

Chernobyl disaster

26 april 1986

The worst man-made disaster
in human history

The nuclear power station

Chernobyl is located on the border area between Ukraine and Belarus.





Chernoby

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The Chornobyl nuclear power station was built in 1978-1979.





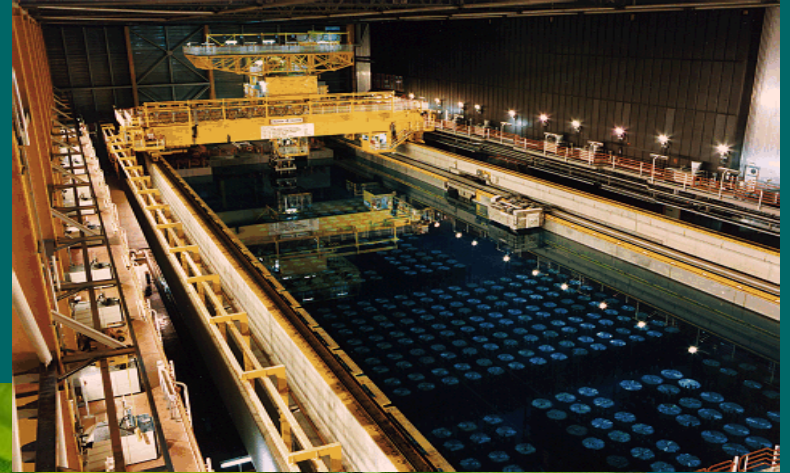
concrete barriers

Chernobyl Power Plant

Pripjat River

cooling pond

Chernobyl

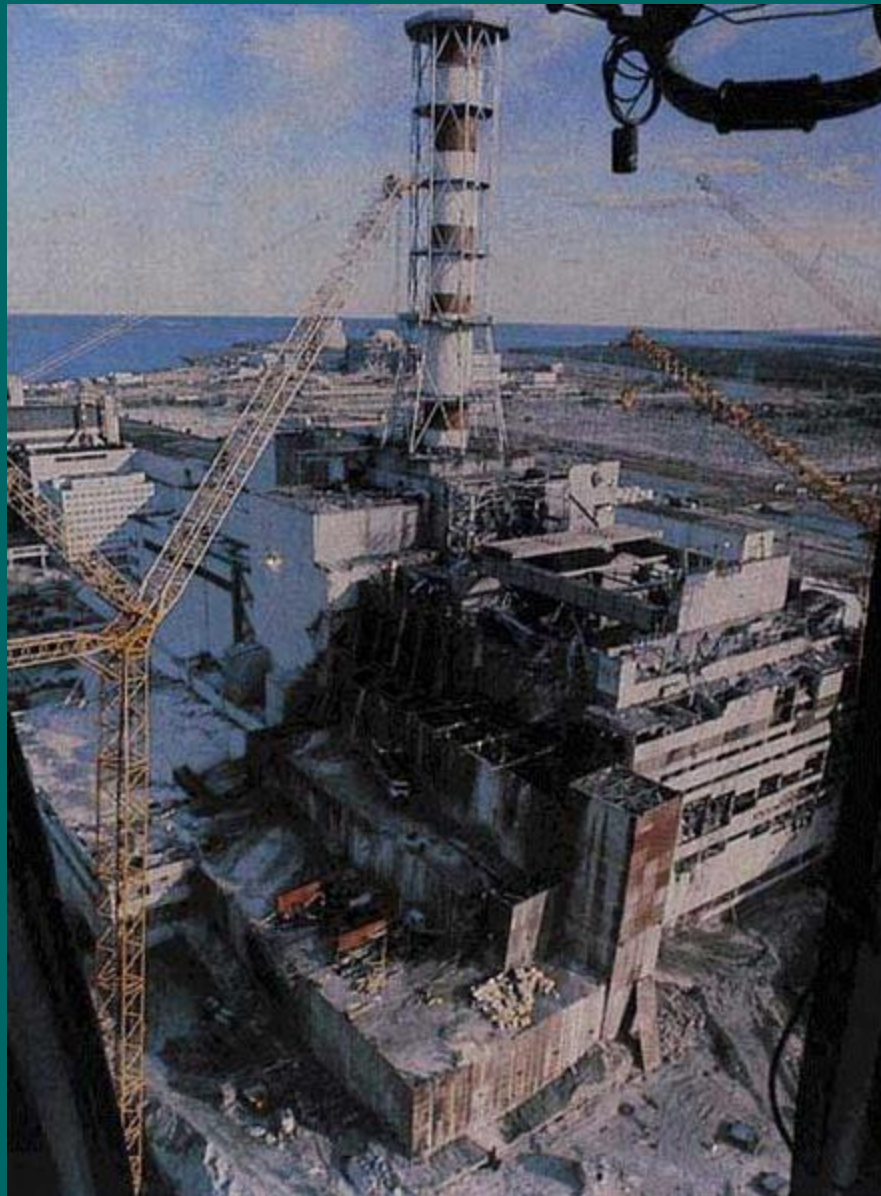


The Explosion

In the early morning hours of 26 April 1986, a testing error caused an explosion at the Chernobyl nuclear power station.



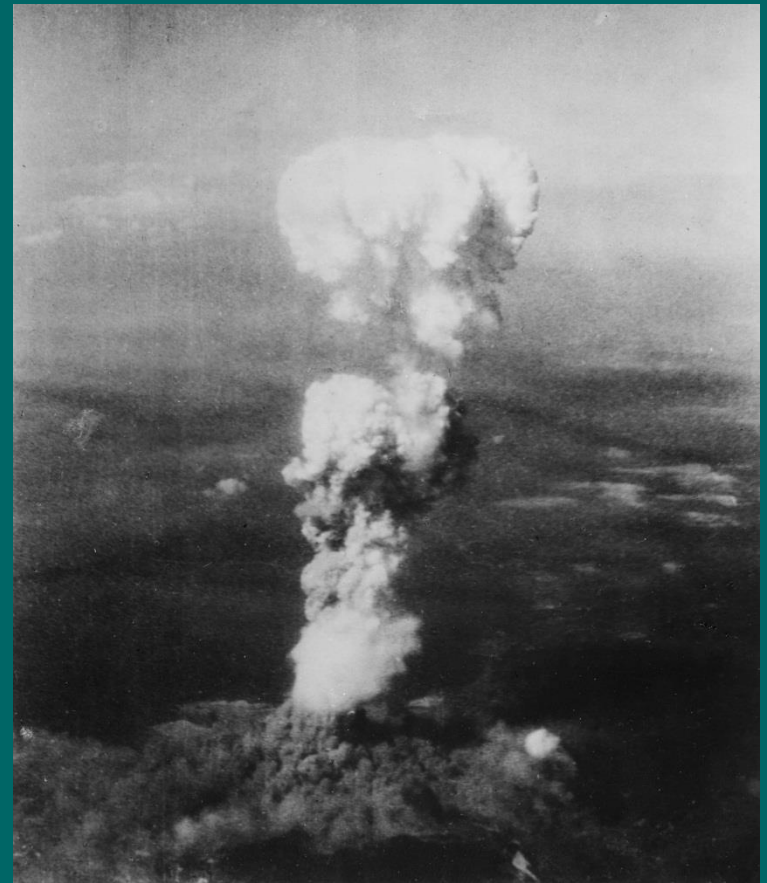






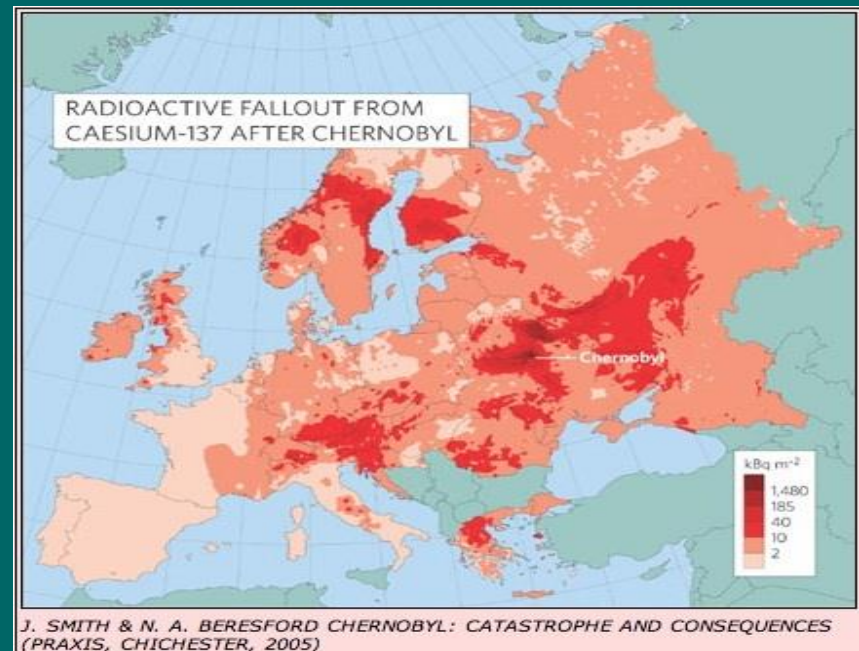
Radioactive fallout

The explosion released 190 tons of radioactive gases into the atmosphere.





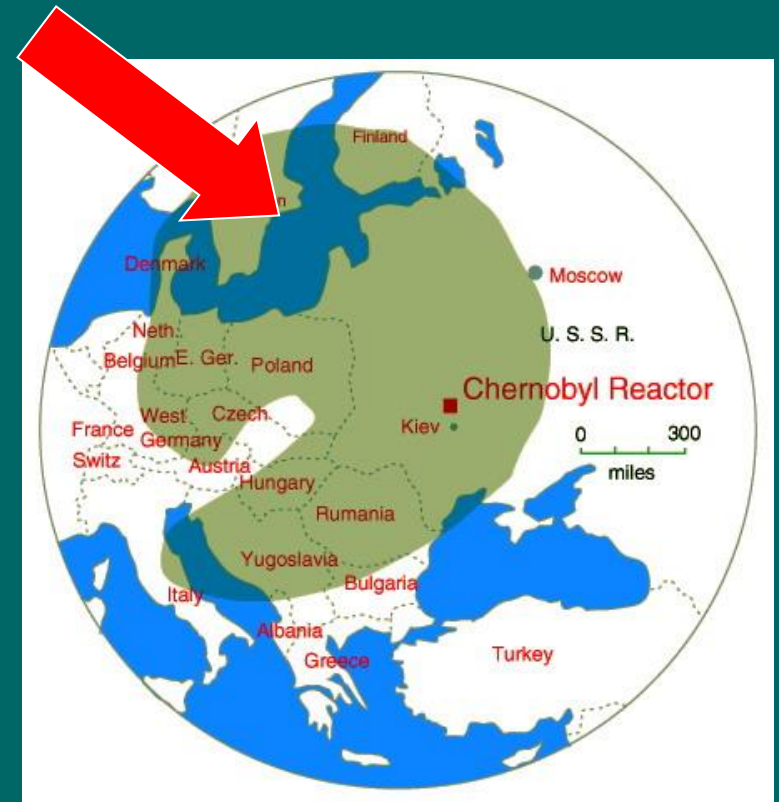
Radioactive fallout scattered over much of the northern hemisphere via wind and storm patterns.



70% of the radioactive material
was blown into the neighboring
country of Belarus.



In all 150,000 square kilometres
in Belarus, Russia and Ukraine
were contaminated.



7 million people living in these areas were exposed to the radiation fallout.



The evacuation

The morning after the explosion,
there was no hint of a disaster.



Children went to school and
played outside.



Gardeners worked on their plots outdoors.



Even weddings took place that
Saturday night.



Only on the second day after the disaster (after 36 hours) did the Soviet authorities start evacuating people from the area around Chernobyl.



In total some 200,000 people are believed to have been relocated as a result of the accident.



3 million of those evacuated were children.

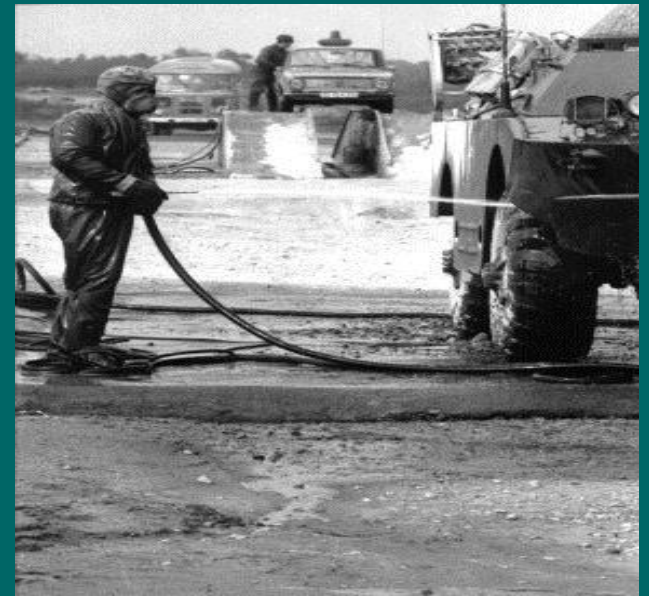




The Human Casualties

The immediate impact

The immediate casualties were operators, rescue workers, firefighters and soldiers involved in the clean up operations.



31 emergency clean-up people
workers died in 3 months of
radiation poisoning.



134 emergency workers suffered from acute radiation sickness.



Wokół czarnobylskiej elektrowni atomowej rozciąga się trzydziestokilometrowa strefa zamknięta

25,000 of the rescue workers later died from diseases caused by radiation.



Diseases caused by radiation included:

- lung cancer,
- leukemia,
- cardiovascular disease.



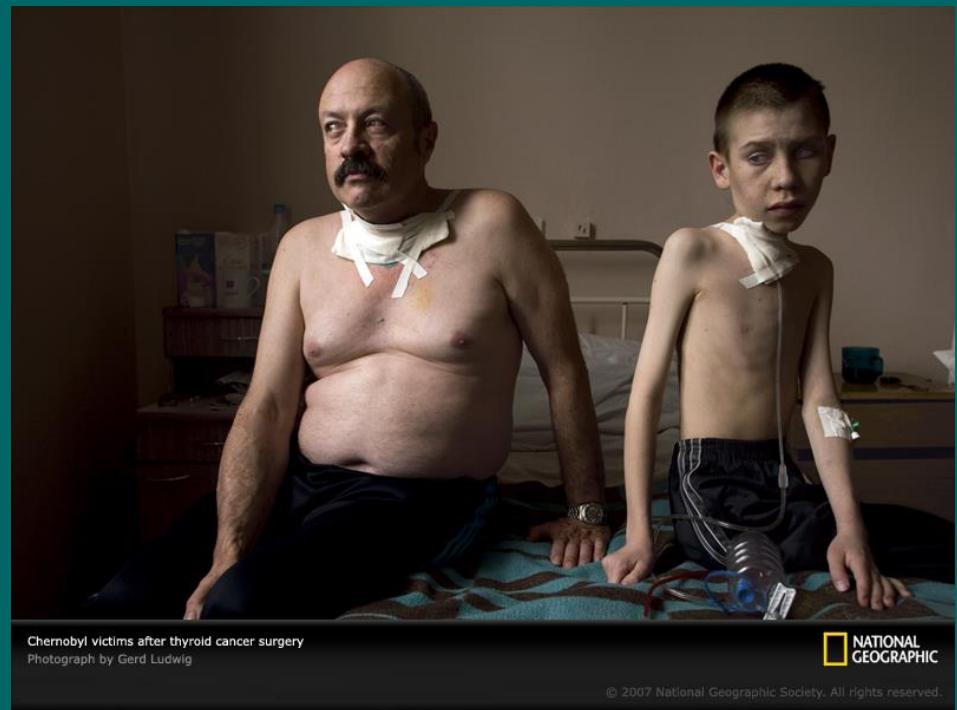
Long term exposure

Eight years after the accident
8,000 people had died from
diseases due to radiation.



Cemetery, Novi Martinovichi. People were evacuated to this village from exclusion zone.
3.96.07.07.35 26 JUL 1995
CHERNOBYL UKRAINE D
© Greenpeace/Kotlyarchuk

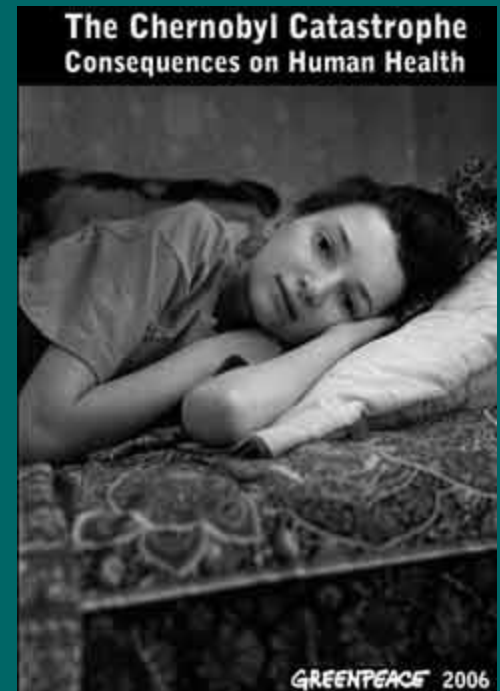
To date medical statistics reported 270,000 cancers (mostly thyroid) caused by the Chernobyl disaster.



Of these 93,000 of these cancer cases were fatal.



There have been at least 1800 documented cases of thyroid cancer in children.



In region of Belarus, incidence of leukemia has increased 50% in children and adults.



Maternal exposure to radiation caused an increased rate of:

- birth defects,
- miscarriages,
- and stillbirths



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Environmental Impact

Areas still impacted today:

- soil
- water
- air
- crops and food
- livestock



20% of prime farmland in Belarus
remains contaminated from the
decaying components of
plutonium.



Radiation is concentrated in sediments at the bottoms of lakes and ponds.



Still the population continues
to contaminate itself by fishing
there.



Livestock such as cattle and goats accumulate radioactivity in their meat and milk.

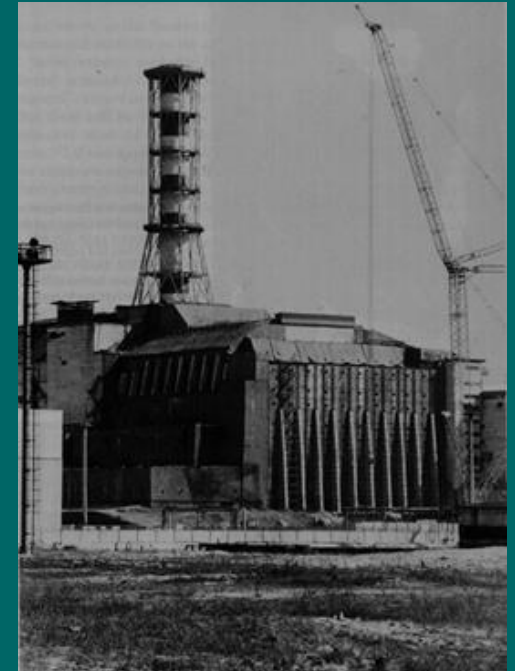


The food and water supply is continuously contaminated by rainfall and by the movement of radioactive dust.



Problems Today

After the disaster, a huge cement box (sarcophagus) was hastily built around the radioactive material.



According to a 2003 report by the Russian Atomic Energy Ministry, *"the concrete shell surrounding the Chernobyl nuclear reactor was in real danger of collapsing at any time."*



A new shelter - a 1.3 million euro project was completed in 2009.



It is hoped to safely contain the nuclear material for the next 100 years.



97% of the radioactive materials
from the Chernobyl plant still
remains inside this sarcophagus.



Even if the people are aware of the danger many have returned to live in their old homes.



Today 5.5 million people still live
in contaminated areas.



They continue to be exposed to low doses of radiation for decades to come.

