

Geographical Eye: Disasters

Programme 5: Toxic Clouds

Activity 2 worksheet: Bhopal, India

Bhopal's toxic cloud killed 10,000 and injured half a million people. Some have said casualties would have been far less if the factory had been in Birmingham instead of Bhopal.

Use the video, Net Notes and the following website: <http://rtk.net/E6199T660> to fill in the grid below and see whether you agree.

| Factor to consider | Bhopal (India) | Birmingham (UK) |
|--|----------------|--|
| 1. Size of population | 1,000,000 | 1,4000,000 |
| 2. Site of factory | | on an industrial estate by the outer ring road |
| 3. Safety procedure at factory | | |
| 4. Area covered by toxic cloud | | |
| 5. Scope for people to escape the cloud | | |
| 6. Health of local people before event | | |
| 7. Number of hospital beds/doctors available | | |
| 8. Compensation costs | \$470,000,000 | |
| 9. Current state of factory site and surrounding areas | | |

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Activity 3 worksheet: Seveso, Italy

The chemical explosion at a weed-killer factory in Seveso, Northern Italy in 1976, produced a poisonous cloud of dioxin that engulfed 750 acres and affected nearly 6,000 people. It took seven years for the area to be made safe.

See the video, Net Notes and this website:
<http://webster.syntex.com/roche/about/esevesa.htm>

As with the other two events, especially Chernobyl, the way people handle an emergency matters enormously.

Look at all three disasters – Chernobyl, Bhopal and Seveso – and see what mistakes officials and other people made. Try to identify the consequences of these poor decisions and complete the grid below:

| Decisions | Location | Consequences |
|--|----------|-----------------------------|
| 1. Cooling system turned off | Seveso | Explosion in chemical works |
| 2. Wait nine days before admitting dioxin in the fallout | Seveso | |
| 3. Allow thousands of workers to live next to factory | | |
| 4. Tell no one what has happened for two weeks | | |
| 5. Move no one out of area for several weeks | | |
| 6. Carry on selling locally grown food crops | | |