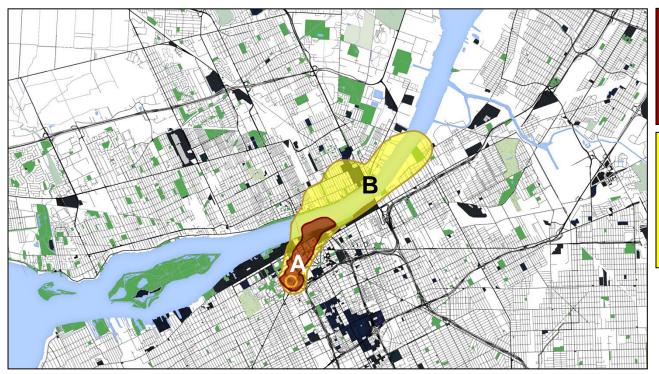




IND Detonation

Predicted Area for Potential Fallout Casualties (Presented in 3 time steps)



LETHAL FALLOUT (>450 rad)

Fallout lethal to most without adequate shelter. Best action is early shelter followed by informed evacuation to control exposure.

Total Population: 14,500 Area: 3.0 km² Extent: 3.4 km

DANGEROUS FALLOUT (>100 rad)

Fallout levels can cause death, injury or illness. Greatest opportunity for life saving and injury reduction. Dose management for first responders essential.

Total Population: 28,800 Area: 18.8 km² Extent: 9.4 km

 $\mathbf{1}_{\mathsf{hour}}$

after detonation

Assumptions:

- Assumes 10 kt detonation at 0 ft elevation.
- Areas shown are model predictions based on an estimated source term but no measurements.
- Radioactive cloud has passed area displayed, radiation from fallout remains a serious hazard.
- Model assumes that no shelter or other protective actions have been taken to decrease exposure.

Notes:

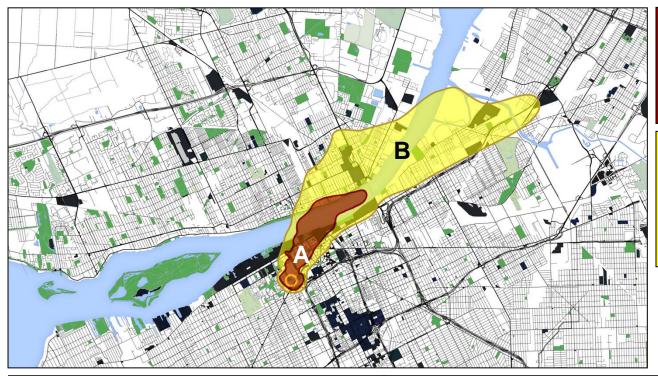
- Total external dose from radioactive fallout during first hour of exposure leading to near-term (days to weeks) illness or death.
- The best initial action is to seek immediate shelter.
- Sheltering with delayed evacuation is preferred, unless evacuation can be completed before fallout arrival.
- Highest radiation hazard during first hours, then rapidly declines.
- Expect few deaths or serious injuries due to radiation outside the maximum extent of these regions.
- Area size will increase rapidly the first few days, then vary slowly, as they show total dose accumulated since detonation.





IND Detonation

Predicted Area for Potential Fallout Casualties (Presented in 3 time steps)



LETHAL FALLOUT (>450 rad)

Fallout lethal to most without adequate shelter. Best action is early shelter followed by informed evacuation to control exposure.

Total Population: 26,900 Area: 6.0 km² Extent: 5.3 km

DANGEROUS FALLOUT (>100 rad)

Fallout levels can cause death, injury or illness. Greatest opportunity for life saving and injury reduction. Dose management for first responders

essential.

Total Population: 53,800 Area: 41.4 km² Extent: 14.9 km

12 hours

after detonation

Assumptions:

- Assumes 10 kt detonation at 0 ft elevation.
- Areas shown are model predictions based on an estimated source term but no measurements.
- Radioactive cloud has passed area displayed, radiation from fallout remains a serious hazard.
- Model assumes that no shelter or other protective actions have been taken to decrease exposure.

Notes:

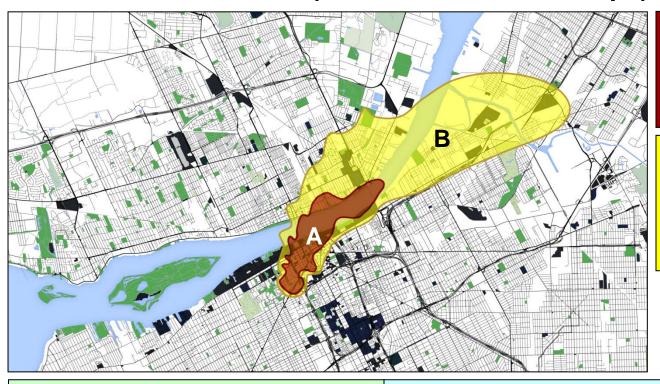
- Total external dose from radioactive fallout during first 12 hours of exposure leading to near-term (days to weeks) illness or death.
- The best initial action is to seek immediate shelter.
- Sheltering with delayed evacuation is preferred, unless evacuation can be completed before fallout arrival.
- Highest radiation hazard during first hours, then rapidly declines.
- Expect few deaths or serious injuries due to radiation outside the maximum extent of these regions.
- Area size will increase rapidly the first few days, then vary slowly, as they show total dose accumulated since detonation.





IND Detonation

Predicted Area for Potential Fallout Casualties (Presented in 3 time steps)



LETHAL FALLOUT (>450 rad)

Fallout lethal to most without adequate shelter. Best action is early shelter followed by informed evacuation to control exposure.

Total Population: 38,500 Area: 8.6 km² Extent: 6.5 km

DANGEROUS FALLOUT (>100 rad)

Fallout levels can cause death, injury or illness. Greatest opportunity for life saving and injury reduction. Dose management for first responders essential.

Total Population: 67,100 Area: 59.8 km² Extent: 16.5 km

168 hours

after detonation

Assumptions:

- Assumes 10 kt detonation at 0 ft elevation.
- Areas shown are model predictions based on an estimated source term but no measurements.
- Radioactive cloud has passed area displayed, radiation from fallout remains a serious hazard.
- Model assumes that no shelter or other protective actions have been taken to decrease exposure.

Notes:

- Total external dose from radioactive fallout during first 168 hours of exposure leading to near-term (days to weeks) illness or death.
- The best initial action is to seek immediate shelter.
- Sheltering with delayed evacuation is preferred, unless evacuation can be completed before fallout arrival.
- Highest radiation hazard during first hours, then rapidly declines.
- Expect few deaths or serious injuries due to radiation outside the maximum extent of these regions.
- Area size will increase rapidly the first few days, then vary slowly, as they show total dose accumulated since detonation.

Text Description for Images

Predicted Area for Potential Fallout Casualties (Presented in 3 time steps) Map 1 showing Predicted Area for Potential Fallout Casualties 1 hour after detonation.

This map is based on the assumed magnitude of the explosion and the predicted or observed meteorological conditions. It delineates those areas where radiation levels due to fallout could lead to fatalities among unprotected members of the population within the first few days to weeks (cumulative dose greater than 450 rad or 4.5 Sv), and areas where unprotected members of the population would be expected to exhibit symptoms of radiation sickness (cumulative dose greater than 100 rad or 1 Sv). Responders and decision-makers will use this map during the first few hours / days post-detonation to determine the need for and nature of protective measures (i.e. sheltering and evacuation), determine potential medical support needs and prioritize rescue efforts.

Map 2 and map 3 showing Predicted Area for Potential Fallout Casualties 12 hours and 168 hours after detonation.

This map is based on the assumed magnitude of the explosion. It delineates the Severe Damage (SD), Moderate Damage (MD) and Light Damage (LD) zones. Responders and decision-makers will use this map during the first few hours post-detonation to prioritize efforts to save lives in the impacted area.