



# Applying Lessons Learned From the COVID-19 Global Pandemic to Increase Radioactive Source Security System Resilience

Ryan Swinney, Martin Sandoval, Mark Ekman, and Bryce Smith

International Atomic Energy Agency, Vienna International Centre P.O. Box 100, A-1400 Vienna, Austria

As part of the Office of Radiological Security (ORS) program, NNSA and its partner National Laboratories work with volunteer partner sites to design, install, and ensure continued operation of physical security systems to protect radiological sources.

## CHALLENGES

**Priorities** – New considerations now require attention of security system managers

**Resources** – Challenging business situations have meant rethinking the way resources are distributed (time, space, money, manpower)

**Emerging threats** – Sites now have to consider all aspects of networked systems as potential areas to be taken advantage of by an adversary

**Uncertainty** – risk associated with unpredictable and unknown future events that could have a negative impact

**Team morale / motivation** – decrease in staff motivation and engagement

**Staff absenteeism or inability to hire / maintain staff** – difficulties faced by facilities in retaining experienced, knowledge, workforce

**Remote worker / social distancing requirements** – requirements and / choices to perform work from offsite location or in a distanced manner

**Supply chain issue** – inability / inconsistency in obtaining and providing goods and services

**Increasing costs** – increased (and rising) prices for goods and services

**Travel / site visitor restrictions** – obstacles to or inability for visitors and contractors to come in person

## LESSONS LEARNED

**Preventative maintenance** – Reacting to equipment issues is much more difficult during abnormal operations, which labor shortages and supply chain issues exacerbate. Preventative maintenance is key in precluding extended downtime.

**Relationships are key** – When face-to-face meetings are impossible, maintaining relationships with vendors, suppliers, customers, staff and management is crucial to preventing and or reacting to security issues. The hardest problem to solve is the one never communicated.

**Monitoring evolving threats** – Understanding the spectrum of factors that could threaten security is critical (staff morale, cyber-physical, funding shortfalls, component failures, lack of training).

**Considering interaction with other areas** – Understanding how security interacts with other business areas (I. E. Environment, Health, and Safety or IT) can help identify opportunities for improvement or critical dependencies.

**Creating/Updating policies and procedures** – The way work is done fundamentally has changed during the pandemic and facilities now have the opportunity to rethink procedures to enhance security.

**Rethinking of roles and responsibilities** – New ways that work gets done present novel opportunities to rethink roles and responsibilities which could allow increased security flexibility and/or efficiency.

**Transition to remote/virtualized work activities**- The expertise in remote operations acquired during the pandemic can continue to be of use in extending the reach and efficiency of remote engagements.

**Maintaining staff awareness, outlook, and morale** – Ensure that staff understand the security threat, have sufficient belief in the security approach and are sufficiently satisfied with their work such that they become an effective part of the security system.