Hawaii Emergency Management Agency
Mission:
To help the Hawaii Ohana prepare for, respond to, and recover from disasters and emergencies
Preparedness

“An informed public (including visitors) that knows 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
What Is Happening
What We Are Doing
What You Should Do
Nuclear Threat - Unlikely But Cannot Ignore It

- Retaliation by U. S. and Allies would result in complete destruction of NK
- U.S. Ballistic Missile Defenses
- Technological Challenges:
  - Warhead re-entry survival
  - Targeting (accuracy)
  - Detonation altitude
PERSPECTIVE
Cold War – Soviet Union

Relative

Cold War Risk

Vulnerability
<table>
<thead>
<tr>
<th>Pre-1980’s</th>
<th>Current</th>
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<tbody>
<tr>
<td>• Cold War – Soviet Union</td>
<td>• Rogue nation</td>
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<tr>
<td>• Federally-funded, Civil Defense</td>
<td>• No federal funding</td>
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<tr>
<td>• Days to weeks to prepare</td>
<td>• Warning less than 20 minutes</td>
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<tr>
<td>• Relocation of population upon Presidential Order</td>
<td>• No relocation plans</td>
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<tr>
<td>• Comprehensive fallout shelter program</td>
<td>• No designated fallout shelters</td>
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<tr>
<td>• Pre-positioned supplies</td>
<td>• No shelter supply caches</td>
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<tr>
<td>• Multi - megaton-range devices</td>
<td>• Single, kiloton-range device</td>
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<tr>
<td>Major Effects</td>
<td>Consequences of a 100 kT nuclear weapon at 1,000 feet AGL</td>
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<td>------------------------</td>
<td>----------------------------------------------------------</td>
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<tr>
<td>1. Blast and Shock</td>
<td>- Up to 15,000 casualties</td>
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<td>2. Thermal Radiation</td>
<td>- 45-60% of survivors exposed to initial radiation or fallout experience Acute Radiation Syndrome</td>
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<td>3. Radiation and Fallout</td>
<td>- Severe damage to critical infrastructure (airport, harbor, power plants, hospitals, highways, other) and surrounding areas</td>
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<tr>
<td>4. Electromagnetic Pulse (EMP)</td>
<td>- Widespread structural fires and building collapses</td>
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<td>- Loss of critical emergency services – fire, police and EMS units and their communications</td>
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<td>- Loss of electrical and water utilities</td>
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<td>- Loss of land mobile radio, broadcast radio, television, cellular telephone and internet services related to EMP</td>
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Radiation decay is Rapid

Fig. 12. Decay of the dose rate of radiation from fallout, from the time of the explosion, not from the time of fallout deposition.
What We Are Doing
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 100kT at 1,000 feet AGL.

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

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

- Conduct initial analysis and planning
  - Nationwide survey
  - Planning model 15 kT, 1000’ AGL
  - SWP procedures
  - Annex to State EOP
  - Five working groups

- Develop public preparedness and response guidance
  - Public response guidance
  - Preparedness guide
  - Speakers bureau

### Phase II

- Immediate response operations
- Emergency medical care and fatality management
- Radiological monitoring and Decontamination
- Contingency Communications and EMP
- Initial Recovery and Restoration of Essential Services
Launch to Impact only 20 Minutes

USPACOM JOC

State Warning Point

Detection | Warning | Individual Action
---|---|---
Launch | Sirens | Get Inside
Defenses | EAS/WEA | Stay Inside
Notifications | Activation of State EOC | Stay Tuned

Elapsed Time: 0 5 10 20
Outdoor Siren System
Within 1 minute of notification

Steady Tone
‘Attention-Alert’
Listen to radio or television

Wailing Tone
‘Attack-Warning’
Seek Shelter Immediately

NOV TESTING CANCELLED

9/21/2017
Emergency Alert System

Television

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.”
What You Should Do
What to Do

* Stay updated on the situation in NK.
* Learn about nuclear events: FEMA website at Ready.Gov; HI-EMA at Ready.Hawaii.Gov; Dept. of Emergency Mgmt at HNL.Info
* Get Inside/stay Inside/stay Tuned.
* Shelter in place – know where that place is ahead of time and prepare it. May be multiple places during the day.
* Have a plan – Individual, family, work place, friends, etc. Know where to go/what to do/when to do it … ahead of time.
* Drill – Actions automatic – no time to call family and friends.
* Family/individual emergency supply kits – 14 DAYS
## GUIDANCE SUMMARY for COORDINATED PUBLIC MESSAGING

### Nuclear Detonation

<table>
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<tr>
<th>Trigger</th>
<th>Mnemonic</th>
<th>Immediate Action</th>
<th>Rationale</th>
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</thead>
<tbody>
<tr>
<td>Sirens sound Attack-Warning signal</td>
<td><a href="#">GET INSIDE</a></td>
<td>1. If you are indoors, stay indoors well away from windows.  2. If you are outdoors, seek immediate shelter in a building preferably a concrete structure such as a commercial building or parking structure.  3. If you are driving, 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.</td>
<td>• 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.</td>
</tr>
<tr>
<td>Emergency Alert System (EAS) advisory</td>
<td><a href="#">STAY INSIDE</a></td>
<td>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.</td>
<td>• 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.</td>
</tr>
<tr>
<td>Wireless Emergency Alert (WEA) system advisory</td>
<td><a href="#">STAY TUNED</a></td>
<td>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.</td>
<td>• 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.</td>
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\(^1\) EMP = Electromagnetic Pulse  
\(^2\) FRS = Family Radio Service (unlicensed); GMRS = General Mobile Radio Service (licensed)
Personal Preparedness

- 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, blankets and tarp
- Personal hygiene items
- First-aid kit
- Cash in small bills
Public Information

Nuclear Preparedness Guide
HI-EMA Website

- Ready.Hawaii.Gov
- Live as of July 1<sup>st</sup>
- Distinct ‘Nuclear Threat’ tab
- Content a mirror of booklet and other documents

9/21/2017
It is still Hurricane Season!
Hurricane IRMA Key West 09/2017

Toby Clairmont – Hawaii Disaster Medical Assistance Team (DMAT)
Questions?

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