

Fact Sheet

Dirty Bomb

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A Radiological Dispersion Device, or “dirty bomb”, is a mix of explosives with radioactive powder or pellets. When it explodes the blast scatters radioactive material.

- A dirty bomb is not the same as an atomic bomb, which produces an atomic mushroom cloud.
- A dirty bomb cannot create an atomic blast. It uses dynamite or other explosives to scatter radioactive materials which cause radioactive contamination.

Know Your Risk and What to Do

The terrorists’ purpose is to spread fear. The main danger from a dirty bomb is the explosion, which can cause serious injuries and damage. The radioactive materials in a dirty bomb would probably not lead to enough radiation exposure to cause serious illness immediately, except to those people who are very close to the blast site. However, the radioactive dust and smoke that spreads could be dangerous to health if they are inhaled.

- Contact your local emergency management office to learn about community emergency plans, and what you should include in your family and personal emergency plans.
- Get additional information from --
 - The Centers for Disease Control and Prevention (www.bt.cdc.gov/radiation/dirtybombs.asp)
 - The Federal Emergency Management Agency (www.fema.gov)
 - The U.S. Department of Homeland Security (www.ready.gov)
 - The American Red Cross (www.redcross.org)
- Inquire about emergency plans and procedures at school and workplace.
- Make a family disaster plan that includes out-of-town contacts and locations to reunite if you become separated. Be sure everyone knows home, work and cell phone numbers, and how to call 9-1-1.
- Assemble a 3-day disaster supplies kit (for more information, visit www.fema.gov/areyouready/).
- Make a plan and assemble a disaster supplies kit at work, too.
- Place documents such as birth and marriage certificates, social security cards, passports, wills, deeds, financial and insurance records in a fire- and flood-safe location or safe deposit box.

Before an RDD Explosion

- Make a list of potential shelters near your home, workplace and school such as basements, the windowless center area of middle floors in high-rise buildings, subways and tunnels.
- If you live in an apartment building or high-rise, talk to the manager about the safest place in the building for sheltering building occupants.

During a Dirty Bomb Attack

Because you cannot see, smell, feel or taste radiation, you should take immediate precautions.

If you are outside and close –

- Cover your nose and mouth with a cloth to reduce the risk of breathing in radioactive dust or smoke.
- Don’t touch objects or fragments scattered by the explosion.
- Quickly go into a building where walls and windows are intact to shield yourself from radiation .
- Once inside, take off your outer layer of clothing and seal it—with the cloth used to cover your mouth—in a plastic bag, if available. If not, use whatever will hold the clothing, can be closed and removed. Removing outer clothes will get rid of up to 90% of radioactive dust.
- Put the plastic bag where others will not touch it. Keep it until authorities tell you what to do with it.
- Shower or wash with soap and water. Be sure to wash your hair. Washing will remove any remaining dust.
- Tune to local radio or television news for more instructions.

During a Dirty Bomb Attack (Continued)

If you are inside a building and close to the incident –

- If walls and windows are not broken, stay in the building. Do not leave.
- To keep radioactive dust from getting inside, shut all windows, outside doors (including pet-operated) and fireplace dampers. Turn off fans and heating and air conditioning systems that bring in air from outside. It is not necessary to put duct tape or plastic around doors or windows.
- If walls and windows of the building are broken, go to an interior room and do not leave. If the building has been heavily damaged, quickly go into another building where walls and windows are not broken. If you must go outside, cover your nose and mouth with a cloth. Once you are inside take off your outer layer of clothing and seal it in a plastic bag if available. Store the bag where others will not touch it.
- Shower or wash with soap and water to remove any remaining dust. Be sure to wash your hair.
- Tune to local radio or television news for more instructions.

If you are in a car, van or SUV when the incident happens –

- Close the windows and turn off the air conditioner, heater and vents.
- Cover your nose and mouth with a cloth to avoid breathing radioactive dust or smoke.
- If you are close to your home, office, or a public building, go there immediately and go inside quickly.
- If you cannot get to any building safely, pull over to the side of the road, under a bridge or in a shady spot.
- Turn off the engine and listen to the radio for instructions.
- Stay in the car until you are told it is safe to get back on the road.

What should I do about my children and family?

- Stay together. Take the same actions to protect everyone.
- If anyone is in another home or building, they should stay there until you are told it is safe to travel.
- Schools have emergency plans and shelters. If your children are at school, they should stay there until it is safe to travel. Do not go to the school until public officials say it is safe to travel.

How do I protect my pets?

- If you have pets outside, bring them directly into a room where you can wash them with soap and water to remove any radioactive dust before they scatter it.

Should I take potassium iodide (KI)?

- Potassium iodide only protects a person's thyroid gland from taking up radioactive iodine. KI will not protect a person from other radioactive materials or protect other parts of the body from radiation.
- Since there is no way to know at the time whether radioactive iodine was used in the RDD, taking KI would probably not be beneficial. Also, KI can be dangerous to some people.

After an RDD explosion

- Continue listening to your radio and watching television for instructions from local officials. Be prepared to evacuate the area if directed to.
- Do not visit or return to an RDD incident location for any reason.

The Recovery Process

- For immediate needs contact the American Red Cross or other local voluntary agencies.
- Check the media for disaster assistance available.
- If you have property damage, contact your insurance company and the FEMA Disaster Recovery Center (1-800-621-3362).
- For information on helping children deal with disaster, visit www.fema.gov or get a copy of FEMA 478 Helping Children Cope with Disaster. To obtain this and other fact sheets and publications call the FEMA Distribution Center at 1-800-480-2520.

| Dangerous RDD Myth! | The Facts: |
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| Taking KI after exposure will protect me from the effects of radiation. | Potassium iodide (KI) will not protect you from the effects of radiation, it will only keep your thyroid from absorbing radioactive iodine. |