Billowing Mushroom Cloud

Hiroshima: 8:15 a.m., August 6, 1945
Nagasaki: 11:02 a.m., August 9, 1945

▲ The Mushroom Cloud about 1 Hour after Detonation (Hiroshima)
Taken from an altitude of about 9,000 m (29,520 feet) and a distance of about 80 km (50 miles) from the hypocenter from one of the three US bombers that took part in the A-bomb mission. (August 6, 1945-Photo: US Army)

▲ The Billowing Mushroom Cloud (Nagasaki)
A round white puff of smoke, then instantly a crimson fireball began to swell. (August 9, 1945-Photo: US Army) Courtesy: The Japan Peace Museum

HIROSHIMA & NAGASAKI
The Vanished Cities

(Hiroshima) Taken from the roof of the Hiroshima Chamber of Commerce and Industry building 260 m (286 yards) north of the hypocenter.
(October 5, 1945-Photo: Shigeo Hayashi)

(Hiroshima) Taken 120 m (132 yards) east of the hypocenter near what is now the Nagasaki Atomic Bomb Museum.
(Mid-October 1945-Photo: Shigeo Hayashi)
(Nagasaki) Taken 900 m (990 yards) west of the hypocenter. The photo on the left is the view across the Urakami River in the opposite direction.

(Mid-October 1945-Photo: Shigeo Hayashi)
A-bomb Damage

Atomic bombs utilize the enormous energy released by nuclear fission to inflict massive and instantaneous destruction and slaughter. The energy is released in three forms: heat, blast, and radiation. The synergistic effects of these three produce unimaginable destructive power. Two such bombs utterly obliterated the cities of Hiroshima and Nagasaki.

Long after the bombings, survivors continue to suffer from the physical damage caused by radiation. They have been forced to carry the terrible burden of never knowing when the aftereffects might manifest as a life-threatening disorder.

The atomic bombs inflicted massive human and property damage, resulting in intense psychological and emotional trauma, which was compounded by destruction of the entire fabric of those urban societies. The most distinctive characteristic of A-bomb damage is the complex interaction of destructive effects wrought by this broad spectrum of personal and social loss.

Profile of A-bomb Damage

<table>
<thead>
<tr>
<th>Category</th>
<th>Hiroshima</th>
<th>Nagasaki</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time of explosion</td>
<td>8:15 a.m., August 6, 1945</td>
<td>11:02 a.m., August 9, 1945</td>
</tr>
<tr>
<td>Number of dead</td>
<td>About 140,000 (± 10,000) (350,000 people estimated to have been in Hiroshima at the time)</td>
<td>About 74,000 (± 10,000) [Total pop. 240,000]</td>
</tr>
<tr>
<td>Damage to buildings</td>
<td>% No. of buildings at the time: about 76,000</td>
<td>% No. of buildings at the time: about 51,000</td>
</tr>
<tr>
<td>% damaged</td>
<td>92%</td>
<td>36%</td>
</tr>
<tr>
<td>Totally collapsed and burned</td>
<td>63%</td>
<td>23%</td>
</tr>
<tr>
<td>Totally collapsed</td>
<td>5%</td>
<td>2%</td>
</tr>
<tr>
<td>Partial collapsed, partly burned, partly damaged</td>
<td>24%</td>
<td>11%</td>
</tr>
</tbody>
</table>
The Atomic Bomb

A single neutron colliding with the atomic nucleus of a fissionable substance like uranium 235 (or plutonium 239) can cause the nucleus to split, releasing 2 or 3 more neutrons and a large amount of energy in the forms of extreme heat and lethal radiation. These newly released neutrons collide with other nuclei, releasing more neutrons and more energy. Under proper conditions, this chain reaction spreads through the substance, releasing enormous energy instantaneously. The atomic bomb is a weapon designed to inflict massive destruction with the vast energy thus released.

The Manhattan Project
During the Second World War, which began in 1939, US President Franklin Roosevelt ordered the development of the atomic bomb. This development effort, called the "Manhattan Project," began in August 1942. It was carried out in top secrecy and absorbed vast financial and human resources.

Profiles of Atomic Bombs

<table>
<thead>
<tr>
<th>Category</th>
<th>Hiroshima</th>
<th>Nagasaki</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>Gun-barrel uranium bomb (Nickname Little Boy)</td>
<td>Implosion plutonium bomb (Nickname Fat Man)</td>
</tr>
<tr>
<td>Weight</td>
<td>approx. 4 tons</td>
<td>approx. 4.5 tons</td>
</tr>
<tr>
<td>Explosive power</td>
<td>approx. 16,000 tons</td>
<td>approx. 21,000 tons</td>
</tr>
<tr>
<td>(TNT equivalent)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Detonation altitude</td>
<td>approx. 600 m (1,969 feet)</td>
<td>approx. 500 m (1,640 feet)</td>
</tr>
<tr>
<td>Structure</td>
<td>Quantities of uranium 235, each less than a critical mass, were placed at two ends of a long, thin cylinder. A chemical explosion propelled the U-235 at one end forcefully into the piece at the other end, instantly creating a critical mass and starting a fission chain reaction. U-235 is present in natural uranium, but only in tiny amounts. This bomb thus required technology to increase that percentage.</td>
<td>Quantities of plutonium 239, each less than a critical mass, were placed around the inside of a sphere. A chemical explosion drove the pieces forcefully toward the center, compressing them instantly into a critical mass and starting the nuclear fission. P-239 does not exist naturally. This bomb thus required a reactor capable of creating this element.</td>
</tr>
</tbody>
</table>

Critical mass: The minimum amount of fissionable material required to sustain a nuclear chain reaction.

[The Atomic Bomb dropped on Hiroshima (Little Boy)]

[The Atomic Bomb dropped on Nagasaki (Fat Man)]
Before the A-bomb

Hiroshima

The city of Hiroshima boasted two primary aspects. Its high concentration of army installations made it a "military city," while the Hiroshima Higher School of Education supported its reputation as an "education city."

Nagasaki

As Nagasaki modernized, its main industry shifted from trade to shipbuilding.

HIROSHIMA & NAGASAKI
Immediately After the Bombings

▲ A-bomb Survivors Suffering from Burns and Other Injuries  (Hiroshima, about 2.3 km (1.4 miles) from the hypocenter)  
Approximately 3 hours after the bombing  (Around 11 a.m., August 6, 1945 - Photo: Yoshito Matsushige)

▲ Policeman Writing Disaster Certificates  
(Hiroshima, about 2.5 km (1.6 miles) from the hypocenter)  
(Around 5 p.m., August 6, 1945 - Photo: Yoshito Matsushige)

A Young Girl on a Relief Truck  
(Hiroshima, about 920 m (0.5 miles) from the hypocenter)  
With red and oozing burns, this girl lacked even the strength to drink water.  
(August 9-12, 1945 - Courtesy: Asahi Shinbun Company)
Stunned Survivors Watching Vacantly over the Injured (Nagasaki, about 1.1 km (0.7 miles) from the hypocenter) (August 10, 1945-Photo: Yosuke Yamahata)

A Dead Horse and Wagon near the Hypocenter (Nagasaki) (August 10, 1945-Photo: Yosuke Yamahata)

Corpses of a Mother and Baby on the Platform at Urakami Station (Nagasaki, about 1 km (0.6 miles) from the hypocenter) (August 10, 1945-Photo: Yosuke Yamahata)

The Charred Corpse of Boy (Nagasaki, about 700m (0.4 miles) from the hypocenter) (August 10, 1945-Photo: Yosuke Yamahata)
**Gathering Bodies** (Hiroshima) Bodies being gathered for cremation was a common sight throughout the city. (August 9-12, 1945) Courtesy: Asahi Shimbun Company

**Relief Teams Carry the Severely Injured on Stretchers**
(Nagasaki, about 1.1 km (0.7 miles) from the hypocenter)
Taken the day after the bombing near Urakami Station. The people carrying stretchers are probably rescue team members from the factory.
(August 10, 1945-Photo: Yosuke Yamahata)

**Crowded, Chaotic Relief Station**
(Hiroshima, about 1.2 km (0.7 miles) from the hypocenter)
Lacking medical supplies, applying zinc oxide and a layer of gauze to burned faces was the best they could do.
(August 7, 1945-Photo: Yotsugi Kawahara)
Conditions Immediately after the Bombing as Drawn by Survivors

▲ August 6 (Hiroshima) (Picture: Kanemitsu and Chieko Ikeda)

▲ Destroyed Steel Mill (Nagasaki) (Picture: Hiroshi Matsuoe)

▲ Dead Victims Clustered around a Fire Cistern (Hiroshima) (Picture: Akira Onoki)

▲ Children Crying as their Mother is Taken Away on a Stretch (Nagasaki) (Picture: Sakae Ikeda)

▲ A Woman Trapped under a Collapsed House and Calling for Help (Hiroshima) (Picture: Shoichi Furukawa)

▲ The Urakami District after the Bombing (Nagasaki) (Picture: Mura Ashizuka)
Heat Rays

When the A-bomb exploded, the temperature at the epicenter soared to over one million degrees centigrade. The fireball expanded to 280 m (308 yards) in diameter. The heat rays generated by the fireball brought temperatures on the ground near the hypocenter to 3,000 to 4,000 °C (5,432 to 7,232 °F).

▲ Shadows of Railings Cast by the Heat Rays
(Hiroshima, 880 m (979 yards) from the hypocenter)
(November 1945-Photo: US Army)

▲ Shadow of a Man and Ladder Remain on a Wooden Wall
(Nagasaki, about 4.4 km (2.6 miles) from the hypocenter) Courtesy: Asahi Shimbun Company

▲ Human Shadow Etched in Stone
(Hiroshima, 260 m (286 yards) from the hypocenter)
The heat rays burned the stone steps white. Only the place where a person was sitting remained dark.
(End of 1946-Photo: Yoshito Matsushige)

▲ Charred Remains of a Fence Ignited by the Heat Rays
(Hiroshima, 2.1 km (1.1 miles) from the hypocenter)
The heat rays caused this crosstie fence along the Sanyo Main Line to burst into flame.
(End of August 1945-Photo: Isao Kita)
Blast

The explosion generated super-high air pressure, reaching hundreds of thousands of atmospheres. The surrounding air expanded enormously creating an extremely powerful blast. The leading edge of the blast was a shock wave traveling faster than sound, followed by a powerful wind.

At the hypocenter, the maximum blast pressure was 35 tons per m². The maximum wind velocity was 440 m/sec (about 1,000 mph).

The shock wave and blast crushed all wooden buildings within 2 km (1.2 miles) of the hypocenter. Close to the hypocenter it crushed even ferro-concrete buildings.

▲ Looking North from the Hypocenter (Hiroshima)
In the foreground is Shima Hospital, at the hypocenter. To the right is the gate to Gokoku Shrine. (November 1945-Photo: US Army)

▲ Building Directly beneath the Epicenter (Hiroshima, 210 m. (231 yards) from the hypocenter)
This roof, punched in by the blast from directly above, is collecting rainwater. (1945-Photo: US Army)

▲ The Aioi Bridge Buckled by the Blast (Hiroshima, 300 m (328 yards) from the hypocenter)
The Aioi Bridge, located in downtown Hiroshima, is said to have been the target of the bombing. This 30-cm (12-inch) thick concrete sidewalk was blown upward by the intense blast reflecting off the river. (October 1945-Photo: Toshio Kawamoto)

▲ Statues of St. Maria and St. John in the Ruins of Urakami Cathedral (Nagasaki, 530 m (550 yards) from the hypocenter)
The cathedral was totally destroyed. All parishioners there at the time died. (1946-Photo: US Army)

▲ Shiroyama National Elementary School in Ruins (Nagasaki, 500 m (350 yards) from the hypocenter)
Because of an air-raid alert, the building was occupied by faculty, pupils, and a number of Mitsubishi Nagasaki Ordnance Factory employees, who were using the school. Nearly all died. (1946-Photo: US Army)
Super-High-Temperature Fire

The heat rays emitted by the fireball ignited houses and anything combustible near the hypocenter. Kitchen fires in collapsed houses around the city also spread out of control. Throughout the day, the entire city was engulfed in a sea of flame. The total area reduced to ashes was about 13 km² (8 mi²) in Hiroshima and 6.7 km² (4.2 mi²) in Nagasaki.

Though the total energy of the Nagasaki bomb was greater than that of Hiroshima, more of Hiroshima burned due to topography and the distribution of buildings.

▲ Burned Corpses Scattered near the Hypocenter (Nagasaki, 110 m (121 yards) from the hypocenter) The buildings in this area were burned completely to ashes.
(August 10, 1945-Photo: Yosuke Yamahata)

▲ Downtown Hiroshima in Flames
Taken from the Army Ship Training Division Grounds, about 4 km (2.2 miles) south of the hypocenter.
(August 6, 1945-Photo: Gonichi Kimura)

▲ Ruins of the Nagasaki Medical College Hospital (Nagasaki, 700 m (770 yards) from the hypocenter)
More than 1,000 staff, nursing students, patients, and visitors were in this hospital.
(1945-Photo: US Army)

▲ The Burned Plain (Hiroshima)
The view from the hypocenter extends unobstructed all the way to Ninoshima Island, about 10 km (6.2 miles) away in Hiroshima Bay.
(October 1945-Photo: US Army)
Damage to Human Bodies

The symptoms inflicted by the A-bomb are broadly divided into acute disorders and aftereffects. Most acute disorders were caused by complex interactions of heat ray and fire burns, blast contusions and lacerations, and radiation damage.

“Aftereffects” refers to symptoms that manifested after the acute disorders. They are assumed to be caused mainly by radiation.

Burns from Heat Rays and Fire

The intense heat rays from the fireball inflicted normally inconceivable burns. In severe cases, the surface layer of skin was burned crisp and slid off the body, exposing the tissues beneath, sometimes down to the bone. The burns of victims directly exposed within 1.2 km (0.7 miles) of the hypocenter extended into internal tissues and organs. The vast majority of these victims died within a few days.

Nearly every building in the city collapsed, so thousands were trapped inside or under heavy debris. Unable to escape, they were burned alive by the sea of fire.

▲ Man Burned over His Entire Body (Hiroshima, about 1 km (0.6 miles) from the hypocenter)
His unburned waist was protected by a waistband.
(August 7, 1945-Photo: Masami Onaka)

▲ A Boy of 16 Exposed while Riding His Bicycle (Nagasaki, 1.8 km (1.1 miles) from the hypocenter)
This boy survived, but spent an agonizing year and nine months lying face down in bed.
(January 1946-Photo: US Army)
Damage from the Blast
The blast hurled people through the air and crushed them under collapsed buildings. Many found their skin filled with glass fragments from shattered windows.

Damage from Radiation
The A-bomb released massive amounts of radiation, far beyond levels normally found in nature. This radiation is what made the A-bomb qualitatively different from conventional bombs. Victims exposed to radiation suffered serious injury, and even today, radiation damage continues to cause great suffering to many. The immediate effects of radiation poisoning include the destruction of cells, damage to blood-forming and other organs, weakened immune functions, and loss of hair.

A Soldier on the Verge of Death (Hiroshima, exposed 1 km (0.6 miles) from the hypocenter)
Subcutaneous bleeding, stomatitis, and hair loss.
(September 3, 1945-Photo: Gonichi Kimura)

A Girl Who Has Lost Her Hair (Nagasaki)
Suddenly, about two weeks after the bombing, large numbers of survivors began losing their hair. This symptom was prevalent for the following 1 to 2 weeks.
(Late August 1945) Courtesy: Asahi Shimbun Company
Most acute disorders either killed victims or healed in 4 to 5 months. However, the aftereffects, including a distinct increase in leukemia five or six years after the bombing, have continued to cause serious problems. The most common aftereffects include keloids (abnormally thick scar tissue over burns), cataracts, leukemia, as well as thyroid, breast, lung, and other cancers. Some in-utero survivors were born with microcephaly, often accompanied by mental and developmental impairment.

Even today we have much to learn about the full range of effects produced over the years by radioactive substances taken into the body. We do know that survivors continue to suffer from radiation aftereffects.

![Years of Cancer Onset Diagram](image)

**Years of Cancer Onset**

<table>
<thead>
<tr>
<th>Detonation</th>
<th>10 years</th>
<th>20 years</th>
<th>30 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>1945</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1950</td>
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<td></td>
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<td></td>
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<tr>
<td>1975</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1980</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **Latency period**
- **Increase suspected**
- **Increase observed**

Source: Effects of A-bomb Radiation on the Human Body, Hiroshima International Council for Medical Care of the Radiation-Exposed

**A Man with Skin Cancer on His Right Hip** (Hiroshima, exposed 1.2 km (0.8 miles) from the hypocenter)

**A Woman with Microcephaly and Her Mother** (Hiroshima)

The A-bomb radiation had numerous adverse effects on fetuses exposed in their mothers’ wombs. Those born with mental or physical impairment have survived thus far through the loving care of their parents. However, as these survivors age and their relatives die, many are unable to live independently. Their care has become a major issue.

(1975) Courtesy: Takeharu Narita

**A Man with Keloids on His Face and Neck** (Nagasaki, exposed 1 km (0.6 miles) from the hypocenter)

(June 1970 Photo: Nagasaki Chapter of the Japan Realist Photographers)
Sadako Sasaki was two years old at the time of the bombing. She grew up strong and healthy, but ten years later (1955), when she was in the sixth grade in elementary school, she was hospitalized with leukemia.

Sadako believed that folding 1,000 paper cranes would cure her illness. While in the hospital she folded cranes whenever she could, but her hope was in vain. She died after fighting the disease for eight months. Her death reveals the great horror of radiation—its ability to injure and kill many years after exposure.

Sadako’s classmates were terribly shocked by her death and the story of her paper cranes, so they started collecting money to build a monument to comfort her soul and the souls of the many children killed by the A-bomb, and to express their hope that there would never be another war. This campaign spread to schools around the nation and around the world. In 1958, the Children’s Peace Monument was erected in Hiroshima Peace Memorial Park, depicting a young girl lifting a paper crane high over her head.

Beneath the monument, carved in black granite, are the words, “This is our cry. This is our prayer. For peace in this world.” The area around this statue is always full of paper cranes sent by peace-loving people throughout the world.
Under the Mushroom Cloud

▲People Who Lived beneath the Epicenter
Courtesy: Chujo Shimbun Company

HIROSHIMA & NAGASAKI
The A-bombings were followed by a time of chaos and confusion. Japan’s surrender and the Allied Occupation brought tremendous change. Despite dire shortages of food, capital, and materials of all kinds, the people of Hiroshima and Nagasaki fought off their despair and struggled to rebuild their lives.
Reviving the Cities

▲ Reconstruction of Aioi Bridge (Hiroshima)
Workers making temporary repairs on Aioi Bridge. Its railings were blown away and much of the roadway was destroyed. (1949-Photo: Yoshita Kishimoto)

▲ Building a Temporary Urakami Cathedral (Nagasaki)
Surviving parishioners set about building a temporary cathedral. (August 1946-Photo: Yasuo Tomishige)

▲ Replacing Streetcar Track (Hiroshima)
A burned-out streetcar appears on the left. The A-bomb dealt a devastating blow to Hiroshima’s streetcars, but three days later, service was restored to a portion of the line. Section after section was reopened and, though only a limited number of cars were running, operation resumed on all lines by the following October. (October 1945-Photo: Shunkichi Kikuchi)
Assistance from Overseas

▲ Norman Cousins and the Orphans (Hiroshima)
Norman Cousins, editor-in-chief of the American magazine Saturday Review, proposed a Spiritual Adoption Movement. By the end of November 1951, he sent over $12,000 to 263 children. On March 3, 1964, the city of Hiroshima made him an honorary citizen.
(January 9, 1951) Courtesy: Chugoku Shimbun Company

▲ One of the Female Survivors Receiving Treatment in the US (Hiroshima)
Twenty-five young women traveled to the US for treatment of their keloid scars.
(May 1955) Courtesy: Chugoku Shimbun Company

▲ Orphans at Seibo no Kishi Children’s Home (Nagasaki)
Many children lost their families in the war and were abruptly left to fend for themselves. At Seibo no Kishien, these war orphans were warmly welcomed and cared for.
(May 1947) Courtesy: Seibo no Kishi, a friary of the Franciscan Friars

▲ Children’s Library (Hiroshima)
This library was built with money sent from the Hiroshima Prefecture Association of California. It was later rebuilt but remains the Municipal Children’s Library.
Courtesy: Chugoku Shimbun Company

HIROSHIMA & NAGASAKI
Recovery

The City Seen from Hijyama Hill (Hiroshima)
The wide street stretching straight off into the distance is Peace Boulevard, then under construction. (April 1957; Photo: Yoshitaka Nakatani)

South of the Hypocenter, Nine Years after the Bombing (Nagasaki)
This photo was taken from the International Culture Hall, then under construction (now the site of the Nagasaki Atomic Bomb Museum). In accordance with the Nagasaki International Culture City Construction Project, the area was laid out on a grid for redevelopment.
(August 1954) Courtesy: Nagasaki Shimbun Company
Hiroshima and Nagasaki Today

Hiroshima
Having learned much from its historic tragedy, Hiroshima is striving to offer hope and courage to struggling people around the world.

Nagasaki
Nagasaki is deepening its interaction with people around the world and utilizing the energy generated by diversity and exchange to advance the cause of peace.
Nuclear Weapons Now

Nuclear Deterrence Theory
The idea of nuclear deterrence is simple. "If I threaten my enemy with powerful weapons, I can keep him from attacking me." This idea requires that participating nations always have nuclear weapons powerful enough to destroy their opponent. Thus, for about 40 years after World War II, or until about 1985, the Soviet Union and the US led East and West camps in an ever-escalating nuclear arms race. During this race, they accumulated enough nuclear power to destroy each other many times over, and simultaneously created the potential for an all-out nuclear war that could annihilate the entire human race.

The international community has subsequently poured considerable energy into nuclear disarmament, but the nuclear powers still cling to their nuclear arsenals.

Most experts believe that Israel is a nuclear weapon state, though the Israeli government has never admitted possessing nuclear weapons. North Korea reported a nuclear test on October 9, 2006.

Nuclear Testing
The nuclear arms race escalated rapidly during the East-West Cold War that followed World War II. One by one, the USSR, England, France, and China conducted nuclear tests and joined the US as nuclear powers. In May 1998, India conducted its first test in 24 years, and Pakistan conducted its first ever.

More than 2,000 nuclear tests have been conducted to date.

The Hidden Cost of Nuclear Testing and Development
Radiation poisoning derived from the process of developing, manufacturing, testing, and deploying nuclear weapons has resulted in death for many innocent people around the world, and many more still suffer the aftereffects. Furthermore, it will take far more time and money to decontaminate nuclear test sites and factories, deal with the vast amount of existing fissionable material, and store, dismantle and dispose of radioactive waste than was spent in developing the weapons. Controlling the waste, which will remain dangerously radioactive for tens of thousands of years, presents serious hazards of radiation leakage due to container corrosion and explosion.

▲ After the Nuclear Test in the Desert in the Western State of Rajasthan, India
(May 11, 1998) Courtesy: Reuters

▲ Drums Filled with Radioactive Waste Left Exposed to the Elements
(January 1994-Photo: US Dept. of Energy)

▲ Land Contaminated by Radioactive Waste Stored in Underground Tanks
(January 1994-Photo: US Dept. of Energy)
Toward a Peaceful World Free From Nuclear Weapons

Expanding Nuclear-Free Zones

Nuclear-free zones are created through formal promises that countries within defined areas will never manufacture, test, acquire, or possess nuclear weapons. These treaties thus reduce the threat of nuclear war and ease international tensions.

Declaring a nuclear-free zone does not immediately solve the problem, but the spread of such zones reinforces the framework for preventing nuclear proliferation. They are an effective means of moving the world toward nuclear abolition.

Efforts by Citizens

The abolition of nuclear weapons cannot be left to nations alone. International public opinion must be formed to lead national policies toward disarmament. Individuals must be committed to peace and determined to build a society free from nuclear weapons. People engaged in a wide variety of related activities must strengthen their solidarity and work together with others around the world. The efficacy of such cooperation was amply demonstrated by the vital role played by non-governmental organizations (NGOs) in establishing the International Treaty Banning Anti-personnel Landmines and in promoting the World Court Project. The latter led to the advisory opinion from the International Court of Justice that says "...the threat or use of nuclear weapons would generally be contrary to the rules of international law." Only the collective power of an inspired populace can move nations, move the United Nations, and lead to a peaceful world free from nuclear weapons.

Peace Parade to Protest Nuclear Testing

In September 1995, a meeting to protest and halt the resumption of nuclear testing by France in the South Pacific was held on the Island of Tahiti, French Polynesia. Legislators from many countries around the world attended the meeting, and local citizens held this parade.

(September 2, 1995) Courtesy: Kyodo News Service

Protest Demonstration against Nuclear Testing

Held in Sempalatinsk in the Soviet Union in 1989, this was the first demonstration against testing at the Semipalatinsk test site. That test site was closed in 1991.

(1989-Photo: Yuri Ivanovich Kudin)
At 05:29:45 on July 16, 1945, a blinding flash and an incredible wave of heat scorched the desert near Alamogordo, New Mexico. This was the first atomic explosion in human history.

Most of those involved in this test felt tremendous relief and shouted for joy. But already some feared that the success of this test would cover the Earth with a dark cloud. J. Robert Oppenheimer, who led the scientific effort that culminated in this test, reportedly quoted a line from a sacred Hindu sutra. "I am become Death. Destroyer of Worlds." Today, we still have tens of thousands of nuclear weapons, most of which are incomparably more powerful than this first little atomic bomb.

The 20th century was one of amazing scientific and technological progress, but it was also a "century of war." We must make the 21st a "century of peace."
Material Witnesses

Shigeru's Lunch Box
Shigeru Orimen (then 13) was a first-year student at Second Hiroshima Prefectural Junior High School. Every day, he and his classmates were mobilized to clear away demolished buildings. On August 6 he left home in a hurry as usual, carrying the lunch his mother had made. It was a simple lunch, but one she had gone to great effort and expense to make.

Shigeru's worksite was 500 m (550 yards) from the hypocenter. After the bombing, his mother walked around the destroyed city searching for him. Early in the morning of August 9, on the bank of the Honkawa River, she found Shigeru's body doubled up, clutching this lunch box to his stomach. The lunch he never ate was burned black.

Mother's Rosary
On the morning of August 9, Misaki Ide's mother went to work at the home of a relative who lived near the Urakami Cathedral, about 600 m (660 yards) from the hypocenter.

After the bombing, Misaki headed for that relative's house to search for his mother. He found her dead at the cathedral. He found his mother's rosary at the relative's house. The glass beads had melted like taffy. Misaki kept this rosary for forty years in memory of his mother, then donated it to the Nagasaki Atomic Bomb Museum.

Shinichi's Tricycle
Shinichi (then 3 years and 11 months) loved to ride his tricycle. On August 6, he was riding in front of his house 1.5 km (0.8 miles) from the hypocenter. When the A-bomb exploded, both Shinichi and his tricycle were badly burned. He died that evening.

His father felt that laying a 3-year-old alone in a distant grave was too painful, so he buried Shinichi with his tricycle in the backyard.

Forty years later, his father dug up Shinichi's remains and transferred them to the family grave. He donated this tricycle, Shinichi's favorite playmate, to the Peace Memorial Museum.
Witnesses to History Conveying the Tragedy

▲ A-bomb Dome (Hiroshima)  (January 1995-Photo: Michio Ide)

▲ One-legged Torii Gate of Sanno Shinto Shrine (Nagasaki)  (October 19, 1995-Photo: Michio Ide)

HIROSHIMA & NAGASAKI