Risk Communication

Disaster Response Consequence Management

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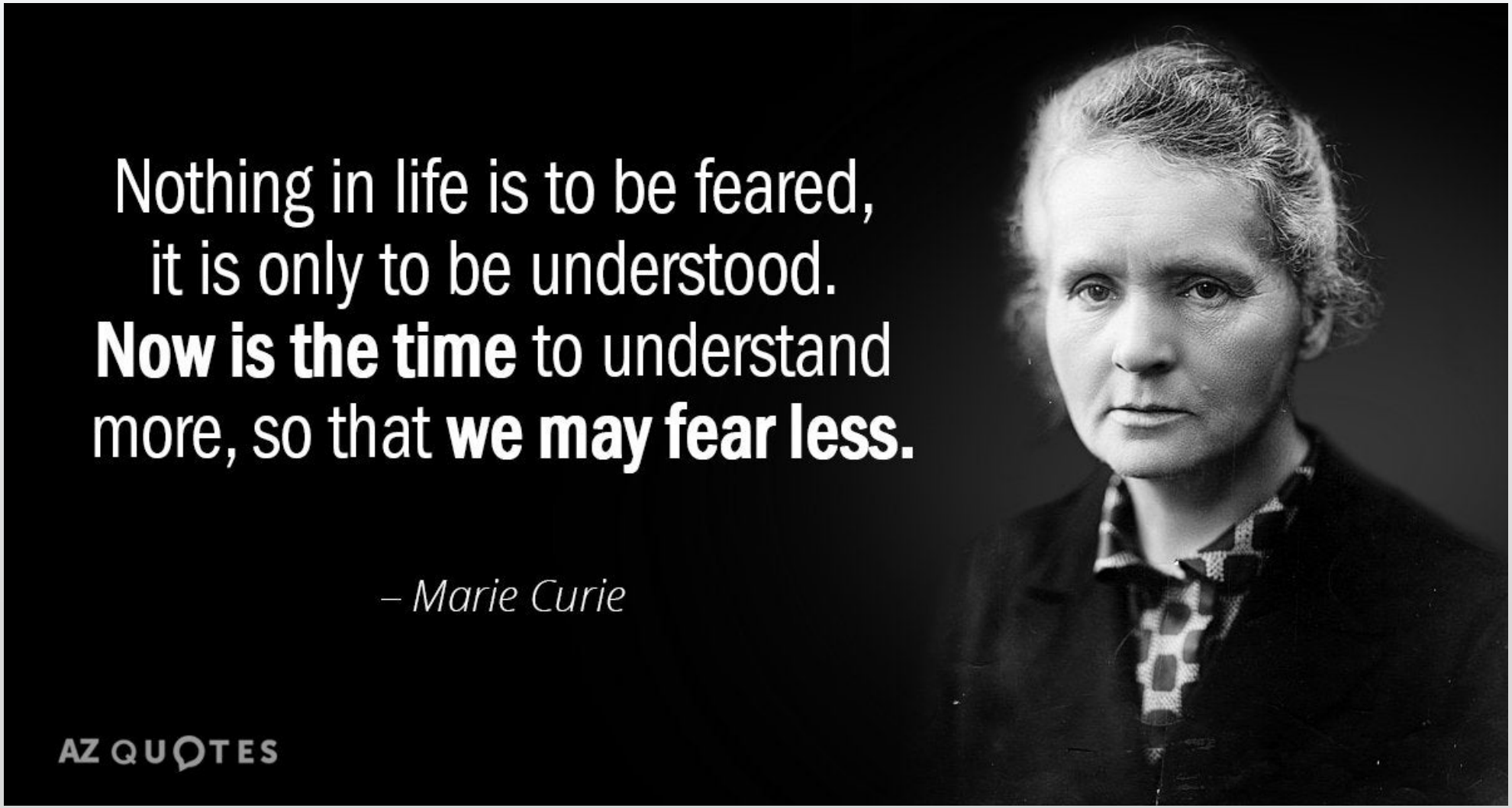
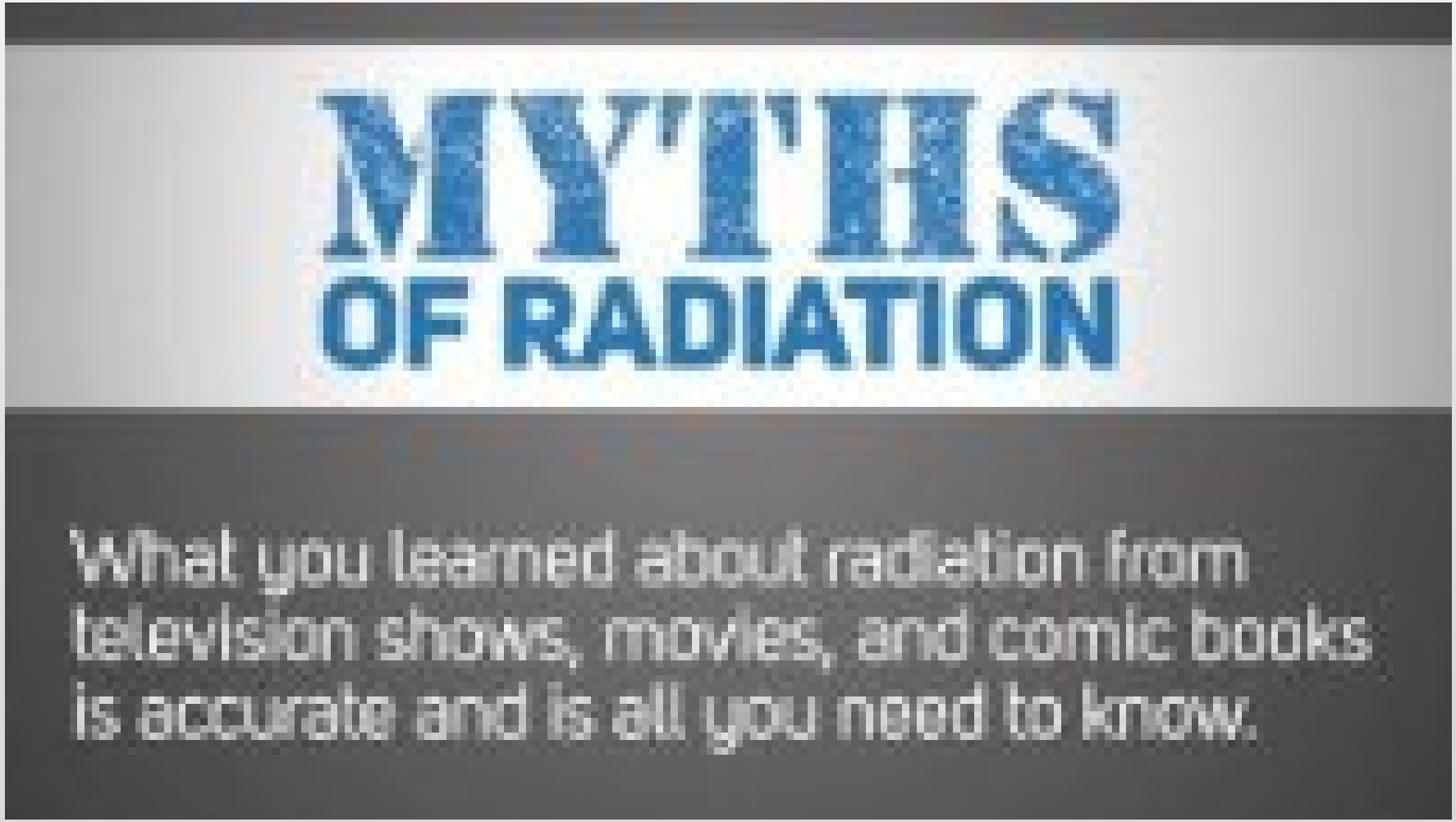
Office of Counterterrorism and Counterproliferation
Nuclear Incident Policy and Cooperation

Objective

- Research has shown that radiation emergencies are feared and poorly understood by the public
- There are many myths about radiation
- During an emergency people overestimate risks and underestimate official and reassuring messages
- It is crucial to establish effective and accurate communication with the public


Nothing in life is to be feared,
it is only to be understood.
Now is the time to understand
more, so that we may fear less.
– Marie Curie
AZ QUOTES

Radiation Myths



Common Myths

- The smallest dose of radiation is harmful
- There is nothing you can do to protect yourself from exposure
- Potassium Iodide tablets are the cure
- It doesn’t matter where you are or what you do, there is no way to survive a nuclear detonation
- The best thing to do after a release of radiation is to evacuate

Resistance to Response

- It is natural for people to overestimate risks
- Most people have little to no knowledge about radiation
- Many people do not understand nor want to shelter in place
- It is hard to believe in simple measures such as time or decontamination
- People are more likely to take protective measures if they know why

Establish Communication

- Research from Fukushima and other responses show that message repetition and message consistency are important
- A public information officer/group should handle communications with the public and media
- As a responder expect people to ask you too
- You may have to brief your colleagues, supervisors, and participants from other agencies
- Establishing effective and timely communication can help save lives and keep people safe

Effective Communication Benefits

- Can save lives and reduce risks to those affected
- Builds trust with the responding agencies
- Helps response and recovery efforts
- Provides people with positive actions to take
- Reduces rumors and misinformation
- Eases burden on critical resources like hospitals

Effective Communication Steps

1. Be First
   - People are more likely to believe the first message they here
   - People will turn to media and social media sources
2. Be Right
   - Accuracy is critical
   - Wrong statements will result in lost trust
3. Be Credible
   - Maintain your reputation as a credible source of information

Effective Communication Steps Cont.

4. Express Empathy
   - Demonstrate compassion
   - “People don’t care how much you know until they know how much you care
5. Promote Action
   - Provide clear instructions on what people need to do in order to protect themselves
6. Show Respect
   - Respect everyone's cultures and beliefs

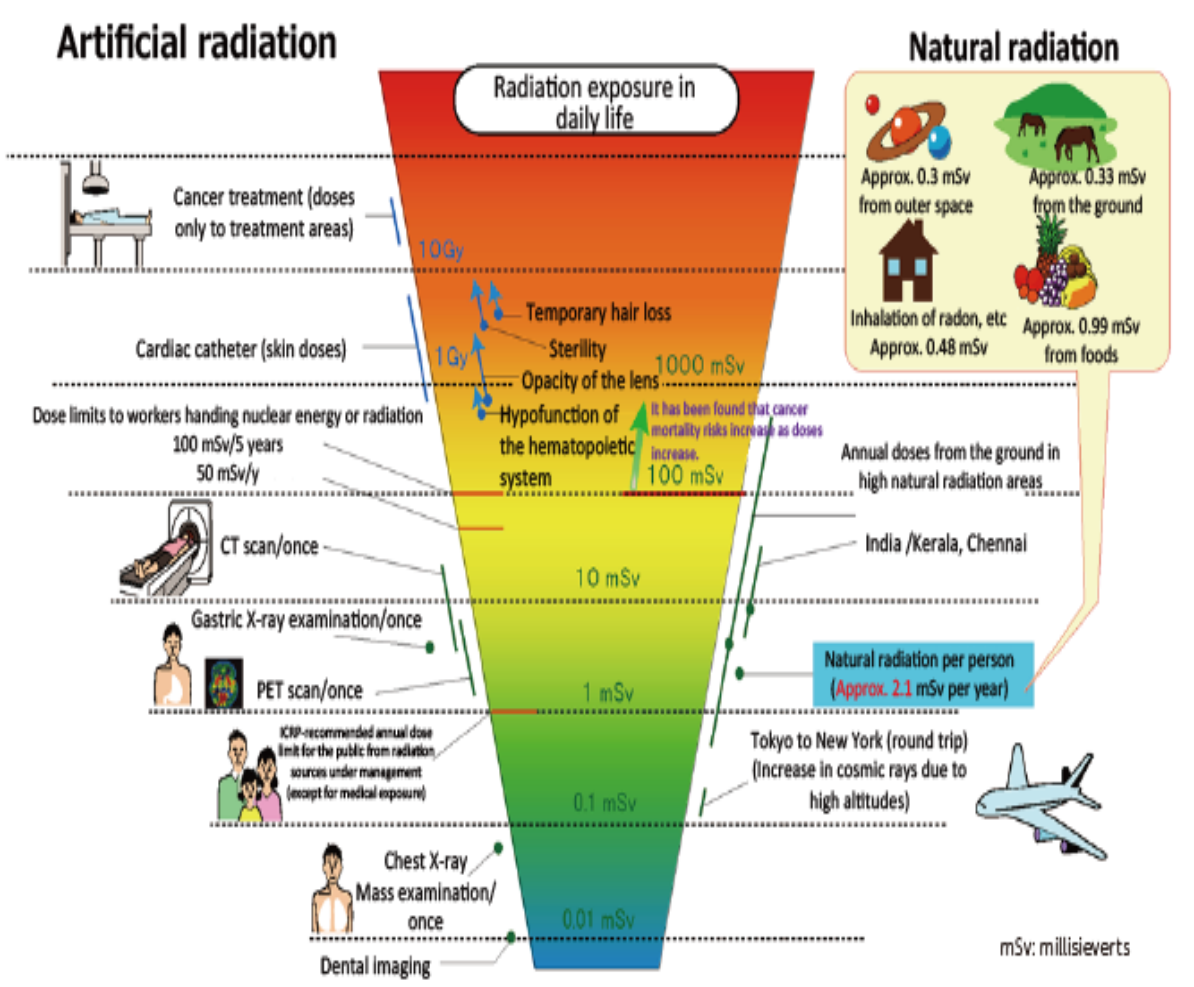
Be a Trustworthy Spokesperson

- Your audience should view you as credible and competent
- Maintain frequent eye contact
- Have a confident voice
- Do not hide your hands
- Maintain good posture
- Try to reduce nervous movements like twitching, shaking your legs, tapping your feet

Communication Tips

- Stay calm
- Convey empathy and caring
- Communicate honestly
- Be sensitive and responsive to public concerns
- Clarify questions
- Stay on your message
- Never speculate nor comment on issues outside your areas of expertise

Provide References



Helpful aids/glossaries

- Glossary of radiation terms such as - https://www.nrc.gov/reading-rm/basic-ref/glossary.html - from the NRC
- Manuals used by your countries decision makers

Common Questions

- What type of emergency is this?
- Was this a terrorist attack?
- Am I exposed?
- Are my children at school safe?
- Are my pets safe?
- What should I do if I think I am contaminated and am asked to evacuate?
- What do I do if I've been contaminated?

Example – Transportation Accident

- A properly marked/placarded truck carrying solid and liquid radioactive waste from a hospital rolled over just outside of a major city. Containers of mixed rad/bio waste were bumped off of the truck and opened due to the force of the impact. The accident has forced closure of a major commuter route during the afternoon rush hour and the media is out in full force. The area is contained and local hazmat teams are at the scene. Although radiation experts have determined the threat to the public is low, the media attention is extremely high.

What messages should we give?

- This is a spill of hazardous material.
- Radioactive material is a hazardous material; local response teams are trained to respond to a variety of hazardous materials including radioactive materials.
- Responders will make recommendations for protective actions if they are needed.
- The radioactive material has been contained.
- We continue to monitor the situation and will provide updates.

Example - RDD

- An explosion in a train station in the city has killed 8 people and injured 13. Readings by local emergency responders have determined that the explosive device contained radioactive materials. The area around the station has been evacuated and blocked off as a crime scene, and state and federal officials are also on the scene.

RDD General Information

- A dirty bomb is a type of RDD that spreads radioactive materials with explosives. – First responders will cordon off the area for safety and for investigative purposes. – The area may be evacuated as a safety precaution.
- The effects from a dirty bomb depend on a number of factors: – The amount of explosive. – Weather conditions like wind speed and direction during and after the explosion. – The relative quantity and type of radioactive material used
- Because of the limited amount of radioactive material anticipated in RDDs, measurable health effects are unlikely.

Activity

- Split into groups
- Discuss what initial messages you or your colleagues may have to brief immediately following the explosion
- You may have to brief the media, your supervisor, or other agencies that are arriving on scene to provide assistance

Messages You Could Use

- This was not a nuclear bomb
- The explosion spread a limited amount of radioactive material
- Because of the limited amount of radioactive material anticipated in a dirty bomb, measurable health effects are unlikely
- Avoid the area
- If you have been injured, seek medical attention

Messages Continued

- If you think you have been contaminated, shower and change into clean clothes
- Place clothing in a plastic bag and seal it
- Bagged clothing can be examined later to determine if you were contaminated
- We are continuing to monitor the situation and will alert you to any actions you should take to protect yourself

Scenario 2: Nuclear Power Plant - Questions

- What happened?
- Has anyone been hurt or killed?
- When did this incident occur?
- Was it deliberate or was it a terrorist attack?
- What caused the release of radioactive material and how much radioactive material has been released?
- Is it still occurring or is the situation under control?
- What's being done to stop the release? Where is the plume going?
- How far does it extend?

Activity

- In your groups work together to come up with potential answers
- Remember the 6 steps: Be First, Be Right, Be Credible, Express Empathy, Promote Action, Show Respect

Questions - Assume Accident Occurred 1 Hour Ago

- What affects has this had on the communities? (Hint – it is too early to know any specifics)
- What should people do if they are told to evacuate?
- What should people do if they are told to shelter in place?
- Will Potassium Iodide protect people from the radiation?
- What is being done in response to the release of radiological material?

Summary

- We must establish effective communication
- Be First, Be Right, Be Credible, Express Empathy, Promote Action, & Show Respect
- Provide updates and maintain message consistency
- Speak plainly, avoid technical terms and acronyms
- Stay calm, stay confident, and stick to the known facts

Questions?