# The Realities of the Atomic Bombing of Hiroshima and the Reconstruction from the A-bomb Damage

## 1 Hiroshima before the Bombing

Hiroshima developed as a military city and an educational capital with the seventh largest population in Japan before the bombing. The area now known as Peace Memorial Park prospered as a major commercial and residential center. It is believed that about 350,000 people were in Hiroshima when the bomb exploded. As most adult males were serving in the war 90% of these were the elderly, women, and children.



Courtesy of Hiroshima Municipal Archives
Ujina Military Pier



Courtesy of Hiroshima Municipal Archives **Hiroshima Higher School of Education** 



Courtesy of KNACK Images Production Center Hiroshima Prefectural Industrial Promotion Hall and the center of Hiroshima City



Courtesy of KNACK Images Production Center Center of Hiroshima City (later became the Peace Memorial Park)

Hiroshima Prefectural Industrial Promotion Hall (later became the A-bomb Dome)

Nakajima District before the bombing (later became the Peace Memorial Park)



Aioi Bridge, target of the atomic bombing

Photo by Wakaji Matsumoto

## 2 The Atomic Bomb Damage

## (1) The Dropping of the Bomb

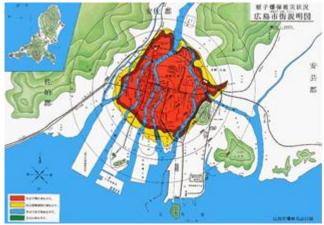


Courtesy of Hiroshima Peace Memorial Museum Photo by US Armed Forces

At 8:15 a.m. on August 6<sup>th</sup>, 1945, Hiroshima City fell victim to the first atomic bombing in history. The atomic bomb was dropped from an altitude of 9,600 meters and exploded 600 meters above the ground 150 meters southeast of the building now known as the A-bomb Dome.

Under this mushroom cloud, numerous innocent citizens were killed, injured, wandering in confusion, or hovering between life and death.

## (2) The Destroyed Area

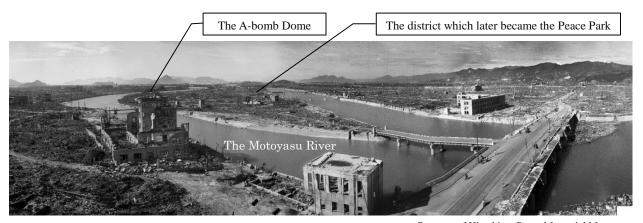


Collection of the City of Hiroshima

Due to the heat rays, blast, and fire, wooden buildings within two kilometers of the hypocenter were completely collapsed or burned. It is estimated that about 140,000 people out of approximately 350,000 had died by the end of 1945.

### (3) The City after the Bombing

This photo shows the hypocenter area soon after the bombing. Before the bombing, it was the center of commercial activity.



Courtesy of Hiroshima Peace Memorial Museum Photo by Shigeo Hayashi

## (4) Damage to Human Bodies

Ground temperatures near the hypocenter reached 3,000 to 4,000 degrees Celsius. The heat carbonized or deeply burned bodies. Symptoms of damage from heat ray, blast and radiation that appeared immediately after the bombing were called "acute disorders" and were varied and complex.



Courtesy of Hiroshima Peace Memorial Museum Photo by Yotsugi Kawahara **Injured victims taken in at a relief station** 



Courtesy of Hiroshima Peace Memorial Museum Photo by Masami Onuka

Burns caused by the heat rays



Courtesy of Hiroshima Peace Memorial Museum Photo by Gonichi Kimura **Effects by the radiation** 

Exposed to the A-bomb one kilometer away from the hypocenter, this soldier lost hair, bled from the gums, and developed purple spots on his skin due to radiation. He died nearly one month after the bombing. The acute disorders caused by radiation in time gave way to prolonged health problems. The number of survivors contracting leukemia increased noticeably five to six years after the bombing. Ten years after the bombing, the survivors began contracting thyroid cancers, and breast, lung and other cancers also developed at higher than normal rates.

Even today, 70 years after the bombing, the survivors suffer health problems due to radiation.



Collection of Hiroshima Peace Memorial Museum Drawing by Shoichi Furukawa, a survivor

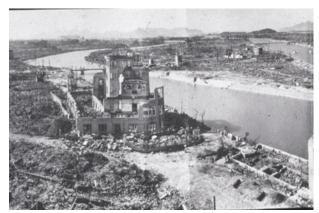
Injured victims at a relief station

## (5) Damage to Buildings



Courtesy of Hiroshima Peace Memorial Museum Photo by Shigeo Hayashi Headquarters of Hiroshima Gas Company 210 meters from the hypocenter

When the atomic bomb exploded, pressure at the point of detonation was equivalent to several hundred thousand atmospheres. This pressure instantly expanded the air surrounding it, causing shock waves followed by a very powerful blast. Within 10 seconds, the shock waves traveled about 3.7 kilometers. At the hypocenter, the maximum blast pressure was 35 tons per square meter and the maximum wind velocity was 440 meters per second.



Courtesy of Hiroshima Peace Memorial Museum Photo by Shigeo Hayashi

Ruins of the Hiroshima Prefectural Industrial Promotion Hall (now, the A-bomb Dome)



Photo by Shigeo Hayashi

### District that later became the Peace Memorial Park

## (6) Damage to Trees

The catastrophic damage that shock waves, blast, and super-hot fires inflicted on the city center gave rise to the rumor that nothing would grow in Hiroshima for 75 years.



Courtesy of Hiroshima Peace Memorial Museum Photo by Shigeo Hayashi

Willow trees 250 meters from the hypocenter

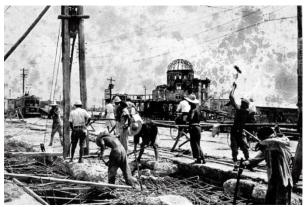


Courtesy of Hiroshima Peace Memorial Museum Photo by Masami Oki

Camphor trees 370 meters from the hypocenter

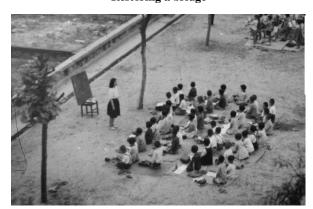
## **3** Reconstruction from the A-bomb Damage

## (1) Reconstruction Efforts by the People



Courtesy of Hiroshi Kishimoto Photo by Yoshita Kishimoto

# Restoring a bridge



Courtesy of Hiroshima Municipal Archives **Taking a lesson outside** 

On scorched earth scattered with charred bodies and building remnants, under abysmal living conditions and unaware of the pervasive residual radiation, the people began to work steadily to rebuild, driven by love for their hometown and determination to make it a better place. Though catastrophic road damage had halted all streetcar operation, workers managed to restore it partially three days after the bombing.

Regarding water supply, water utility workers, themselves exposed to the bomb, hurried to the waterworks plant and were able to supply water without interruption on the day of the bombing.

Because many school buildings had been destroyed, for months or years, students took their lessons sitting on mats laid down in schoolyards.

## (2) Hope for Rebuilding the City



Courtesy of Asahi Shimbun Flowers of Canna blooming in the scorched earth (September 1945 / 250 meters from the hypocenter)

#### (3) Support from Home and Abroad



Courtesy of Hiroshima Municipal Archives **Planting trees along Peace Boulevard** 

In the autumn of 1945, new plants began to sprout in the burnt plain of Hiroshima. Flowers blooming among charred ruins gave people hope and courage to go on living.

More than the government, it was private citizens in great numbers in Japan and around the world who stepped up to help Hiroshima. Money poured in from people who had emigrated abroad from Hiroshima. Along the sides of a new road named "Peace Boulevard," more than 6,000 trees donated from people in Japan and overseas were planted.

### 4 Present Day Hiroshima

This photos show Hiroshima today. The population is approximately 1.18 million. The photo on the right is Peace Boulevard, lined on both sides by verdant trees.

It was the hard work of people who loved their hometown and generous assistance by many in Japan and abroad that enabled Hiroshima to rebuild.





The A-bomb Dome and the Peace Memorial Park

Peace Boulevard

### 5 Hibakusha's Wish and the Inscription on the A-Bomb Cenotaph

Having experienced indescribable suffering seventy years ago, hibakusha (the atomic bomb survivors) have continued with their appeal that "no one else should ever suffer as we did." In response to their appeal, we offer the words that are inscribed on the Cenotaph for the A-bomb Victims in the Peace Park: "Let all the souls here rest in peace; For we shall not repeat the evil." These words express our determination to transcend differences of nationality, race, creed, and the dichotomy between victim and aggressor, to never to let wars or the use of nuclear weapons be repeated, and to build a bright future based not on violence but on dialogue and trust.



Cenotaph for the A-bomb Victims (Memorial Monument for Hiroshima, City of Peace)



The inscription on the Cenotaph

## Let us realize the total abolition of nuclear weapons by 2020!

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