to do so is clear. Cooperative inter-agency PRND programs seek to not only deny the terrorists access to materials but also provide the ability to detect their movement or attempted use should they be successful in their acquisition attempts.

The nexus of weapons of mass destruction (WMD) and terrorism causes one of the gravest potential risks to the national security of the United States. A successful major WMD terrorist attack could result in hundreds or thousands of casualties and produce far reaching economic and

political consequences. The U.S. Government places the highest priority on working with a broad range of international and domestic partners, including State, local, and Tribal governments as well as private sector organizations, to implement effective partnerships to meet the global challenge of WMD terrorism.

The U.S. strategy for combating WMD terrorism relies on several key objectives, including:

1. Detecting and disrupting terrorists' attempts to move WMD materials, weapons or personnel by expanding our capability to detect illicit materials or weapons traveling within the U.S.
2. Denying terrorists' access to materials, expertise, and other enabling capabilities required to implement WMDs.
3. Implementing a range of deterrence strategies tailored to various WMD threats (Chemical, Biological, Radiological and Nuclear) and the individual actors who facilitate or enable those threats.
4. Seeking to contain, interdict, and eliminate the threat once a potential attack has been detected.

Some terrorist organizations, such as Al Qaeda, have openly stated their desire to acquire and use nuclear weapons. The diffusion of scientific and technical information, some of which is now available on the internet, has increased the risk that terrorists in possession of sufficient nuclear material may attempt to implement their own nuclear weapon. Terrorists may, however, seek to form ties with a variety of facilitators to implement their own nuclear capability. These facilitators may seek to profit from the sale of nuclear material, a completed device, or technical knowledge gathered from nuclear experts involved in a national nuclear program.

Additionally, some terrorists may seek to acquire radiological materials for use in a radiological dispersal device (RDD), such as a "dirty bomb". Although an RDD is far less destructive than the nuclear threat, the public panic and economic disruption caused by an RDD would be significant. In order to manage the potential risk posed by the radiological/nuclear threat, the PRND program focuses on enhancing several of the core capabilities of Colorado preparedness.

With its 104,000 square mile footprint within the core homeland of the United States and a variety of critical infrastructure and key resources, Colorado is at risk to the threat of a radiological or nuclear device being transported through, or utilized within, the State. Collaboration of Colorado police, fire, and health disciplines from throughout the region, via a unified and coordinated PRND program, should help mitigate the radiological/nuclear risk to the region and the continental U.S.

PRND Program Mission and End States

PRND Program Mission

The mission of the Colorado Preventative Radiological/Nuclear Detection (PRND) program is to protect its residents, visitors, economy, critical infrastructure, and natural resources and prevent against threats posed by the unauthorized use of radiological or nuclear materials. This mission is in alignment with the *2014-2016 State of Colorado Homeland Security & All-Hazards Strategic Framework* and the *2014 Colorado Homeland Security and Emergency Management Strategic Plan*.

Program End States

In support of the State of Colorado Homeland Security strategies, the Colorado PRND program strives for:

- A sustainable PRND program that ensures that participants in the field have the equipment, training, and technical support structure to help them quickly and successfully resolve radiation detection issues.
- A robust and efficient program that minimizes impacts on commerce and the public while avoiding undue operational impacts on the agencies that perform PRND operations.
- Collaborative PRND data/intelligence-sharing and incident communications coordinated through state, local, and public safety agencies and fusion centers.
- Uniformity of protocols and radiation detection equipment to foster interoperability and efficient training.

Program Coordination

The PRND Working Group constructed for program development will act as the initial home for ongoing PRND coordinative efforts. This working group is chaired by the Preparedness Program Manager in the Colorado Department of Public Safety's Division of Homeland Security & Emergency Management (DHSEM). Informal task forces (e.g. training and exercise, special events, plans, and capabilities) will be formed as necessary to continue the PRND program development and implementation. Routine meetings of the PRND Working Group will be used to maintain awareness of PRND activities with regards to training and exercise, state and local experiences and lessons-learned, gap reviews and continued capability development.

The PRND Working Group will include agency representatives from Federal, State and local law enforcement, fire departments, emergency management, core-city public safety-based hazardous materials and explosive ordnance teams, and public health specialists who play a role in the PRND program. The State PRND program encourages agencies to designate an Agency PRND Coordinator (by name or function) to support equipment monitoring, maintenance, training, and oversight of the program within their agency, and provide input into state-wide PRND activity planning.

The PRND Working Group will steward state-level and regional equipment procurement and distribution planning and participant responsibilities. The Working Group will maintain an inventory of equipment (via the Colorado WEBEOC) and collect regional lessons learned, usage, training, and drill/exercise statistics from participating agencies.

The Colorado PRND Working Group is responsible for performing periodic State equipment gap analysis, technology review, and general capability evaluations to inform the on-going monitoring and procurement process. The PRND Working Group will facilitate equipment comparisons and demonstrations to ensure the Colorado PRND program appropriately advances with evolving technologies and capabilities.

Training and Exercise

In support of the Colorado PRND Program Strategy, preventative radiological/nuclear detection will be incorporated into State and regional training and exercise programs using the Colorado State Training and Exercise Plan (TEP) process, through:

- A Homeland Security Exercise and Evaluation Program (HSEEP)-consistent PRND exercise program.
- A process to coordinate the training and exercise activities of Colorado jurisdictions in order to maximize efficiency and improve interoperability.
- Provision of training appropriate for specific roles within the PRND program.
- Development of exercise scenarios that emphasize the need for well-defined roles and responsibilities.

PRND will be included in the Colorado TEP gap analysis to ensure appropriate prioritization of training efforts. It is the goal and intent of this strategy to bring cost effective, sustainable, and relevant training to the state and local agencies that includes Colorado-specific issues and conduct of operations information. Colorado will utilize a combination of Federal, State and regional and local training options to deliver effective training to the variety of Colorado law enforcement and public safety disciplines.

Although the Preventative Radiological Nuclear Detection program is primarily a function of public safety agencies, success of the program is dependent upon socialization of the program across disciplines as well as our other private sector, non-governmental organizations and the general public. This socialization to our extended partner group will be appropriately tailored so that we can engage them in our prevention efforts.