

Psychological Safety at Work

Jim Floyd, DHA, MS, MEd, DAAETS

What if...

you came to work every day feeling completely safe to be yourself, to ask for help, and to challenge the way things have always been done?

You don't have to live with the anxiety of a culture that punishes mistakes and silences new ideas.

Psychological safety reduces errors, fosters innovation, and encourages learning.



fearless organization

Creating Psychological Safety in the Workplace for Learning, Innovation, and Growth

Amy C. Edmondson

HARVARD BUSINESS SCHOOL



I have defined psychological safety as the belief that the work environment is safe for interpersonal risk taking.

(p. 28)



Creating **Psychological Safety** in the Workplace for Learning, Innovation, and Growth

Amy C. Edmondson

HARVARD BUSINESS SCHOOL





Psychological safety is present when colleagues trust and respect each other and feel able – even obligated – to be candid.

(p. 28)



Creating **Psychological Safety** in the Workplace for Learning, Innovation, and Growth

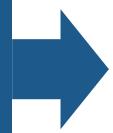
Amy C. Edmondson

HARVARD BUSINESS SCHOOL



Impression Management

No one wants to look:



So we:

- Ignorant
- Incompetent
- Intrusive
- Negative

- Don't ask questions
- Don't admit weakness or mistakes
- Don't offer ideas
- Don't critique the status quo

The Four Stages of Psychological Safety



Inclusion Safety: I feel safe to be myself.



Learner Safety: I feel safe to ask questions and learn.



Contributor Safety: I feel safe to contribute ideas.



Challenger Safety: I feel safe to challenge the status quo.

TIMOTHY R. CLARK

PSYCHOLOGICAL SAFETY

> Defining the Path to Inclusion and Innovation





//

As I learned firsthand, the absence of physical safety can bring injury or death, but the absence of psychological safety can inflict devastating emotional wounds, neutralize performance, paralyze potential, and crater an individual's sense of self-worth.

TIMOTHY R. CLARK

PSYCHOLOGICAL SAFETY

Defining the Path to Inclusion and Innovation

(p. 7)



The implication is that organizations that lack psychological safety and compete in highly dynamic markets are galloping their way to extinction.

TIMOTHY R. CLARK

PSYCHOLOGICAL SAFETY

Defining the Path to Inclusion and Innovation

(p.7)



11

Psychological safety is a condition in which you feel (1) included, (2) safe to learn, (3) safe to contribute, and (4) safe to challenge the status quo—all without fear of being embarrassed, marginalized, or punished in some way.

TIMOTHY R. CLARK

PSYCHOLOGICAL SAFETY

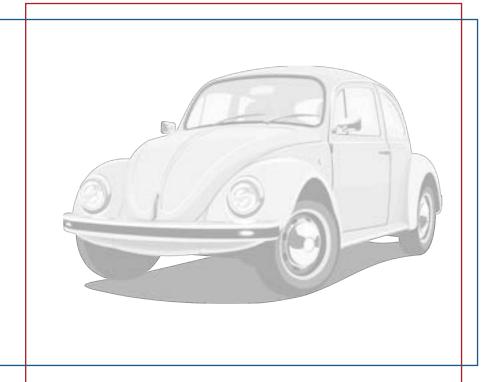
> Defining the Path to Inclusion and Innovation

(p. 8)



Case Study #1

VW's Emissions Scandal

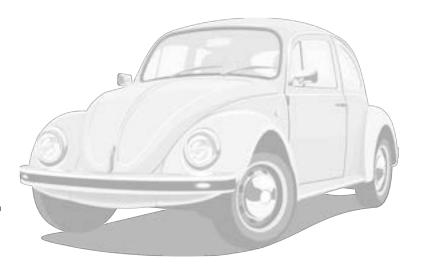




In 2008, Volkswagen was found to be cheating in emission tests by making its cars appear far less polluting than they were. The US Environmental Protection Agency discovered that 482,000 VW diesel cars on American roads were emitting up to 40 times more toxic fumes than permitted - and VW later admitted the cheat affected 11m cars worldwide.



It meant that far more harmful NOx emissions, including nitrogen dioxide, were pumped into the air than was thought – on one analysis, between 250,000 to 1m extra tonnes every year. The hidden damage from these VW vehicles could equate to all of the UK's NOx emissions from all power stations, vehicles, industry and agriculture.



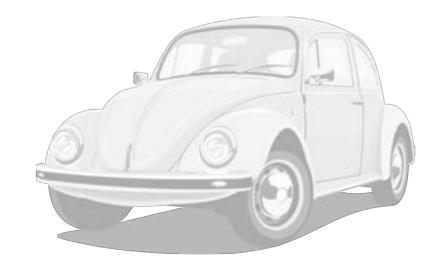


VW's "defeat device" was not a physical device but a programme in the engine software that told the car if it was being driven under test conditions - and only then pull out all the anti-pollution stops. "Clean diesel" engines cut emissions through techniques such as adjusting air-fuel ratios and exhaust flows. When running normally, requiring greater performance, VW's controls would not operate in the same way.

The fumes can cause inflammation of the airways and worsen breathing for anyone. But NOx emissions can also react with other compounds to cause more serious respiratory conditions and aggravate heart problems. Long-term exposure to the pollution hastens death: research this year linked high levels of NOx to 9,500 premature deaths annually in London alone.



Ferdinand Piëch, the immensely powerful former chief of Volkswagen's supervisory board, is more than likely the root cause of the VW diesel-emissions scandal. Whether he specifically asked for, tacitly approved, or was even aware of the company's use of software to deliberately fudge EPA emissions testing is immaterial.

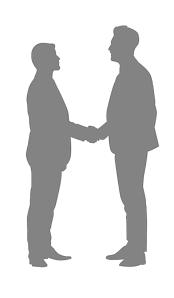




I sat next to him at an industry dinner in the Nineties, just after the fourthgeneration Golf had debuted at the Frankfurt show.

I told him, "I'd like to congratulate you on the new Golf. First of all, it's a nicelooking car, but God, those body fits!"

"I'll give you the recipe. I called all the body engineers, stamping people, manufacturing, and executives into my conference room.



And I said, 'I am tired of all these lousy body fits. You have six weeks to achieve world-class body fits. I have all your names. If we do not have good body fits in six weeks, I will replace all of you. Thank you for your time today. "

"That's how you did it?"

"Yes. And it worked."



That's the way he ran everything. It's what I call a reign of terror and a culture where performance was driven by fear and intimidation.



He just says, "You will sell diesel in the U.S., and you will not fail. Do it, or I'll find somebody who will."



The guy was absolutely brutal.

I imagine that at some point, the VW engineering team said to Piëch, "We don't know how to pass the emissions test with the hardware we have."

The reply, in that culture, most likely was, "You will pass! I demand it! Or I'll find someone who can do it!"



In these situations, your choice was immediate dismissal or find a way to pass the test and pay the consequences later.

Human nature being what it is—if it's lose your job today for sure or lose your job maybe a year from now, we always pick maybe a year from now.



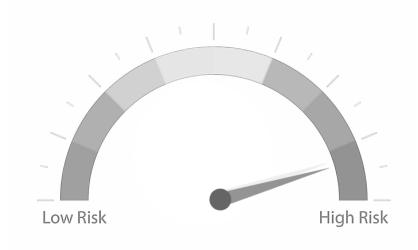


That management style gets short-term results, but it's a culture that's extremely dangerous.



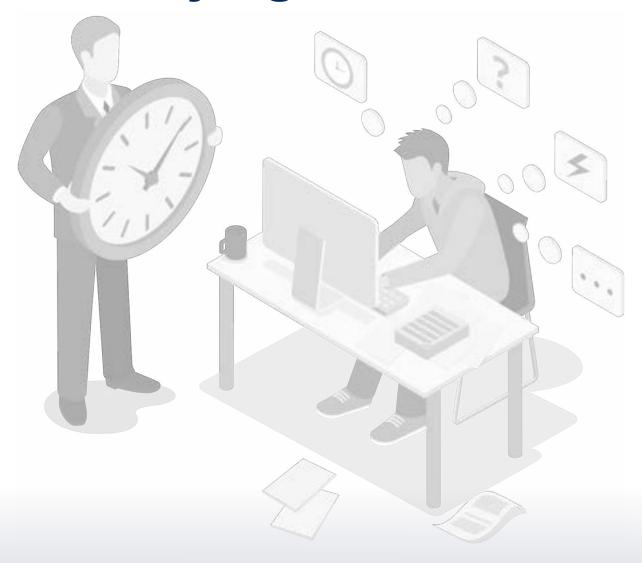


Look at dictators. Dictators invariably wind up destroying the very countries they thought their omniscience and omnipotence would make great. It's fast and it's efficient, but at huge risk.



-Bob Lutz





Fear-Based Leadership:

Micromanagement, blame culture.

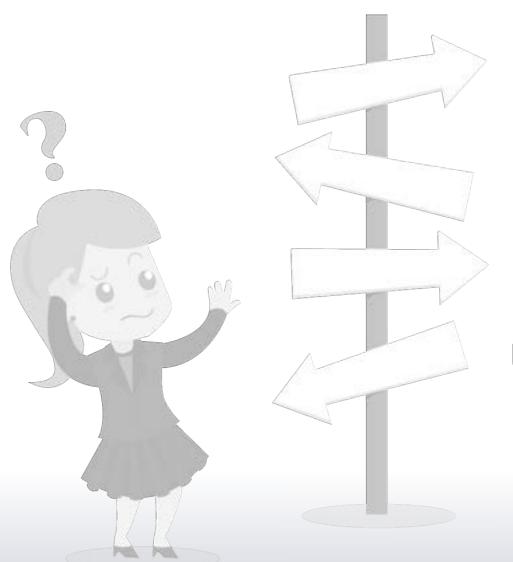




Toxic Communication:

Sarcasm, gossip, passive-aggression.





Lack of Clarity:

Unclear roles or expectations.





High-Stakes Environments:

Where success is prioritized over learning.

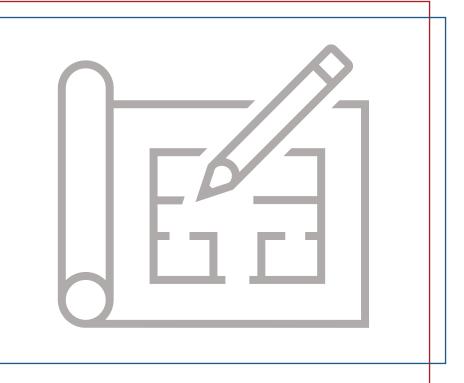


If you only welcome good news, you create fear that means people avoid telling you the truth Setting high standards is important, but it should not be detrimental to psychological safety (anxiety zone) If you do not have psychological safety, it can create an illusion of success, that turns into failure Recognise small failures early and you can usually reduce the size and impact of future large failures



Case Study #2

Barry-Wehmiller





Barry-Wehmiller is, a \$3 billion capital equipment and engineering consulting company that is well-known for having created an organization with a high-level of employee trust.





One of the key elements behind the success of Barry-Wehmiller is their desire to react to the frustrations of their employees and to ask them for input on improvements that can be made within the organization.





Key to this was making employees feel comfortable that they could raise their concerns and vent their anger about issues in the workplace.



All of this helped develop a culture of openness and a principle that employee's opinions were cared for and considered a positive contribution.



Aside from asking for input, they also removed the things they felt demonstrated a lack of trust for employees – time clocks, break bells, cages that locked away inventory were all removed and with it, the trust grew.



Barry-Wehmiller recognised that in psychologically safe environments, team members feel encouraged to ask for clarification, to point out critical errors, and even to share new and challenging ideas.





Psychological Safety Questions

How included do you feel in this team?

How much trust do you have in your colleagues?

How confident do you feel to admit mistakes?

How confident do you feel to be yourself?





Comfort Zone



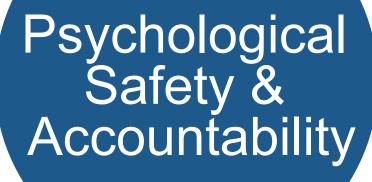
Apathy Zone



Learning Zone



Anxiety Zone



High



What Psychological Safety is NOT





- About being nice
- Dependant on personalities
- An alternative word for trust
- Lowering Standards



How well can you predict the outcome of your action?



Ambiguity





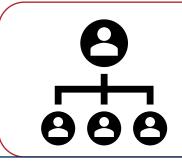
How much do you know about the situation?



C

A





Leadership Commitment & Behavior



Build Trust & Mutual Team Respect



Promote Open Communication & Voice





Establish Clear Expectations & Roles



Foster a Culture of Learning & Innovation

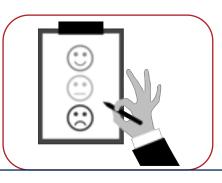




Invest in Training & Development for Psychological Safety



Design Supportive Physical & Virtual Environments



Monitor, Evaluate, & Evolve Psychological Safety Initiatives





Prioritize
Mental Health &
Well-being



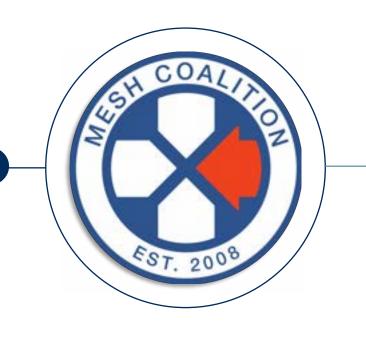
Strengthen
Ethical &
Safety Climate







THANK YOU



Jim Floyd, DHA, MS, MEd, DAAETS

Organizational Psychology Consultant





www.meshcoalition.org

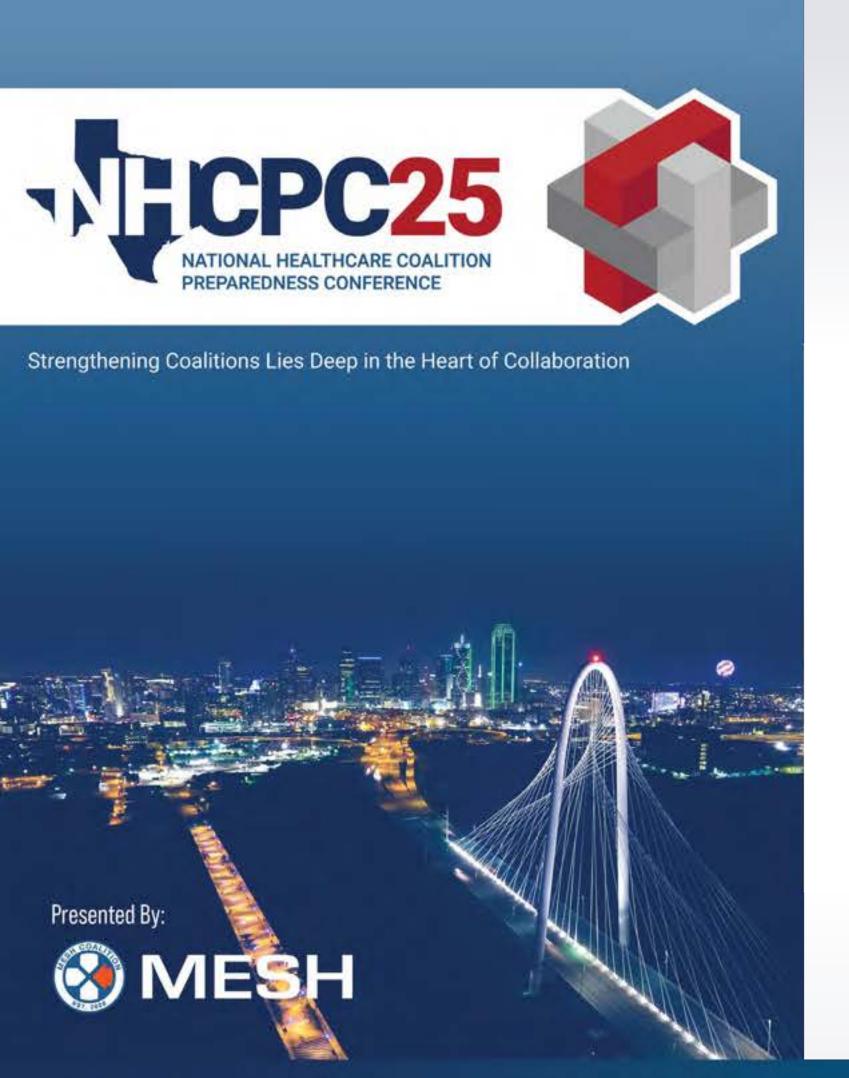


jfloyd@meshcoalition.org



317.914.2431





Thinking Ahead of the 2026 FIFA World Cup:

A Chemical and Radiological/Nuclear Emergency Preparedness

Ziad Kazzi, MD, FAAEM, FACEP, FACMT, FAACT
Alex Isakov, MD, MPH



Thinking Ahead of the 2026 FIFA World Cup: Chemical and Radiological/Nuclear **Emergency Preparedness** Preparedness for your Hospital

Ziad Kazzi, MD, FAAEM, FACEP, FACMT, FAACT Professor of Emergency Medicine,

Associate Medical Director, Southern Regional Disaster Response System (RDHRS Region IV)

Assistant Medical Director, The Georgia Poison Center Member, Executive Committee, Radiation Injury Treatment Network Member, National Council on Radiation Protection and Measurements

Alex Isakov, MD, MPH
Professor of Emergency Medicine
Chief, Prehospital and Disaster Medicine Section
PI, Southern Regional Disaster Response System
(RDHRS Region IV)
Emory University

Our Objective after this Presentation is to prepare to be able to



IN A CHEMICAL OR RADIOLOGICAL MASS CASUALTY INCIDENT





Disclosure

• I do not have any conflicts of interest to disclose

After notification of a mass casualty incident in the Emergency Department:

- Activate the external disaster plan and the Hospital EOC. Set up Incident Command
- Alert internal stakeholders
- Secure the facility
- Maximized available treatment space
 - Expedite discharges
 - Postpone elective surgeries
 - Postpone elective radiographic procedures
- Arrange for staffing including specialized care
- Arrange for supplies including drugs and equipment
- Communicate with external stakeholders (EMS, Fire, PH, EMA, Healthcare Coalitions, Red Cross, News Outlets)

Additional items to prepare in a chemical incident

- PPE
- Decontamination
- Expert support
- Testing capabilities
- Antidotes







PPE Levels A and B: Typically, not needed in an ED setting

PPE Level
C: Needed
in an ED
setting



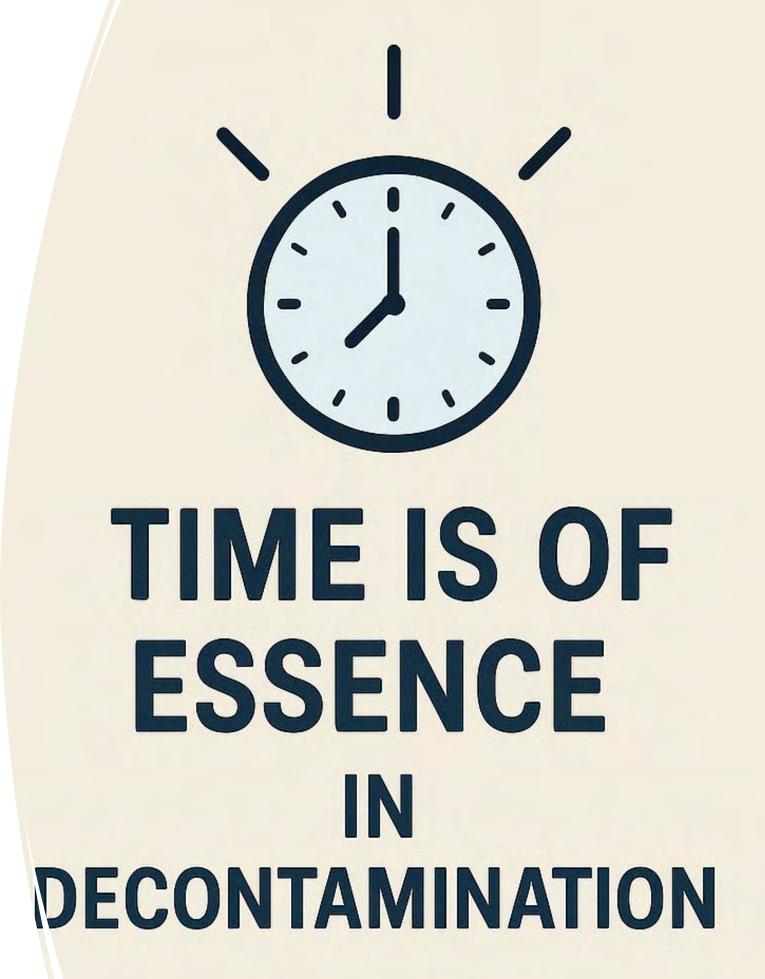
Level D:
Default in the ED



Decontamination: Wet versus Dry

Emergency Decontamination

- -Clothes removal
- —Dry decontamination



Technical Decontamination: Ambulatory or Non-Ambulatory



Do Not Forget Active Drying

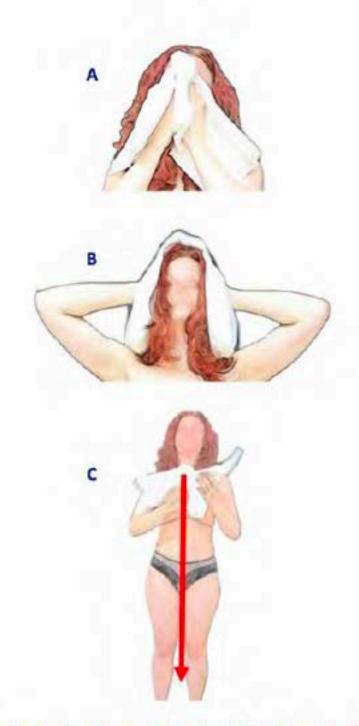


Figure 38: Process for active drying. Start with the face (A), tilt head back to dry the hair/head (B), then progressively move down the body (C).







POISON EMERGENCY? CALL 1-800-222-1222 OR VISIT POISONHELP.ORG

AMERICA'S POISON CENTERS PARTNERS

HOME ABOUT > NEWS & ALERTS NATIONAL POISON DATA SYSTEM > PREVENTION > MEMBER CENTER LOGIN



America's Poison Centers represents 55 poison centers across the country, and through our national Poison Help line (800-222-1222) and website. PoisonHelp.org, we provide all Americans expert advice available 24/7/365, at no cost. We also maintain the National Poison Data System® (NPDS), our nation's only near real-time poisoning data surveillance system, integrating the latest information from across Poison Centers.

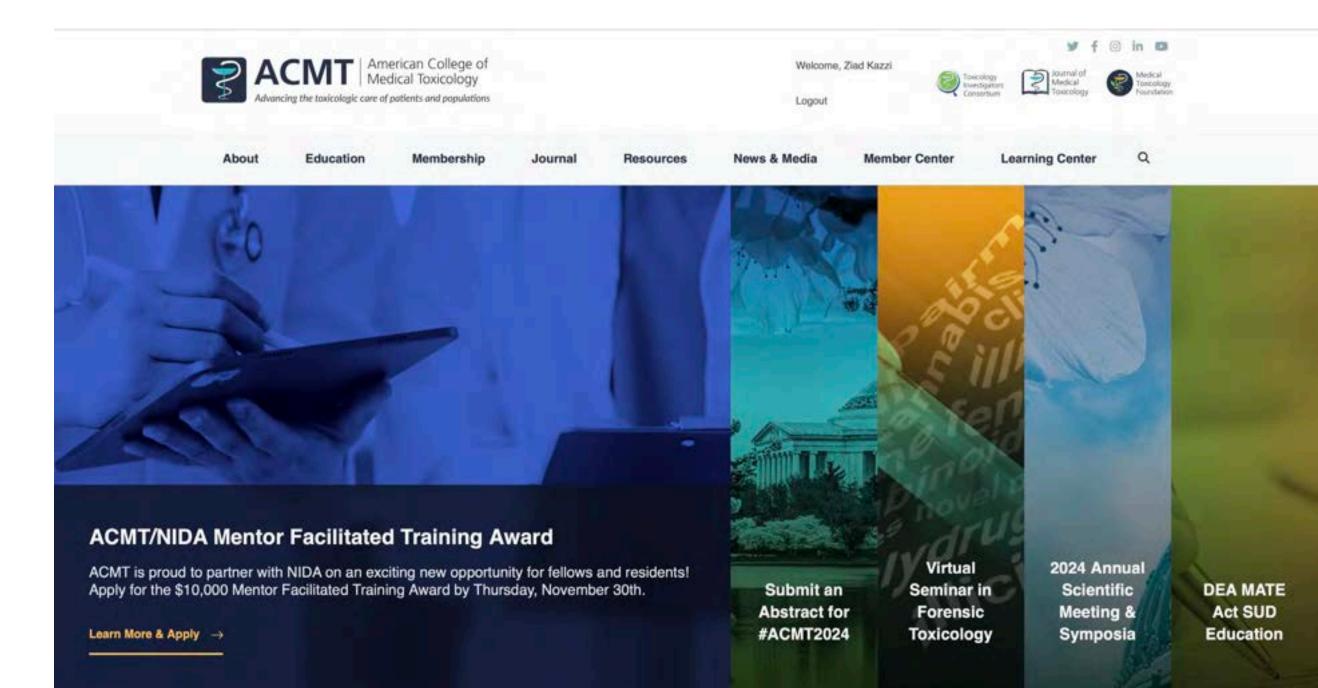
VISIT POISONHELP OR



Poison Centers: <u>America's Poison</u> Centers



Medical Toxicologists: <u>American College of Medical</u> <u>Toxicology</u>





The American Academy of Clinical Toxicology (AACT)

The American Academy of Clinical Toxicology (AACT) was established in 1968 as a not-for-profit multidisciplinary organization uniting scientists and clinicians in the advancement of research, education, prevention and treatment of diseases caused by chemicals, drugs and toxins.

American Academy of Clinical Toxicology

Additional Resources

Industrial Hygienists

Industrial hygienists are scientists and engineers committed to protecting the health

Hazmat Specialists or Hazardous Materials Specialists

Image SourceL https://www.natlenvtrainers.com/hazwoper-training-requirements



Clinical Diagnosis versus Laboratory Diagnosis

- Many agents cause non-specific and overlapping clinical presentations
- Clinicians lack knowledge/experience about certain chemical, radiological and blast injuries
- Some chemical agents and all radiological exposures have delayed presentations
- Resources may not be available for testing in a mass casualty incident
- Laboratory testing may not be available for specific agent

Collection of clinical signs and

symptoms that

point to one or

more toxic

agents

Some Examples of Chemical-Radiological-Explosive Toxidromes

Irritant (highly and moderately water soluble)

Asphyxiant

Cholinergic

Anticholinergic

Sedative

Opioid

Stimulant

Corrosive or Caustic

Hydrocarbons and Substituted Hydrocarbons

Blast Injuries

Acute Radiation Exposure

MEDICAL COUNTERMEASURES



The Chempack

 Nerve agents and Organophosphates





RESPONSE OPERATIONS - HEALTH CARE READINESS - MEDICAL COUNTERMEASURES AND BIODEFENSE - PARTHERSHIPS TOOLS COVID-19 -

Strategic National

Stockpile

About the SNS

Stockpile Products

CHEMPACK

CHEMPACKs are containers of nerve agent antidotes placed in secure locations in local jurisdictions around the country to allow rapid response to a chemical incident. These medications treat the symptoms of nerve agent exposure and can be used even when the actual agent is unknown.



Emergency Preparedness and Training and Exercise + Watch Us in Action

Because these antidotes must be administered quickly, the CHEMPACK team maintains 1,960 containers strategically placed in more than 1,340 locations in the United States. More than 90 percent of the U.S. population is within 1 hour of a CHEMPACK location. Most are located in hospitals or fire stations selected by local authorities to support a rapid hazmat response and can be accessed quickly if hospitals or first responders need them.

Nerve Agent EUA Information

On April 11, 2017, the U.S. Food and Drug Administration (FDA) issued an Emergency Use Authorization (EUA) to permit the emergency use of the 2 mg atropine auto-injector, manufactured by Rafa Laboratories, Ltd. On May 23, 2017, FDA amended the EUA to also permit the emergency use of pediatric strengths (i.e. 0.5 mg and 1 mg) of this atroning auto-injector. On January 24, 2018, EDA

⊞ Watch SNS Videos O SNS in Pictures [3]

23

More than 90 percent of the U.S. population is within 1 hour of a CHEMPACK location.

Other Antidotes are not in the SNS

Antidote	Indication
Hydroxocobalamin (IV)	Cyanide
Naloxone	Opioids
Benzodiazepines	Seizure inducing agents
Nithiodote (Sodium and Amyl Nitrite)	Cyanide
Methylene Blue	Methemoglobin Inducers
Calcium Gluconate or Chloride	Hydrofluoric Acid White Phosphorus

Additional items to prepare in a radiological incident

- PPE
- Decontamination
- Radiation detectors
- Expert support
- Testing capabilities
- Antidotes
- Medical countermeasures

Examples of Radiation Detectors



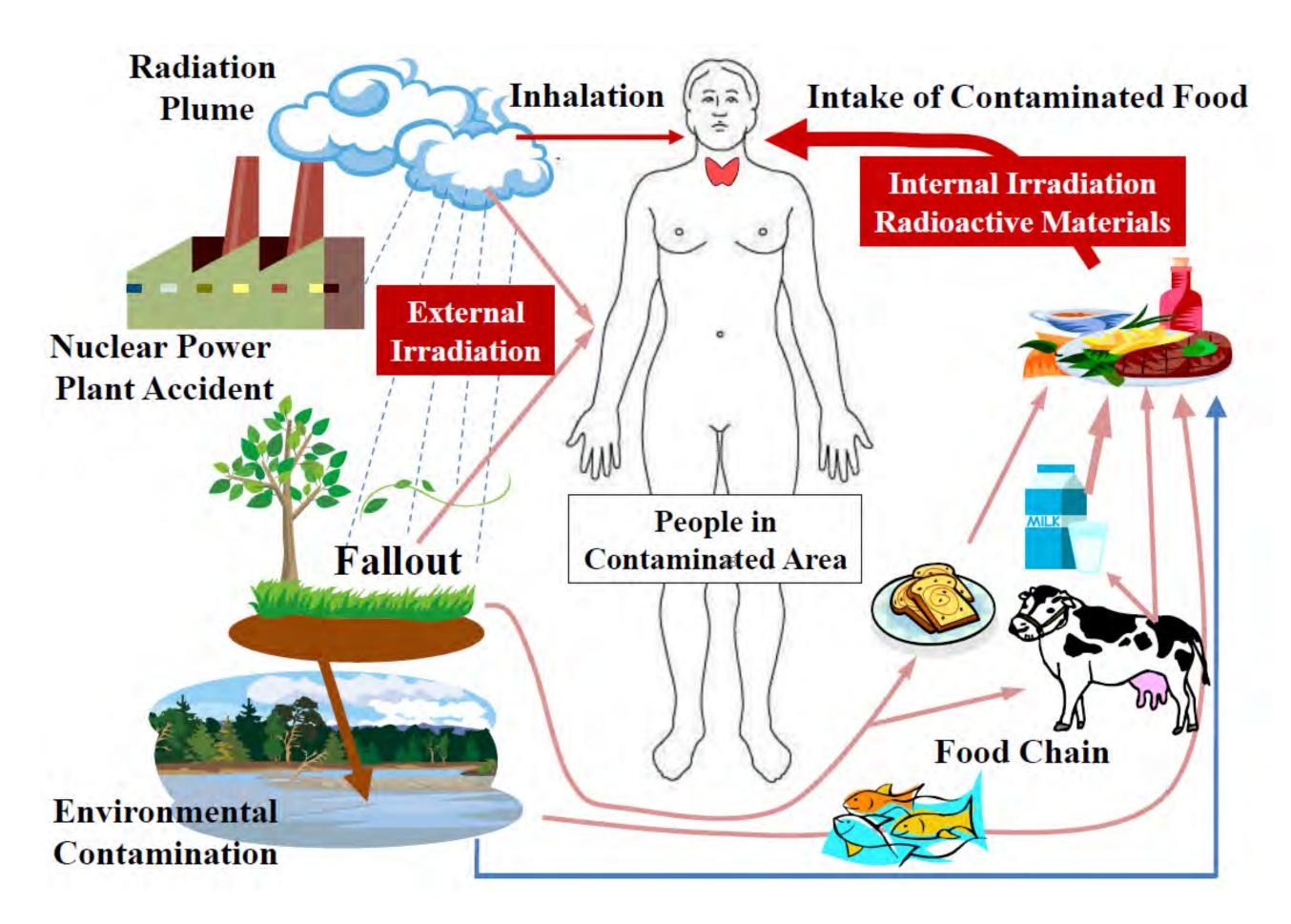
Ionization Chamber



Level D:
Default in the ED for
Radiation
Emergencies



Nuclear Power Plant Emergency





IND Detonation Scenario





Nuclear Weapon Detonation

What is a nuclear weapon?

A nuclear weapon is a device that uses a nuclear reaction to create an explosion. This explosion is much more powerful than that of conventional explosives (like TNT). When a nuclear weapon explodes, it gives off four types of energy: a blast wave, intense light, heat, and radiation. Nuclear weapons can be in the form of bombs or missiles.

When a nuclear weapon explodes, a large fireball is created. Everything inside of this fireball vaporizes and is carried upward. This creates a mushroom-shaped cloud. The material in the cloud cools into dust-like particles and drops back to the earth as **fallout**. Fallout can be carried by the wind and can end up miles from the site of the explosion. Fallout is radioactive and can contaminate anything it lands on.



What are the main dangers of a nuclear weapon?

A nuclear weapon would cause great destruction, death, and injury and have a wide area of impact. People close to the blast site could experience:

Thermal Burns and Instant Radiation Exposures

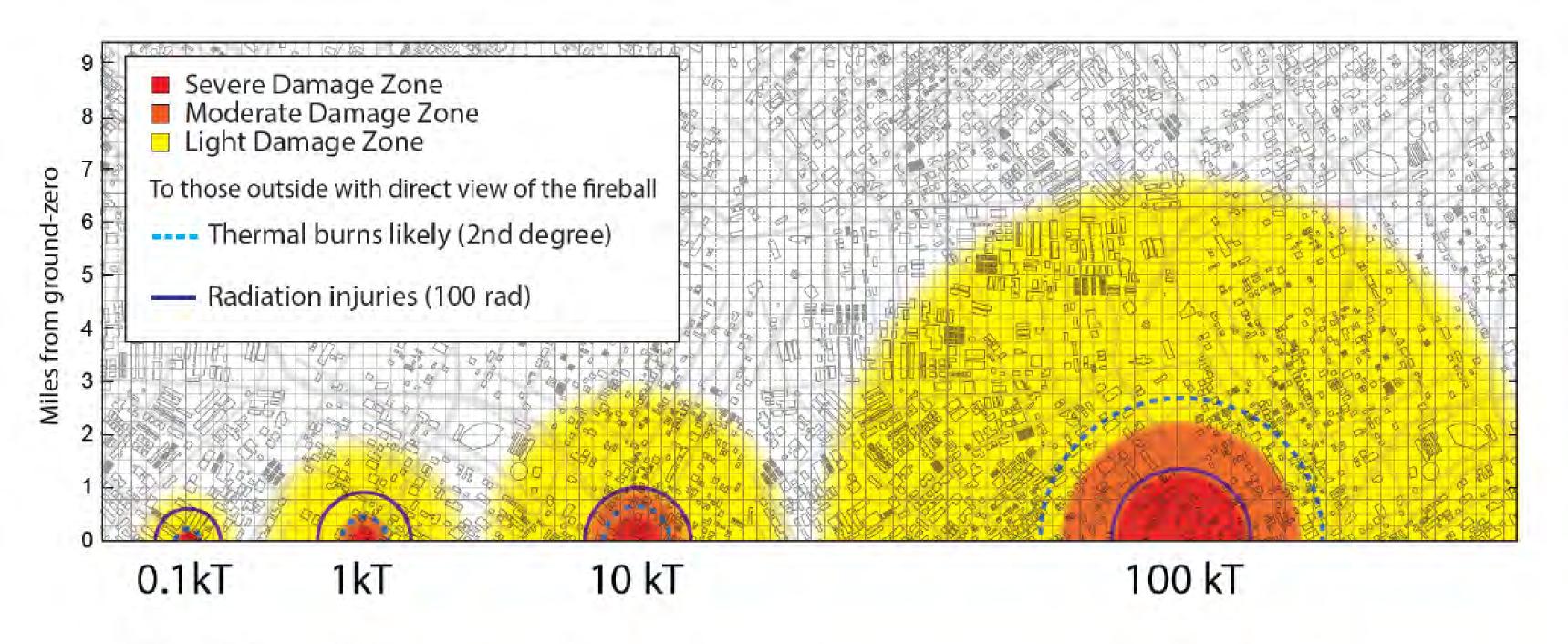


Figure 7: Radiation and burn injury ranges overlaid on damage zones demonstrating the extent of outdoor 1 Gy (100 rad) initial radiation and second-degree thermal burns for unobstructed 0.1, 1, 10, and 100 kT surface detonations.

Flash burns accounted for the overwhelming majority of burns sustained among survivors of Hiroshima

Planning Guidance for Response to a Nuclear Detonation, Third Edition

% were flame

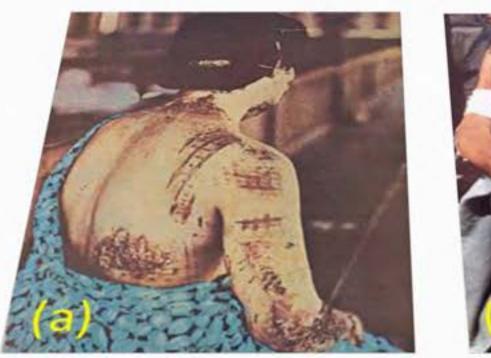




Figure 25: Flash burn victims from (a) Hiroshima showing pattern burns due to clothing patterns and (b) Nagasaki showing profile burns from clothing coverage (War Department, 1945).

Radiation
Zones:
Dangerous
Radiation Zone
&
Hot Zone

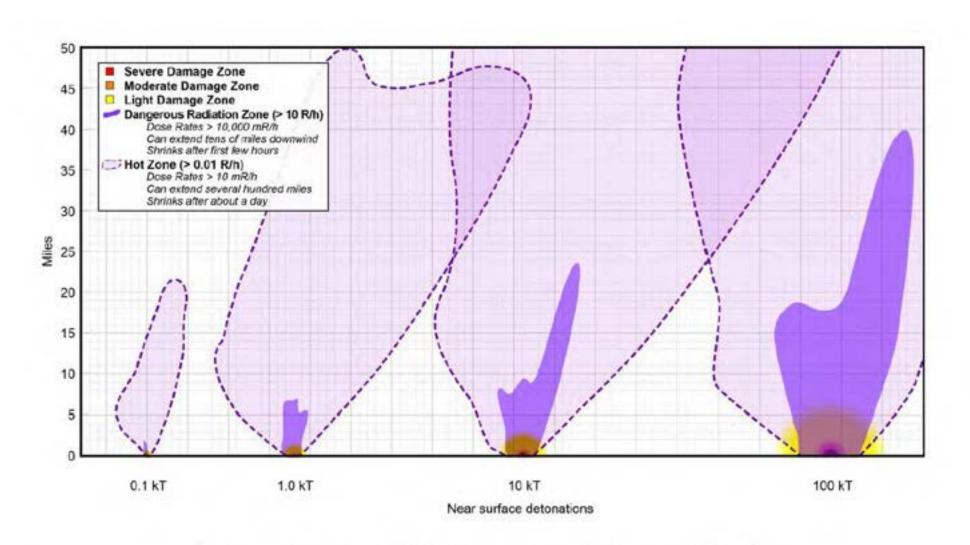


Figure 15: Illustrations of Response Zones for a Variety of Yields

The HZ, like the DRZ, should be established by measured radiation levels. The HZ is bound by 0.01 R/h and higher exposure rates within the 10 R/h boundary. The SDZ is expected to have HZ radiation levels or higher, even for low air bursts. The HZ will overlap with parts of the MDZ and LDZ for near-surface detonations. Figure 15 illustrates the relationship between the HZ, damage zones, and the DRZ for surface detonations of various yields.

Protective Measures Immediately Post Detonation

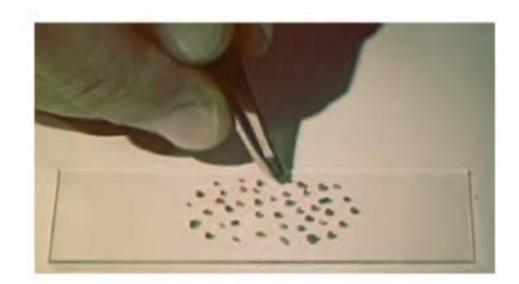




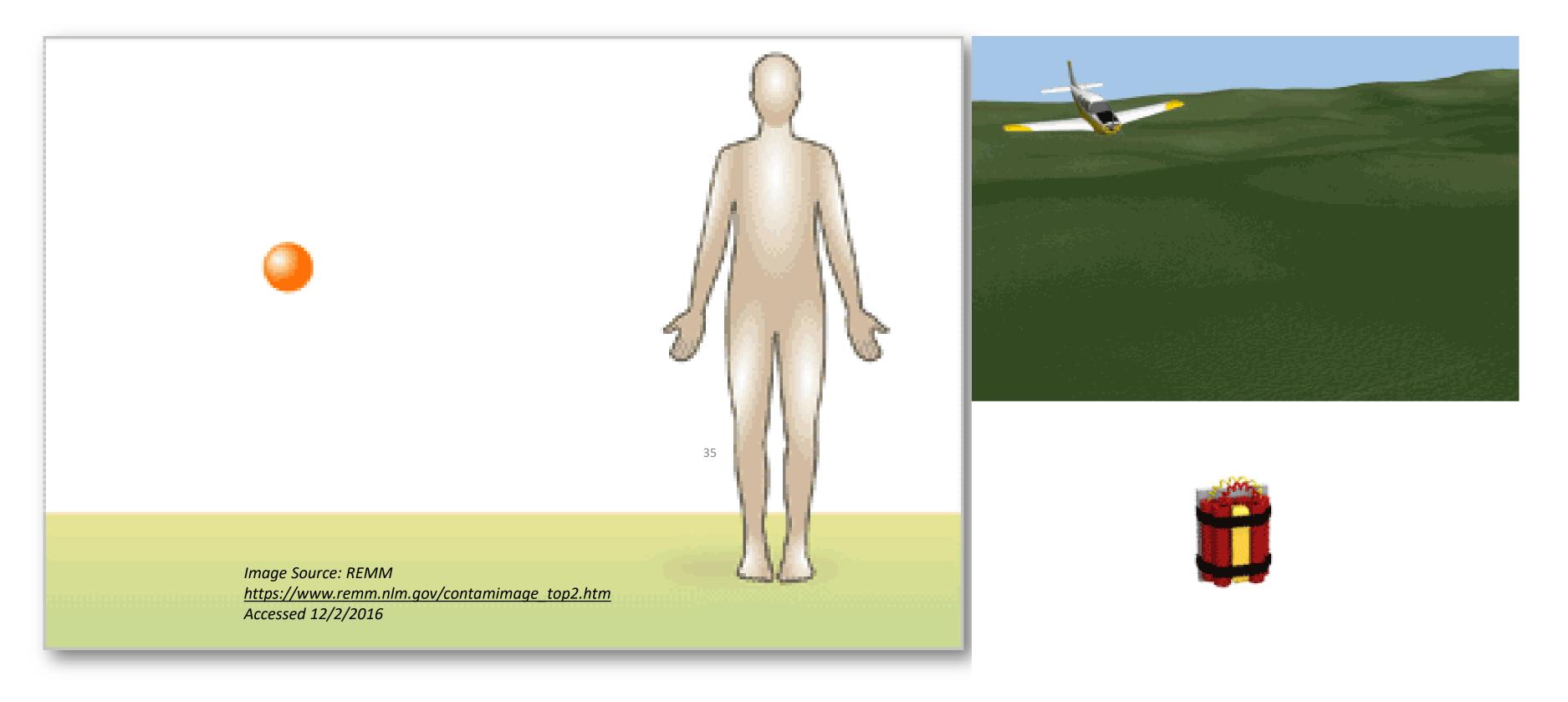




Figure 10: Fallout Particles from Near-Surface Nuclear Tests

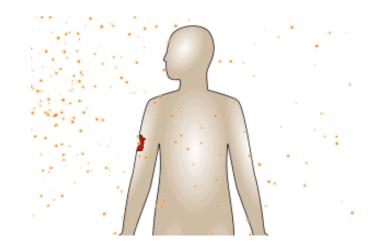
After a nuclear detonation near the surface, immediately dangerous fallout will descend back to earth within the first few minutes to hours and can be readily visible as it comes down.

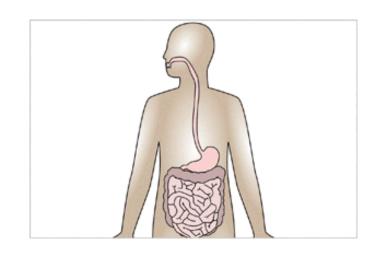
Radioactive Dispersal Device: External with Radioactive Material

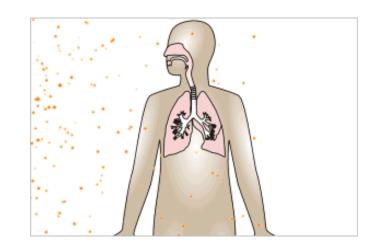




Internal Contamination with Radioactive Material





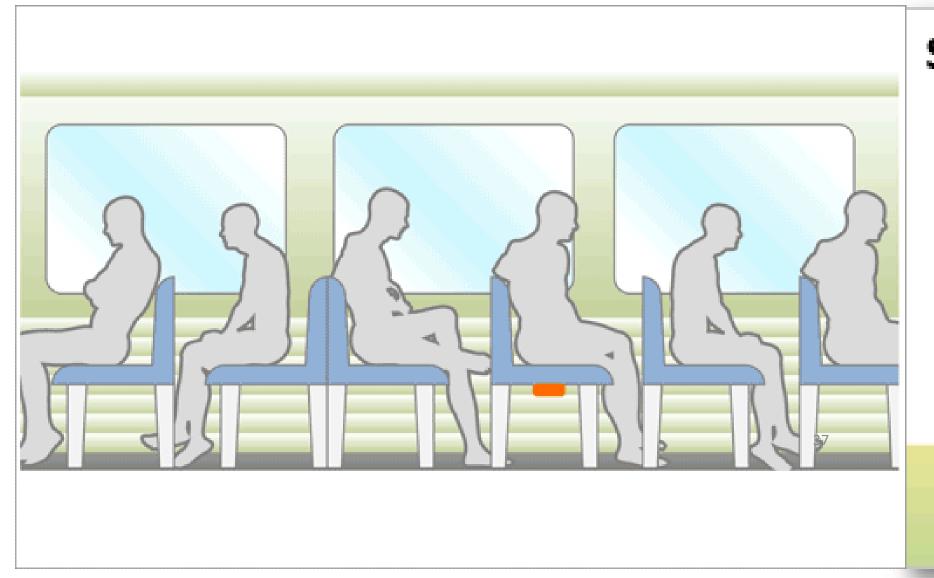


36

(Source REMM)



Radiological Exposure Device: Exposure to Radiation Without Contamination



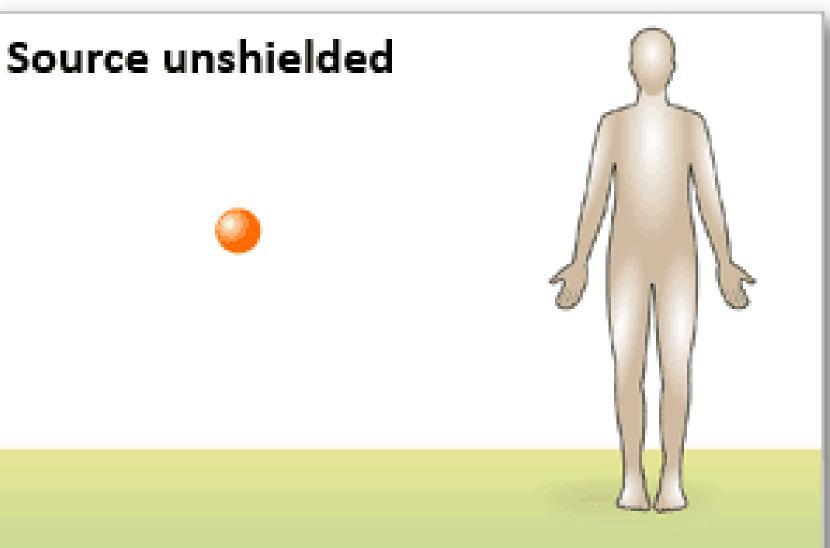


Image Source: REMM https://www.remm.nlm.gov/exposureimage.htm accessed 12/2/2016



- Ionizing radiation is energy travelling in space and that was released from the nucleus of a radioactive atom
 - -Clinically relevant forms of ionizing radiation are gamma rays, beta particles, alpha particles, and neutrons
- Health effects after exposure to ionizing radiation can occur shortly after exposure to radiation or can be of delayed onset like cancer

- Radiation protection principles
 - —Time and Distance
 - -Decontamination of patients contaminated with radioactive materials
- Patients can have their body externally contaminated with radioactive material. They can also take up this material by inhaling it or ingesting it. If they have an open wound, the material could enter the body that way, as well.

- Healthcare providers should double glove, wear googles, and protective suits (like a plastic gown). For respiratory protection, they can use PPE level D or C depending on whether there is a risk of radioactive material suspending in ambient air.
 - -Surgical mask, N-95 mask, or air-purifying respirator fitted with a cartridge
- Life-saving interventions like securing the airway, stopping severe bleeding, or decompressing a tension pneumothorax, should be done before a radiation survey and decontamination are completed

- Radioactive material can be localized using a handheld radiation detector like a Geiger-Muller counter.
- The material can be washed with soap and water, once the patient condition is stabilized.
- Radioactive material that has entered the body can distribute in different organs and cause subacute or long-term organ damage like cancer, or leukemia.
- There are medications that can remove the material from the body or prevent it from entering the organs. These medications are Prussian Blue, DTPA, and Potassium Iodide that work for cesium/thallium, Americium/Plutonium/Curium, and radioiodine, respectively.

- People whose entire body (or a large part of it) is exposed to a significant dose of penetrating radiation, over a short period of time, can develop acute radiation syndrome
- Acute radiation syndrome is a multiorgan syndrome and includes the bone marrow syndrome during which patients become neutropenic and are prone to infections and bleedings.
- People who are exposed to higher doses can develop the GI and Cerebrovascular subsyndromes where they develop GI bleeding and neurovascular manifestations, respectively. These 2 subsyndromes are often fatal.
- Some patients can also develop cutaneous radiation injuries or subsyndrome.

- Patients with ARS develop prodromal symptoms like nausea, vomiting, diarrhea, fever, and fatigue.
- The time to onset and severity of these prodromal signs and symptoms like time to onset of vomiting and diarrhea, can help a clinician estimate the severity of the patient condition.
- The rate of drop of the absolute lymphocyte counts can also be used by the clinician to assess severity and prognosis.
- Newer technologies are being developed to predict the severity of a patient disease.

- Care of ARS is primarily supportive and like the care of a patient who is neutropenic after chemotherapy for cancer.
- Cytokines like filgrastim, pegfilgrastim, sargramostim, and romiplostim can be used to help the bone marrow recover faster, shorten the duration of neutropenia, and decrease the severity of thrombocytopenia, and risk of death.
- Victims with combined injuries or comorbid conditions will have a more severe illness and worse prognosis for survival.

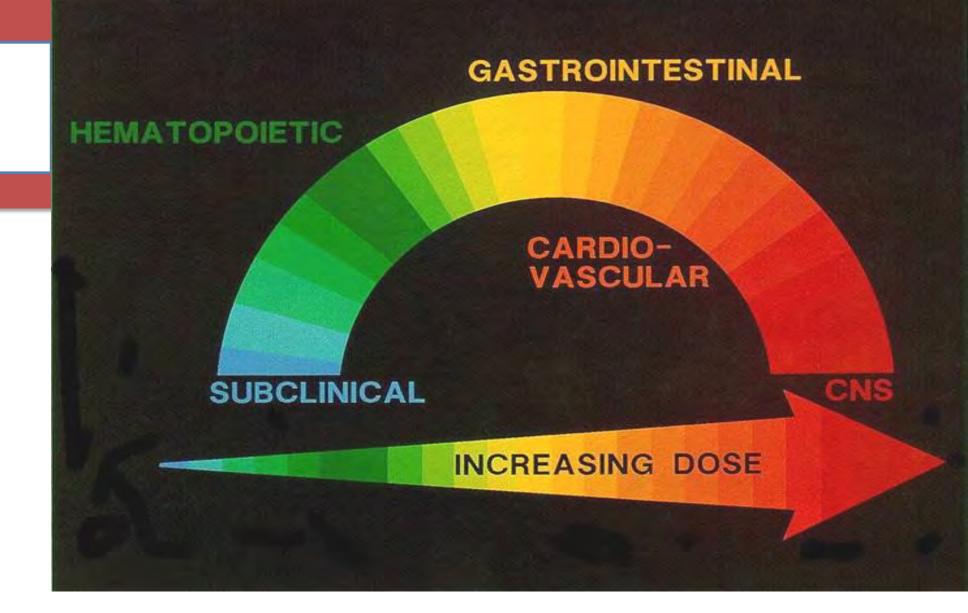
The Rule of 4s:

4 stages

- Prodrome
- Latent
- Manifest
- Recovery or death

4 Conditions

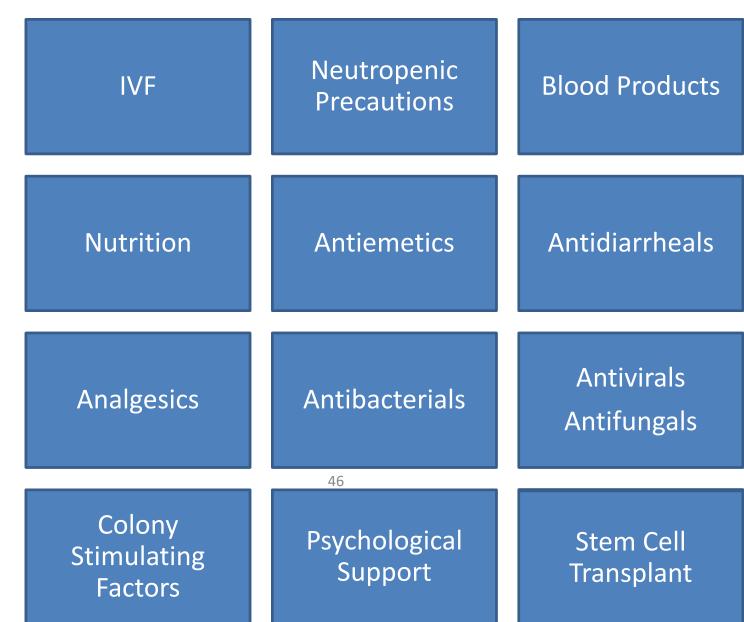
- Exposure to penetrating radiation like gamma rays
- Whole body exposure or near whole body
- Dose ≥ 2 Gray
- Dose received over a short period of time (minutes to few hours)



4 Potential Subsyndromes

- Hematopoietic subsyndrome
- Gastrointestinal subsyndrome
- Cerebrovascular subsyndrome
- Cutaneous subsyndrome





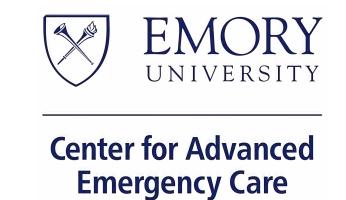
Southern Regional Disaster Response System



Email me zkazzi@emory.edu

Follow me on X @ziadkazzi

Connect with me on Linkedin



Questions?







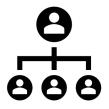


emory - department - of - emergency - medicine - center - for - advanced- emergency - care/



Center for Advanced Emergency Care

Top Ten Ways to Instill Psychological Safety in the Organizational Environment



Leadership Commitment & Behavior

Psychological safety in organizations fundamentally hinges on the actions and attitudes of leadership. Leaders shape the organizational climate and culture and are the linchpins in establishing an environment where employees feel safe to express themselves, take risks, and innovate without fear of reprisal or negative consequences.



Promote Open Communication & Voice

Psychological safety is closely linked to the ability of employees to communicate openly without fear of reprisal or judgment. Therefore, organizations must actively promote structures and cultures that encourage voice.



Build Trust & Mutual Respect Among Team Members

Trust and mutual respect form the interpersonal foundation on which psychological safety rests. Organizations should actively cultivate these relational dynamics.



Establish Clear Expectations & Roles

Clarity around expectations and roles reduces ambiguity, a primary source of stress and psychological insecurity.



Foster a Culture of Learning & Innovation

Psychological safety and a learning culture are mutually reinforcing, enabling organizations to innovate sustainably.

Top Ten Ways to Instill Psychological Safety in the Organizational Environment



Prioritize Mental Health and Well-being

Mental health is intrinsically linked with psychological safety: one cannot exist robustly without the other.



Invest in Training & Development for Psychological Safety

Education and capacity-building for leaders and staff are essential to sustain psychological safety.



Strengthen Ethical and Safety Climate

Ethical and safety climates constitute the organizational frameworks supporting psychological safety.



Design Supportive Physical and Virtual Environments

Environmental factors significantly influence psychological safety.



Monitor, Evaluate, and Evolve Psychological Safety Initiatives

Sustaining psychological safety requires ongoing assessment and refinement.