Hawaii Emergency Management Agency

Emergency Preparedness

Mission:

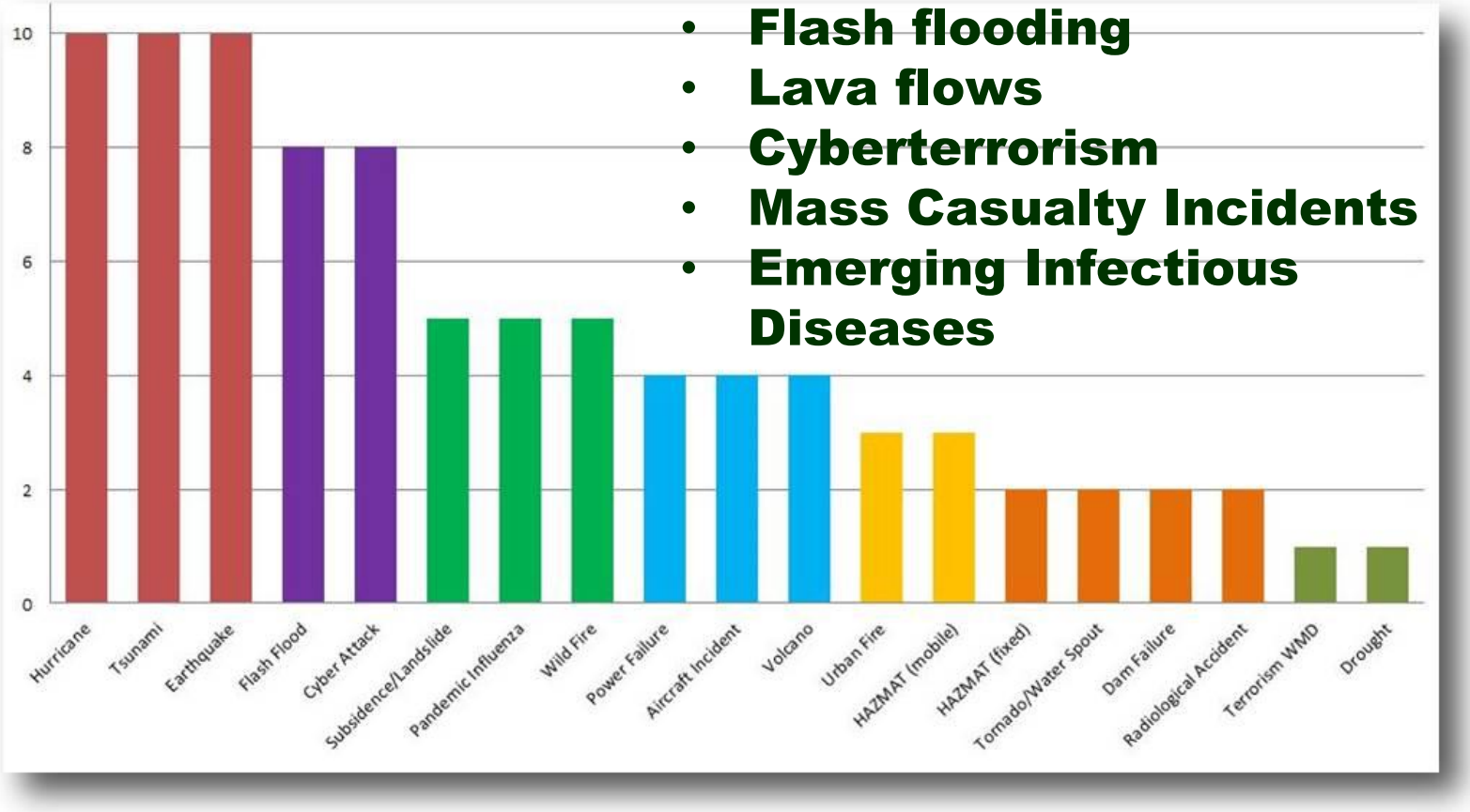
To help the Hawaii Ohana prepare for and respond to disasters and emergencies.

Preparedness

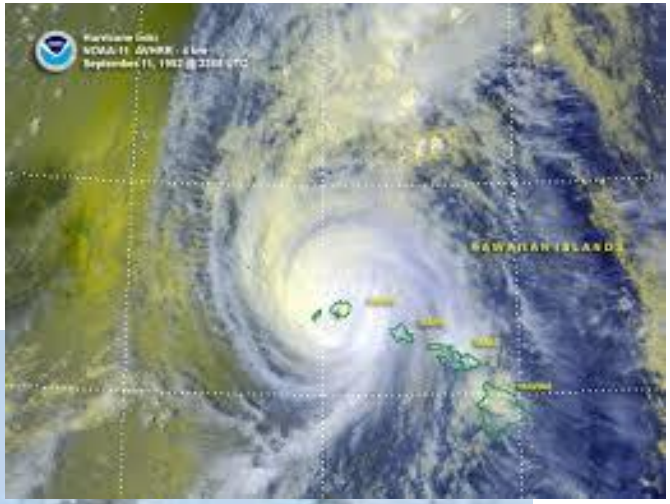
"An informed public (including visitors) that know what to expect and what to do for all disasters …. ahead of time."

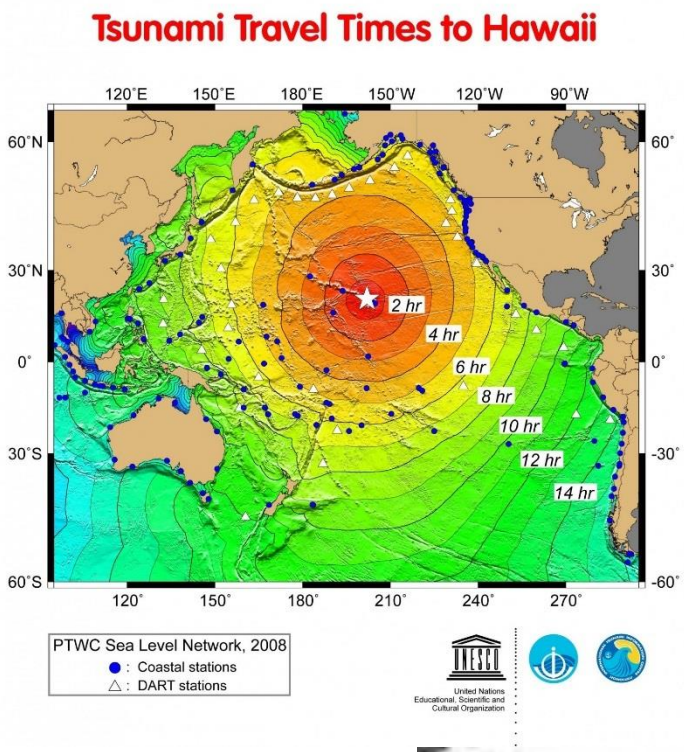
Hawaii is Vulnerable

- Hurricanes
- Tsunami
- Flash flooding
- Lava flows
- Cyberterrorism
- Mass Casualty Incidents
- Emerging Infectious Diseases



Hurricanes





Earthquakes
Tsunami

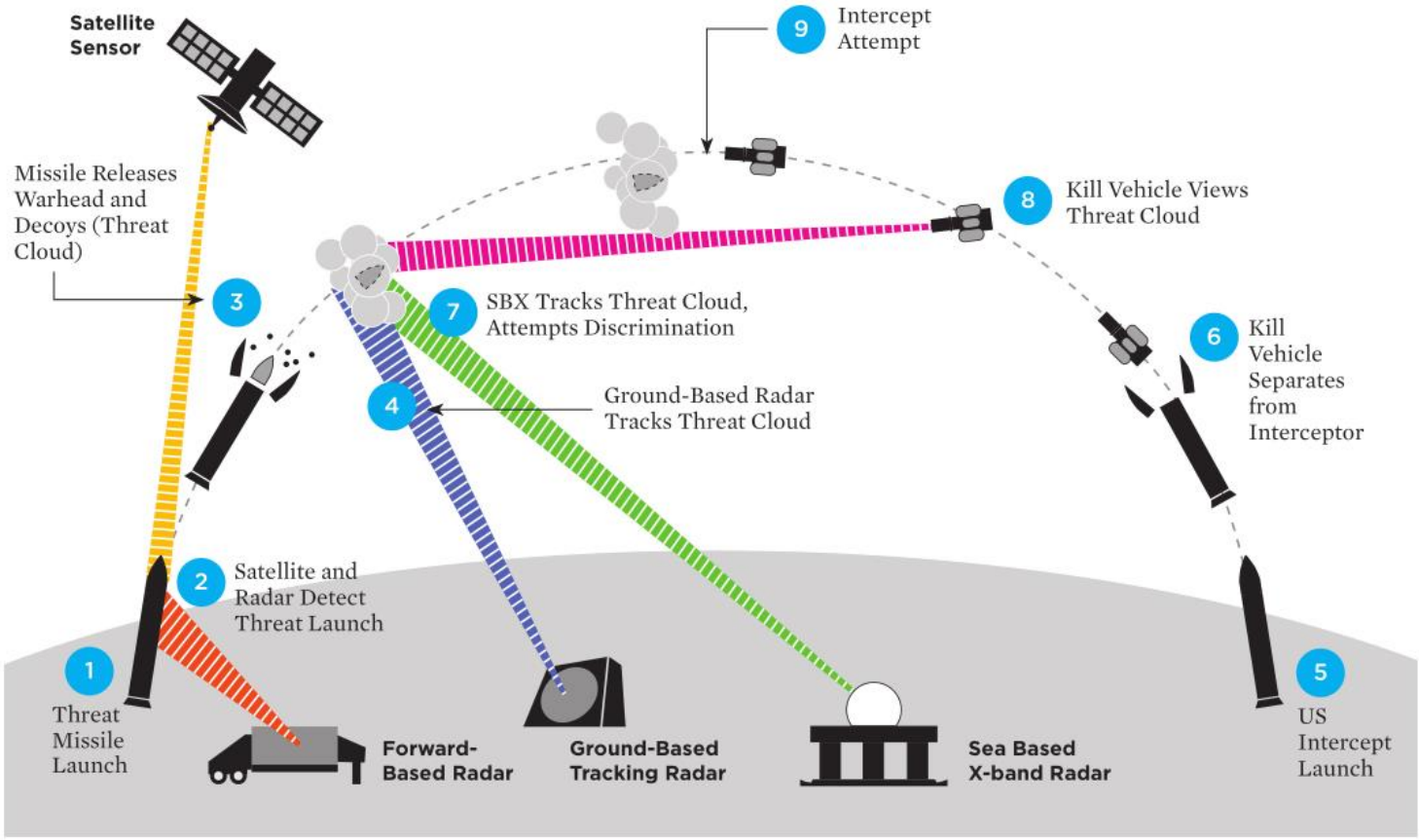
Flooding

Personal Preparedness is Key

- 14 days of food, water and medications
- Battery powered AM-FM radio
- FRS/GMRS hand-held walkie-talkie
- Flashlight with extra batteries
- Important documents in plastic bag
- Whistle, matches, blankets and tarp
- Personal hygiene items
- First-aid kit, dust mask
- Cash in small bills
- Pet supplies

North Korea
Democratic Peoples Republic of Korea

Anatomy of an Intercept



The GMD system involves a complex, global network of components. The launch of the threat missile (1) is detected by forward-based radars, if present, and satellite-based infrared sensors (2). The threat missile releases its warhead and decoys (in this example the decoys are balloons, and a balloon contains the warhead; together they are referred to as the "threat cloud") (3), and the ground-based radar begins tracking the threat cloud (4). Based on information from this radar, the GMD system launches one or more interceptors (5), each of which releases a kill vehicle (6). If a discrimination radar, such as the Sea Based X-band Radar, is in place it will observe the threat cloud to try to determine which object is the warhead (7) and pass this information to the kill vehicle. The kill vehicle also observes the threat cloud to attempt to determine which object is the warhead (8). It then steers itself into the path of the chosen object and attempts to destroy it with the force of impact (9).

Planning Assumptions

1. North Korea (DPRK) is developing ballistic missile technology and a nuclear payload that can target Hawaii.

2. Launch would likely occur without prior warning.

3. USPACOM will detect a launch, however may not be able to destroy a missile launched at Hawaii with absolute certainty.

4. Honolulu most likely target however impact on a neighbor island cannot be ruled-out

5. No relocation of residents and visitors is planned or will be attempted in advance of a missile launch – 20 minute launch to impact timeline

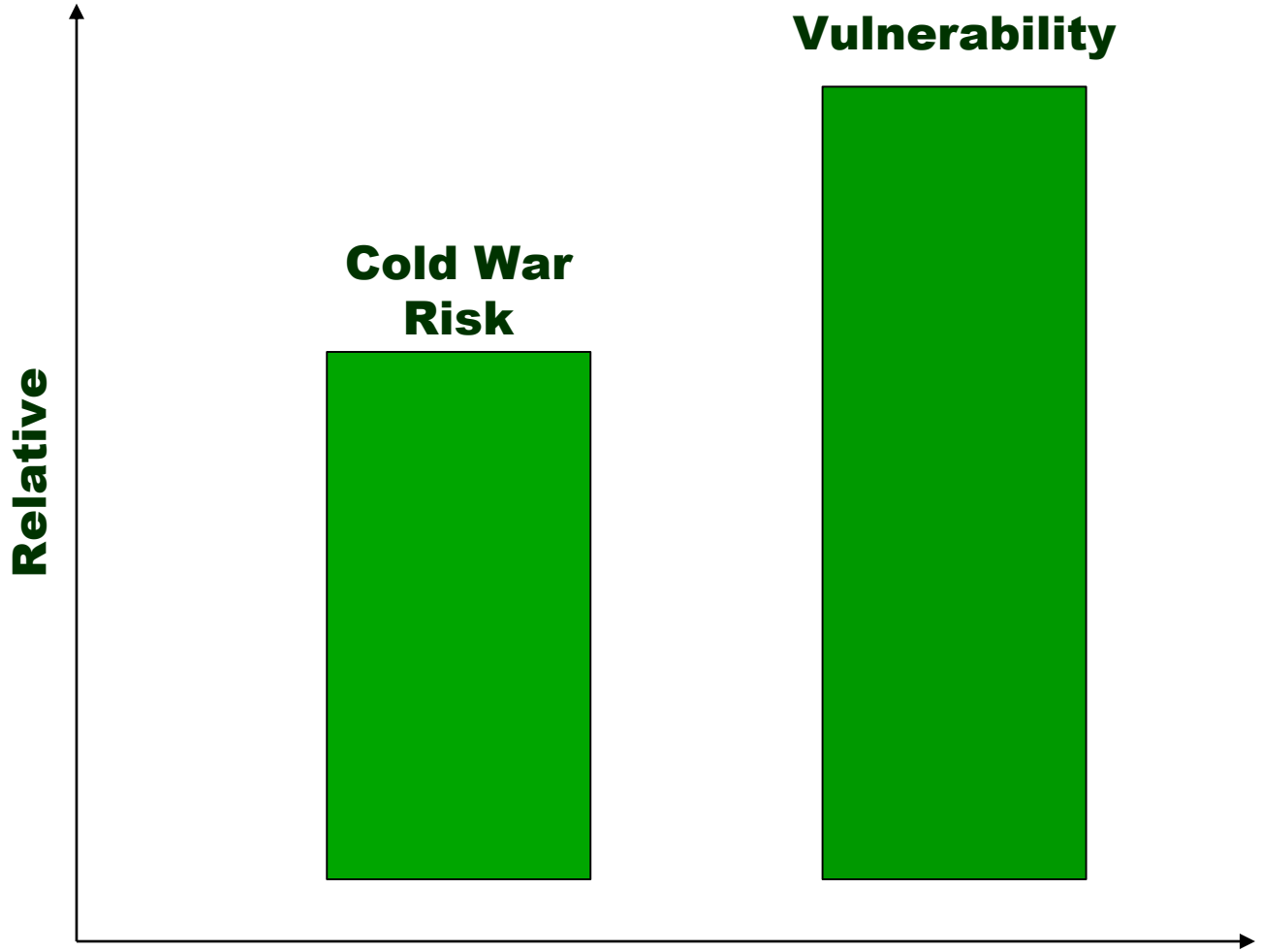
6. Missile payload ranging from a low-yield (< 15 kT) nuclear device to a mid-yield (100 to 200 kT). Using 150kT at 1,000 feet AGL.

7. As the threat grows to include CONUS states, federal guidance may emerge requiring alignment.

Nuclear holocaust

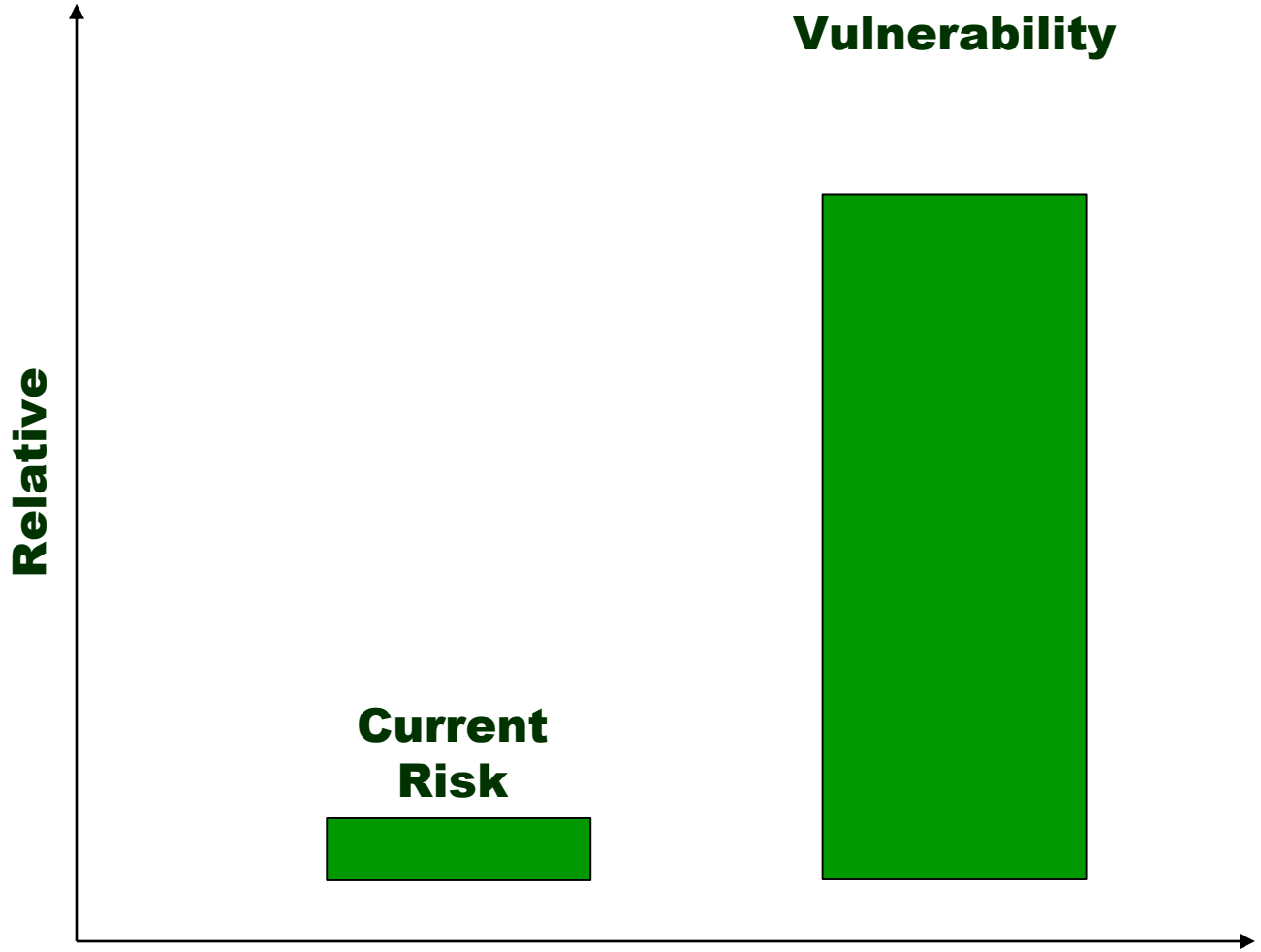
PERSPECTIVE

Cold War – Soviet Union



PERSPECTIVE

North Korea Threat



Pre-1980's

- Cold War – Soviet Union
- Federally-funded, Civil Defense
- Days to weeks to prepare
- Relocation of population upon Presidential Order
- Comprehensive fallout shelter program
- Pre-positioned supplies
- One or more megaton-range devices

Current

- Rogue nation
- No federal funding
- Warning less than 20 minutes
- No relocation plans
- No designated fallout shelters
- No shelter supply caches
- Single, kiloton-range device

Ballistic Missile Effects

Impact of a ballistic missile in Hawaii could result in:

1. Inert missile impact – no payload
2. Detonation of a conventional explosive device
3. Detonation of a nuclear device

Major Effects

1. Blast and Shock
2. Thermal Radiation
3. Radiation and Fallout
4. Electromagnetic Pulse (EMP)

15 kT 1,900 feet AGL Hiroshima, Japan

Consequences of a 150 kT nuclear weapon at 1,000 feet

- 50,000 to 120,000 trauma and burn casualties together with nearly 18,000 fatalities
- 15 to 30% of survivors exposed to initial radiation or fallout experience Acute Radiation Syndrome (ARS)
- Severe damage to Daniel K. Inouye International Airport, Hickam AFB and Honolulu Harbor
- Widespread structural fires and building collapses
- Damage to hospitals and government buildings
- Loss of critical emergency services – fire, police and EMS units and their communications
- Damage to roads and other critical infrastructure
- Loss of electrical and water utilities
- Loss of land mobile radio, broadcast radio, television, cellular telephone and internet services related to EMP

BMP Work Plan Phasing

Phase I

Conduct initial analysis and planning

- Nationwide survey
- Planning model 150 kT, 1000' AGL
- SWP procedures
- Annex to State EOP
- Identify working groups

Improve emergency notification and warning

- Missile launch notification
- Public warning system enhancement and script for EAS, WEA
- Upgrade siren warning system

Develop public preparedness and response guidance

- Public response guidance
- Preparedness guide, PSA's
- Speakers bureau

Phase II

Immediate response operations & gap analysis – first 72 hours

1. Public information and Education
2. Emergency medical care and fatality management
3. Radiological monitoring and Decontamination
4. Contingency Communications and EMP
5. Initial Recovery and Restoration of Essential Services
6. Critical Infrastructure

Phase III

Follow-on response and recovery operations - 72 hours and beyond

- Provision for essential commodities including food and water
- Integration of federal and EMAC resources
- Casualty movement and definitive care
- Recovery of human remains and mortuary services
- Restoration of essential government services
- Restoration of critical services and infrastructure

Launch to Impact only 20 Minutes

USPACOM JOC

State Warning Point

Elapsed Time: **0** **5** **10** **20**

Detection	Warning	Individual Action
Launch	Sirens	
Defenses	EAS/WEA	
Notifications	Activation of State EOC	

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Outdoor Siren System

Steady Tone
'Attention-Alert' signal
Listen to radio or television

Steady.wav

Wailing Tone
'Attack-Warning' signal
Seek Shelter Immediately

Wail aka Attack.wav

Monthly Statewide Siren Test

- Occurs first working day of <u>every month at 11:45 am</u>
- Sirens triggered (coordinated) from the State Warning Point in Honolulu
- Siren sounding accompanied by a description of each event on television and radio

1. <u>Attention-Alert</u> (Steady) signal for 50 seconds
2. Pause for 10 seconds
3. <u>Attack Warning</u> (Wailing) signal for 50 seconds
4. Pause for 10 seconds
5. <u>HAZMAT</u> signal for 50 seconds – **Campbell Industrial Park area only**

Emergency Alert System

Television
Radio

Smart Phone

Pre-Scripted Message

The following message shall be transmitted on the EAS and WEA systems simultaneously and continuously until the threat has passed:

"The U.S. Pacific Command has detected a missile threat to Hawaii. A missile may impact on land or sea within minutes. This is not a drill."

"If you are indoors, stay indoors. If you are outdoors, seek immediate shelter in a building. Remain indoors well away from windows. If you are driving, pull safely to the side of the road and seek shelter in a building or lay flat on the ground."

"We will announce when the threat has ended."

HAWAII STATE DEPARTMENT of DEFENSE

Hawaii Emergency Management Agency

GUIDANCE SUMMARY for COORDINATED PUBLIC MESSAGING

Nuclear Detonation

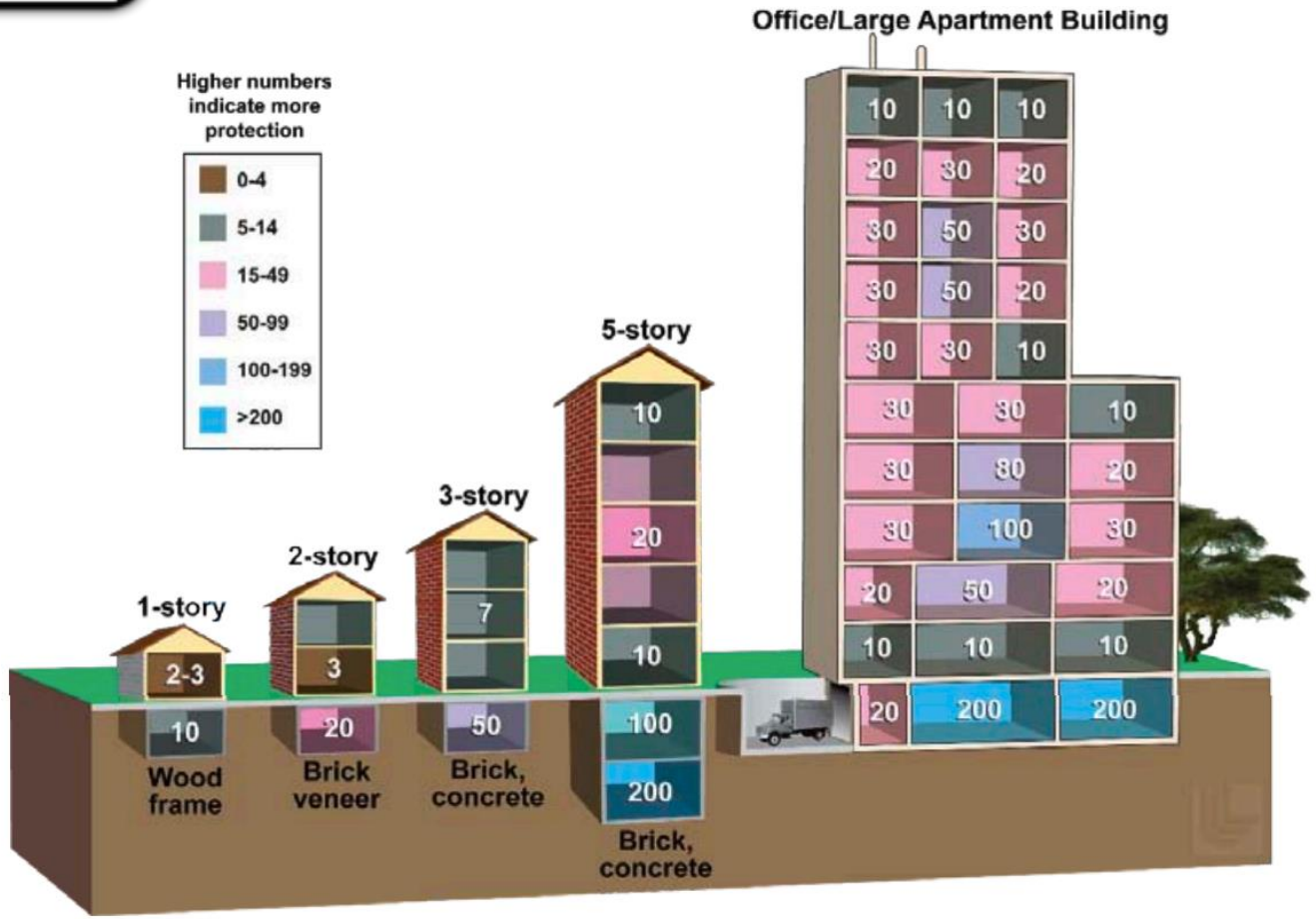
Revised: 27 JUN 2017.3

Triggers	Mnemonic	Immediate Action	Rationale
Sirens sound *Attack-Warning* signal **Emergency Alert System (EAS) advisory** **Wireless Emergency Alert (WEA) system advisory** **Brilliant white light (flash) is observed**		1. <u>If you are indoors</u>, stay indoors well away from windows. 2. <u>If you are outdoors</u>, seek immediate shelter in a building preferably a concrete structure such as a commercial building or parking structure. 3. <u>If you are driving</u>, pull safely to the side of the road and seek shelter in a nearby building or lie flat on the ground. 4. DO NOT look at the flash of light.	• Surviving the immediate effects of a nuclear detonation (blast, shock, thermal radiation, initial nuclear radiation) requires sheltering in resistant structures • You may have only minutes to take protective action – take immediate action without delay • There are no designated blast or fallout shelters in Hawaii • Light generated by the weapon will damage unprotected eyes
		1. Remain sheltered until you are told it is safe to leave or two weeks (14 days) have passed, whichever comes first. 2. You may be advised that it is safe to leave your shelter for short periods of time to locate food, water and medical care. 3. Electrical, water and other utilities may be severely disrupted or unavailable.	• Following the detonation, sheltering from radioactive fallout for up to 14 days is critically important • Public may need to briefly leave their shelters to locate essential supplies and equipment • Emergency Management will assess residual radiation levels and advise when sheltering can be discontinued
		1. Listen to local AM-FM radio stations for official information. 2. Cell phone, television, radio and internet services will be severely disrupted or unavailable. 3. Small portable walkie-talkies may give you communication with nearby shelters.	• Local AM-FM broadcast radio is most survivable and may be useful in advising the public post-detonation • Other communication technologies may be damaged by weapons effects such as EMP[1] • FRS[2] and GMRS radios are widely available in the community and may be useful in keeping people in communication with one another

[1] EMP = Electromagnetic Pulse
[2] FRS = Family Radio Service (unlicensed); GMRS = General Mobile Radio Service (licensed)

3949 Diamond Head Road · Honolulu ·Hawaii · 96816
Telephone (808) 733-4300

GET INSIDE



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STAY INSIDE

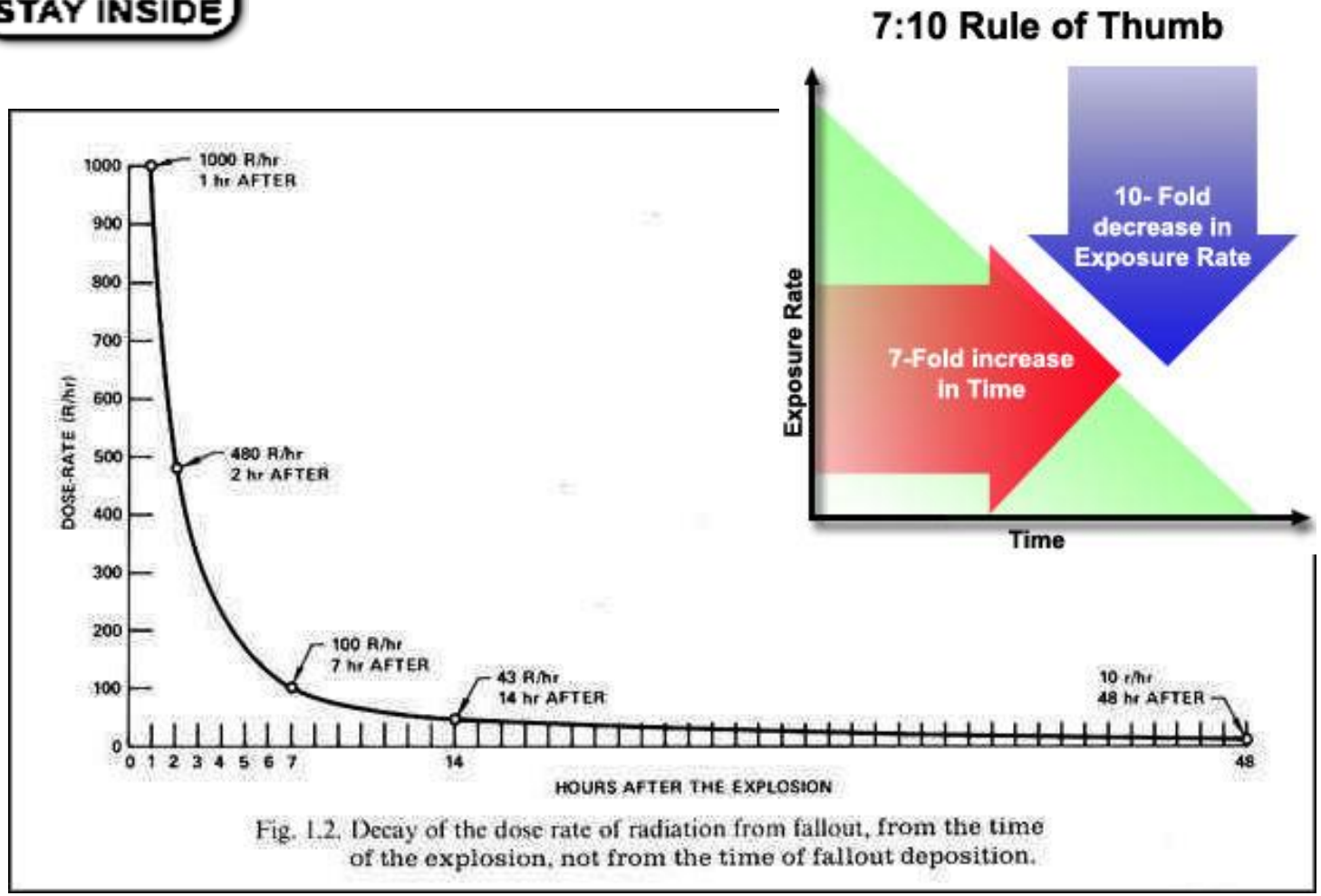

Fig. 1.2. Decay of the dose rate of radiation from fallout, from the time of the explosion, not from the time of fallout deposition.

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STAY TUNED

ESSENTIAL FEATURES

- AM-FM bands
- Battery powered

DESIRABLE FEATURES

- Hand-powered dynamo
- Weather band
- Flashlight
- Water-resistant

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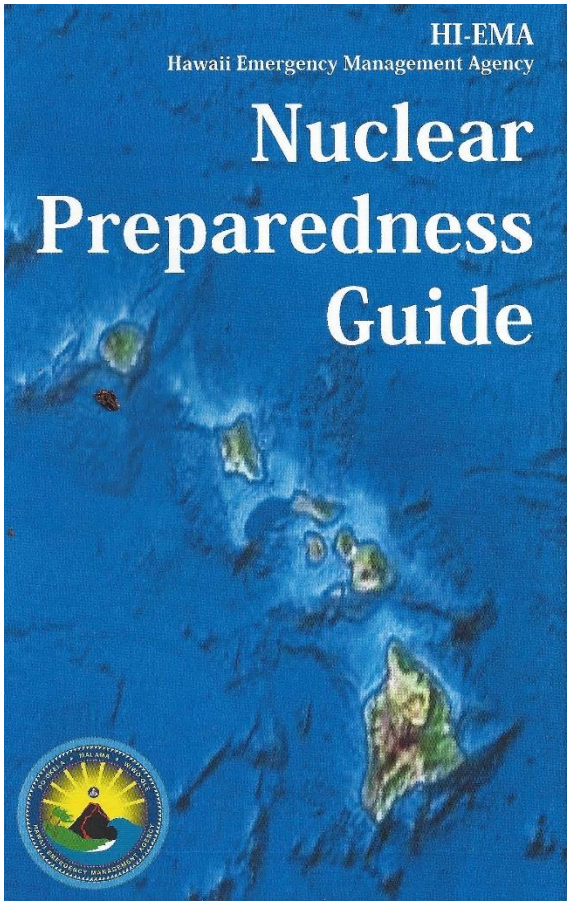
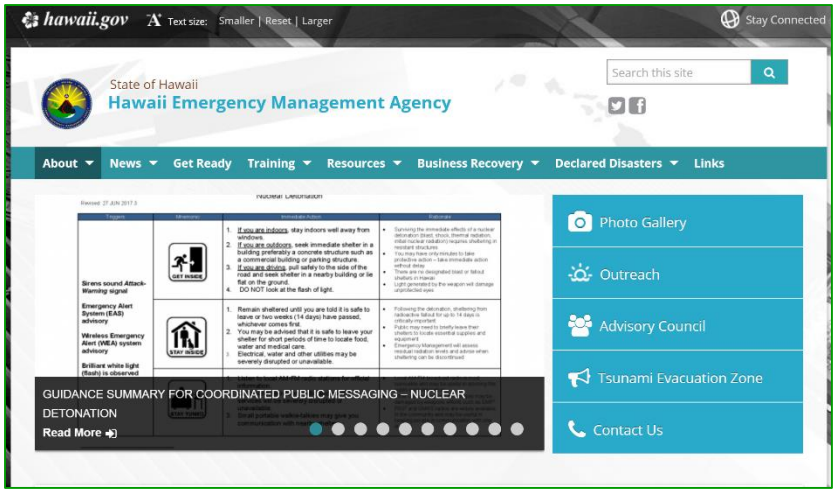
Public Information





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Participate in your own rescue…

1. Have an Individual and Family preparedness plan
2. Be self-sufficient for 14-days
3. Knowledge – what to do and when to do it
4. Keep the threat of North Korea in right perspective

Questions?

Telephone: (808) 733-4300
www.ready.hawaii.gov