#### NUCLEAR WEAPONS

## General Information Moral Issues Survivors' Stories

Brought to you by



**Testimonies filmed by Soka Gakkai International** 

#### WHAT ARE NUCLEAR WEAPONS?

Bombs that use nuclear energy to cause an explosion.

Nuclear energy is created when we split the atom.



It would take 3,300 lorries to carry high explosives with as much destructive power as one nuclear bomb!

A nuclear bomb is the size of a large traffic cone.

#### WEAPONS OF MASS DESTRUCTION (WMD)

Weapons that can kill and bring significant harm to a large number of humans

Weapons that cause great damage to humanmade structures, natural structures, the environment or the biosphere

Other examples of WMDs include chemical weapons and biological weapons.



# There are over 15,000 nuclear weapons in the world

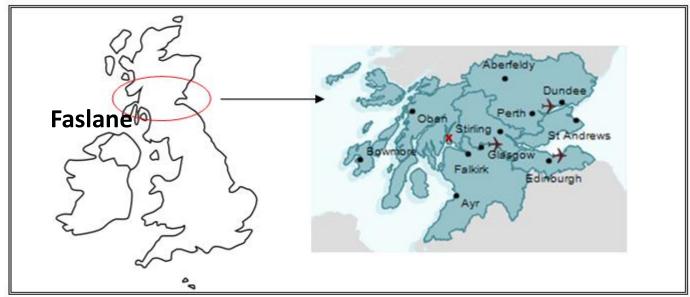


#### WHO HAS NUCLEAR WEAPONS?

There are almost 200 countries in the world – only 9 choose to have nuclear weapons.



UK's arsenal (over 200 weapons) is based in Scotland at Faslane.





#### NUCLEAR EXPLOSIONS



Blast: Blast wave which destroys buildings.

**Heat**: Intense heat which causes fires over a wide area.

#### Immediate radiation:

At the moment of the explosion, deadly radiation affects those in the vicinity.

#### Radioactive fallout:

Radioactive dust is blown for a long distance downwind of the explosion.



#### EFFECTS OF NUCLEAR EXPLOSIONS



#### **Immediate**

Vomiting & diarrhoea, tissue damage, blindness, coma & death

#### Long term

Cancers, particularly in young children and women

Miscarriages, mutations and deformed babies

Mental health problems.

Radiation stays in the environment for a very long time and can be carried by wind across oceans and countries.

'Nuclear Explosions' video 3 min on USB or online at

https://vimeo.com/106861778



#### NUCLEAR WEAPONS TESTING

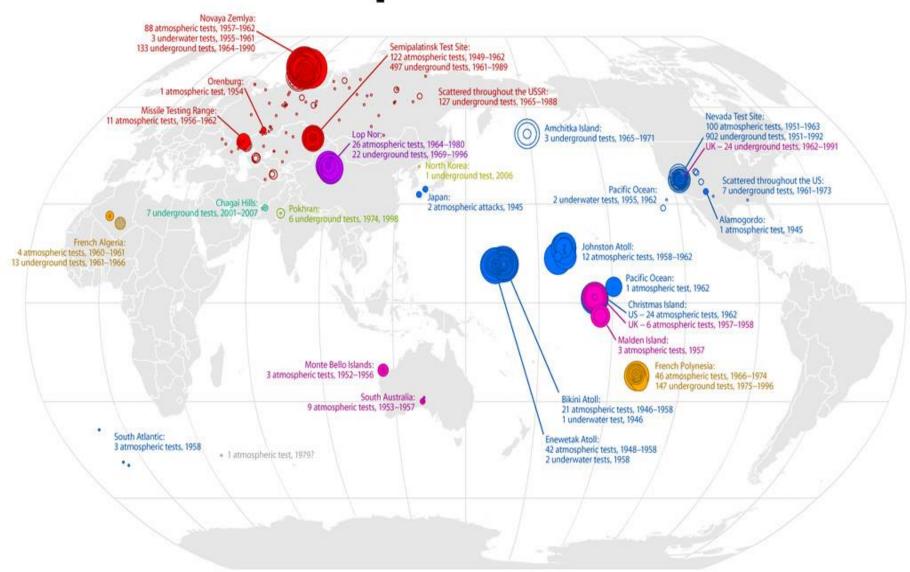


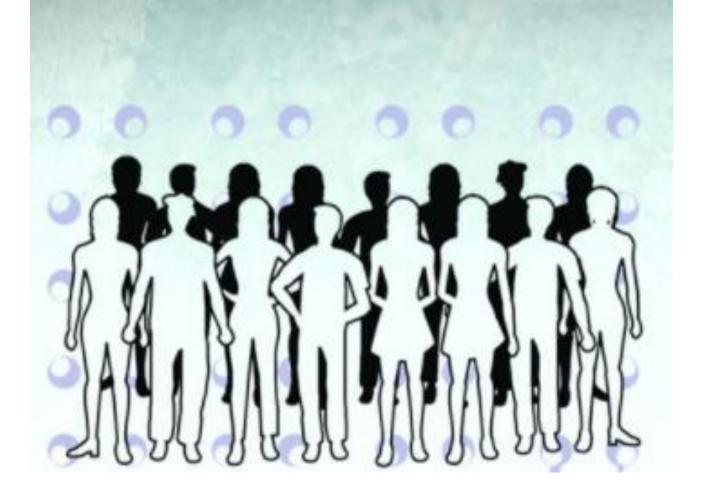
Nuclear weapons have been tested on more than 2,000 occasions

Some of the bombs tested were over a thousand times more powerful than the one dropped on Hiroshima.

From 1946 to 1958, the United States conducted 67 tests in the Marshall Islands. If their combined explosive power was parcelled evenly over that 12-year period, it would equal 1.6 Hiroshima-size explosions every single day.

#### **Nuclear Explosions since 1945**





2.4 million people worldwide will eventually die from cancers due to atmospheric nuclear tests



#### HIROSHIMA & NAGASAKI



6<sup>th</sup> of Aug, 1945

During WW2, the US drops the first A-bomb on Hiroshima in Japan. Three days later, they drop another on Nagasaki.

The explosions flattened buildings and swept bodies away as well as emitting intense heat (4,000°C) and radiation. Everything within 2 km was completely destroyed and burned.

By 1950 over 340,000 people had died as a result of the two bombings.



#### HIBAKUSHA (A-BOMB SURVIVORS)



Survivors of the atomic bomb are called Hibakusha.

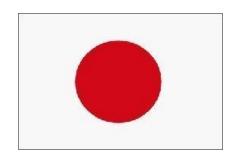
In addition to the emotional scars from the A-bomb, they also suffer from numerous illnesses considered to be after-effects of the A-bomb.

These illnesses have affected many generations of family members, creating 2<sup>nd</sup> and 3<sup>rd</sup> generation Hibakusha.

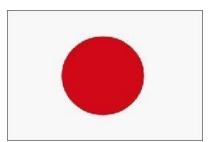
Hibakusha's stories are important because they can convey the truth of the tragedies to future generations and counteract the normalisation of nuclear weapons.

#### SUEKO TAKADA - SURVIVOR OF NAGASAKI

She was 6 years old and she developed major health problems considered aftereffects of her exposure.





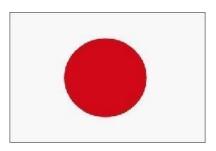


Video section 1 & section 2

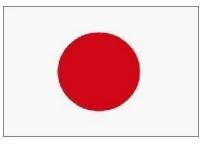
#### KIKUE SHIOTA - HIBAKUSHA

She was 21 years old at the time of the A-bomb.

Her 14 year old sister was killed and her 10 year old brother suffered severe burns. Her mother died suddenly within a month of acute leukaemia. Their house was flattened completely.







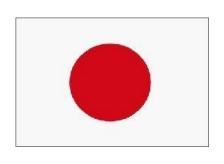
Video section 3 & section 4

#### AIKO KORI - HIBAKUSHA

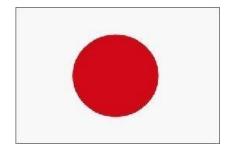
She was 17 at the time of the A-bomb.

She was exposed at the factory where she worked. She was believed to be dead and was almost cremated.

She had leukaemia and her children had health problems. She suffered social stigmatisation and discrimination because of her exposure.



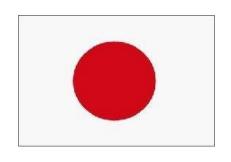




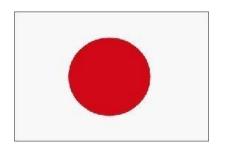
Video section 5 & section 6

## AYAKO KOZUKA - SURVIVOR OF HIROSHIMA

She was 16 when exposed at her workplace. Soon after "black rain" fell over a wide area. This contained dirt, dust and soot stirred up by the explosion that came into contact with radioactive materials, causing all those exposed to the rain radiation-related conditions. She remained uninjured by the bomb, but ate contaminated tomatoes and this led to a number of illnesses.



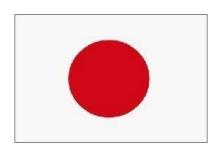




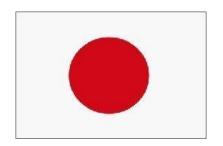
Video section 7

#### TOYOMI HASHIMOTO - SURVIVOR OF NAGASAKI

She was 21 and exposed home with her 3 year old son who was blinded by the bombing. She was pregnant and her unborn child was also exposed. Her husband died of illness later leaving her to raise 4 young children. She suffered with Leukopenia (opposite of leukaemia).



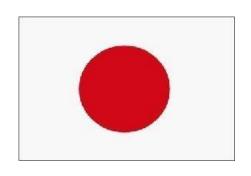




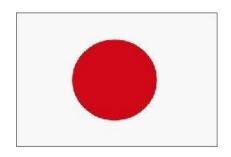
Video section 8

#### KAZUMI NIWA SECOND GENERATION HIBAKUSHA

She was born a second generation Hibakusha, after her mother was exposed to the A-bomb at Nagasaki. Both she and her children have suffered from extensive health problems.







Video section 9 & section 10







4 nuclear powered submarines, one continuously on patrol ready to launch at any point



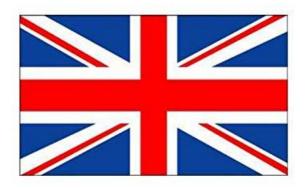
#### IS TRIDENT LEGAL?

Under international law, a treaty is a legally binding agreement between nations.

In November 1968, the UK signed and ratified the Treaty on the Non-Proliferation of Nuclear Weapons.

On 7<sup>th</sup> of July 2017, the UN formally adopted a treaty which categorically prohibits nuclear weapons. **The United Kingdom has not signed.** 







#### DETERRENCE

The strategic concept of deterrence aims to prevent war. It is the justification virtually every nuclear state uses for maintaining nuclear arsenals, including the UK.



- First Strike policy
- Mutually Assured Destruction (MAD).

The concept of nuclear deterrence follows the rationale: states reserve the right to use nuclear weapons in self-defence against an armed attack threatening their vital security interests.

#### DETERRENCE - LOGICALLY FLAWED

"There has been no other nuclear war, therefore deterrence works"

Logical Fallacy - Affirming the consequent
 Logically there is no way to prove that nuclear weapons are the reason we have not had nuclear war. There could be many other reasons for this. The only way to logically ENSURE we cannot have nuclear war is to eradicate nuclear weapons.

#### In other words:

- 1. You're worried it might rain, so you take your umbrella to school for protection.
- 2. It doesn't rain.
- 3. You say "it didn't rain because I brought my umbrella!"



#### DETERRENCE - DOES IT WORK?

"There has been no other nuclear war, therefore deterrence works"

#### We have come very close to nuclear war several times by intention, malfunction or error.

The late 1900s saw a major nuclear arms-race (particularly between the USA and the Soviet Union).

2018 saw a nuclear arms-race begin to escalate between the USA and North Korea.



In 1983, Stanislav Petrov (lieutenant colonel of the Soviet Air Defence Forces) disobeyed orders to deploy nuclear weapons during a nuclear false alarm. At the height of the cold war, a single nuclear strike would likely have sparked full on nuclear war and the destruction of our planet. Stanislav is known as "the man who saved the world".

## DETERRENCE – DO THEY MAKE US A TARGET?

"There has been no other nuclear war, therefore deterrence works"

In 2001 Britain went to war with the nation of Iraq after our leaders told the public that the Iraqi administration were developing WMDs.

In 2016, UK's foreign Secretary Philip Hammond said "North Korea seem to think possessing a nuclear weapon makes them safe. In fact it's the opposite. Having a nuclear weapon makes them a target."





#### NUCLEAR ACCIDENTS

The MoD has confessed to eight real accidents involving nuclear weapons convoys between 1960s-1990s and 180 safety incidents between 2000-2016

Two years ago, the Royal Navy test-fired an unarmed Trident ballistic missile. This was out by several thousand miles and headed in the opposite direction.





# HOW MUCH DO NUCLEAR WEAPONS COST?

Over the next 10 years, world governments will spend a \$1 trillion on nuclear weapons globally.

UK alone is set to pay £205 billion to renew our nuclear weapons system





## A WORLD AT WAR

There are currently over 40 active conflicts globally.

Nuclear weapons are unsuitable for many modern problems (eg terrorism)

The use of a nuclear weapon in war in 2018 would have a far more devastating effect than Hiroshima or Nagasaki.



#### CAMPAIGN FOR NUCLEAR DISARMAMENT





Pressure groups = groups of people who have the same cause and want to change something in their communities and society









## THE TREATY ON THE PROHIBITION OF NUCLEAR WEAPONS



#### 60 signatories countries & 14 state parties

An example on how a grass-root movement can shift the power to civil society in the modern world.



The Norwegian Nobel Committee has decided to award the

#### 2017 NOBEL PEACE PRIZE



#### International Campaign to Abolish Nuclear Weapons (ICAN)

"for its work to draw attention to the catastrophic humanitarian consequences of any use of nuclear weapons and for its ground-breaking efforts to achieve a treaty-based prohibition of such weapons." ICAN video
"If you love this planet"
4 min 30 sec
on USB

or online at <a href="https://vimeo.com/245838745">https://vimeo.com/245838745</a>