

# “Tactical nuclear bombs” – and their horrific consequences

Current report by the “International Campaign  
for the Abolition of Nuclear Weapons” (ICAN)

by Martina Frei\*



Martina Frei. (Picture ma)

On the occasion of the anniversary (6 and 9 August) of the US atomic bombs dropped on Hiroshima and Nagasaki in August 1945, the “International Campaign to Abolish Nuclear Weapons” (ICAN) reminded us of

what atomic bombs do to children.

The ICAN report begins with a warning: “This report contains graphic stories, illustrations and photographs of extreme violence against children; detailed descriptions of child injury, suffering and death; references to child mental illness, suicide and neglect; and stories of harm inflicted on pregnant women, resulting in miscarriages and stillbirths.”

“Whenever I think of Hiroshima, the first image that comes to mind is my four-year-old nephew Eiji – his little body turned into a lump of flesh melted beyond recognition. With a weak voice, he kept asking for water until death saved him.”

Setsuko Thurlow, 13 years old at the time of the atomic bomb explosion

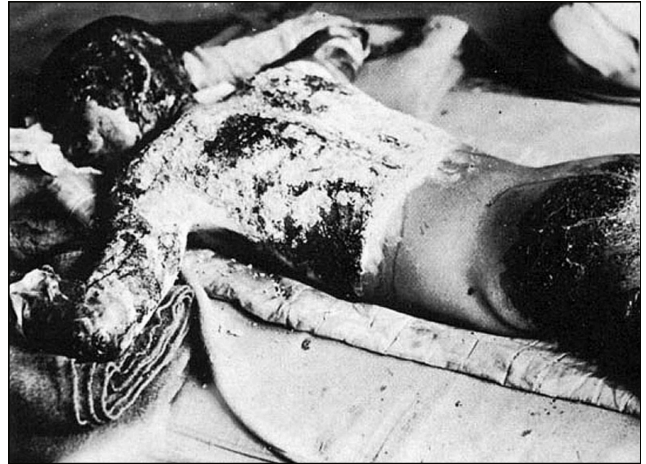
“Everything I could see was destroyed. Children were screaming for their mothers. Charred bodies were scattered all over the city. Many people lost their arms or legs.”

Lee Su-yong, 15 years old

“I found my older sister barely recognisable among the dying and dead. Her face was swollen and burnt.”

A girl in Nagasaki

\* *Dr Martina Frei*, born in 1965, studied medicine in Fribourg and Munich. After graduating from the Ringier School of Journalism, she worked as a science editor at the Swiss newspaper ‘Tages-Anzeiger’. She has been a general practitioner and freelance journalist since 2015 and a contributor to ‘Infosperber’ since 2021.



Photograph of a severely burned person taken on 8 August 1945, two days after the atomic bombing of Hiroshima. (© public-domain Onuka, Masami, via Wikimedia Commons)

“A mother cradled her headless baby and cried. ... Small, barefoot children crouched in the ruins or ran past corpses, calling for their mothers and fathers.”

Susan Southard, author of “Nagasaki: Life After Nuclear War”

“All his skin had peeled off and there was a red, naked body. If I hadn’t had intuition, I would probably have denied that this was my child.”

Yasuo Yamamoto on the sight of his son, who died the next day.



A burnt boy in Nagasaki. It was probably 13-year-old Shoji Tanizaki. Many victims could no longer be identified. (© Yamahata Y#suke, via Wikimedia Commons Public Domain)

“A young couple, the woman’s clothes torn from her body, both covered in blood, holding a bleeding baby and pleading for help to find a second child lost under the rubble.”

James N Yamazaki, author of “Children of the Atomic Bomb”

These quotes are from the recently published report “The Impact of Nuclear Weapons on Children” by the “International Campaign to Abolish Nuclear Weapons” (ICAN).<sup>1</sup> ICAN was awarded the Nobel Peace Prize in 2017.

According to ICAN, it is estimated that over 38,000 children died in Hiroshima and Nagasaki as a direct result of the atomic bombings. In addition, there were countless children who succumbed to radiation-induced leukaemia or other radiation-related illnesses years later.

Iwao Nakanishi, who was 15 at the time, recalled a little boy who cried for help. The little boy had lost both eyes.

“I grabbed his arm and tried to help him stand up. His flesh came loose, and I let go. I can never forget that ... I regret not taking him on my back and saving him.”

Iwao Nakanishi, 15 years old

The surviving children provided further harrowing eyewitness accounts. They saw the charred remains of their siblings and parents. Classmates with their eyeballs bursting out of their sockets. Streets full of dead and dying people.

### Even “tactical” atomic bombs have a greater effect than the bombs of Hiroshima and Nagasaki

The atomic bomb known as “Little Boy”, which was detonated over Hiroshima on 6 August 1945, had an explosive force of around 13 kilotonnes of TNT,<sup>2</sup> while the atomic bomb known as “Fat Man”, which was dropped over Nagasaki two days later, had an explosive force of around 21 kilotonnes.<sup>3</sup>

By way of comparison, the “tactical nuclear weapons” often mentioned recently “generally” have an explosive force of between 0.3 and over 50 kilotonnes of TNT, according to the German public broadcaster “ARD Tagesschau” news programme.<sup>4</sup>

The German “Federal Centre for Political Education” clarified this in an article in 2013: The US bombs that would be stored in Europe would have a “variably adjustable explosive force of 0.3 up to 50 kilotons (Model 4) or 0.3 up to 170 kilotons (Model 3).”<sup>5</sup>



A terrible sight: Killed in the fire of the atomic bomb explosion. (© 中田左都男 (同盟通信), 「反核・写真運動」監修 『決定版 広島原爆写真集』 勉誠出版、2015年8月6日、ISBN 978-4-585-27023-2, Wikimedia Commons Public Domain)

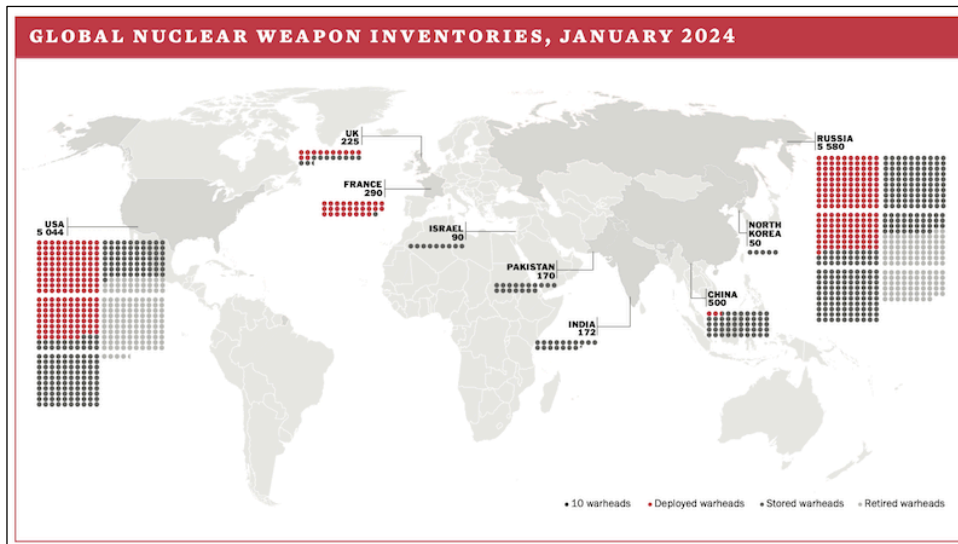
### “Escalation of nuclear rhetoric”

Almost 4,000 nuclear warheads are currently operational worldwide (Infosperber reported).<sup>6</sup> In August 2022, Russian President *Vladimir Putin* wrote to the participants of the then Nuclear Non-Proliferation Treaty conference in New York: “We assume that there can be no winners in a nuclear war and that it must never be started.”<sup>7</sup>

However, ICAN Germany has noted an “escalation of nuclear rhetoric”<sup>8</sup> not only in Russia, but also in Israel and North Korea. “Almost every week, Kremlin politicians or propagandists on state television threaten a conventional or even nuclear retaliatory strike against NATO”, reported the German public broadcaster ZDF recently.<sup>9</sup> “Russia held tactical nuclear weapons

WORLD NUCLEAR FORCES, JANUARY 2024			
Country	Military stockpile <sup>a</sup>		Total inventory <sup>c</sup>
	Deployed <sup>b</sup>	Total	
USA	1 770	3 708	5 044
Russia	1 710	4 380	5 580
UK	120	225	225
France	280	290	290
China	24	500	500
India	–	172	172
Pakistan	–	170	170
North Korea	–	50	50
Israel	–	90	90
<b>Total</b>	<b>3 904</b>	<b>9 585</b>	<b>12 121</b>

Nuclear powers, as of January 2024, estimate by the Stockholm Institute for International Peace Research (Sipri). Left column: Number of operational warheads (mounted on missiles or at bases). Centre column: Deployed warheads and those that could be deployed if necessary. Right column: All warheads, including those decommissioned and awaiting dismantlement. (© Sipri Yearbook 2024)



Inventory of nuclear weapons in January 2024 according to Sipri estimate. Each dot symbolises ten nuclear warheads. Red: warheads ready for use. Dark grey: Stockpiles that could potentially be deployed after a certain amount of preparation. Light grey: decommissioned warheads. (© Sipri Yearbook 2024)

exercises near the Ukrainian border as recently as May”, according to ARD.<sup>10</sup>

In June, NATO Secretary General Stoltenberg said that NATO was considering making more nuclear weapons operational.<sup>11</sup> In October 2023, NATO was already “playing out the nuclear war scenario” (“Neue Zürcher Zeitung”).

At a preparatory meeting for the 11<sup>th</sup> Review Conference of the Nuclear Non-Proliferation Treaty (NPT) in July 2024, the Chinese representative proposed that “all five official nuclear weapons states – the USA, Russia, China, France and the UK – should renounce the first use of nuclear weapons by treaty”, *Pressenza* reports. But: “The USA and NATO have so far refused to take this step.”<sup>12</sup>

Former German Foreign Minister *Joschka Fischer (The Greens)* called for a “European nuclear bomb”. The “NZZ am Sonntag” commented: “It is better to have a nuclear bomb than none.”<sup>13</sup>

Anyone reading the ICAN report will come to the opposite conclusion.

The nuclear powers should urgently enter disarmament negotiations. The previously difficult mutual controls on arms limitations and disarmament are easier to guarantee with modern monitoring options.

### Almost two kilometres from the explosion – four years in hospital

16-year-old *Sumiteru Taniguchi* was cycling 1.8 kilometres from the site of the bomb explosion when the shock wave threw him to the ground. When he raised his head again, he saw that all the children who had been playing

around him were dead. *Sumiteru* suffered severe burns. He spent almost four years in hospital and almost two of those years in a prone position. During this time, he developed deep pressure sores and skin wounds from lying down.

The then 13-year-old *Setsuko Thurlow* described bomb victims who were “missing parts of their bodies”, whose “eyeballs were hanging in their hands” and whose “bellies had burst open”. “I saw complete, unimaginable devastation all around me.”

To escape the unbearable heat of the blaze and to alleviate their cruel pain, hundreds of burnt children at a school in Hiroshima threw themselves into the school swimming pool – and died in the water.

On 6 August 1945, around 8400 seventh and eighth graders were deployed in the centre of Hiroshima. Their task was to help remove scorch marks of the war.



*Sumiteru Taniguchi* lay on his stomach for 21 months due to his severe burns and had to stay in hospital for almost four years. The image is from a colour film taken by US soldiers. (© Team von Lt. Daniel A. McGovern and Lt. Herbert Sussan, via Wikimedia Commons Public Domain)

“Almost all of them were incinerated and vaporised without leaving a trace, and even more died within days. In this way, my age group in the city was almost wiped out.”

*Setsuko Thurlow, 13 Jahre*

Setsuko Thurlow, who spent her life campaigning for the abolition of nuclear weapons and received the Nobel Peace Prize for ICAN in 2017, remembers this.<sup>14</sup>

*Fujio Tsujimoto* was five years old and was playing with his grandmother in the playground of a school in Nagasaki. He heard the approaching aeroplane bomber and, together with his grandmother, managed to reach what was probably the best protected place in a shelter when the atomic bomb detonated. Fujio described his experiences:

“I found people scattered all over the playground. The ground was almost completely covered with corpses. Most of them looked dead and were lying still. Here and there, however, some moved their legs or raised their arms. Those who could still move crawled into the shelter. Soon the bunker was overcrowded with the wounded. The whole town around the school was in flames.

My brother and sisters arrived in the shelter too late, so they were burnt and were crying. Half an hour later, my mum finally turned up. She was covered in blood. I'll never forget how happy I was as I clung to my mum. We waited and waited for father, but he never came. [...]

My younger sister died the next day. My mum died the next day too. And then my older brother. I thought I was going to die too, because the people around me, lying next to each other in the bunker, died one after the other.”

*Fujio Tsujimoto, 5 years old*



*One of the tens of thousands of people injured in Hiroshima in August 1945: back, head, arms – severe burns everywhere.*

(© 底本では尾糠政美 (推定) と書かれているが、恐らくは日本陸軍船舶司令部写真班による撮影。/ 『広島県史』原爆資料編、1972年3月31日、広島県 (編集・発行), via Wikimedia Commons Public Domain)



*Atomic bomb victim in Hiroshima. This person died four weeks after the photo was taken. (© 尾糠政美, 『広島県史』原爆資料編、1972年3月31日、広島県 (編集・発行), via Wikimedia Commons Public Domain)*

The survivors developed fever and bleeding gums, hair loss, vomiting and diarrhoea – symptoms of acute radiation sickness. In addition, there was unbearable pain from severe burns, broken bones, skin wounds, shards of glass lodged deep in the flesh and wound infections. “Many children waited for days for medical treatment [...] At many treatment centres, doctors treated those with less serious injuries first because they had a better chance of survival. [...] Quite a few said they envied the dead. [...]”, says the ICAN report.

Crematoria built on an ad hoc basis burned the bodies – “sometimes 20 or more at the same time.”

“There were so many dead people that it was impossible not to step on them. It was terrible. Some had no heads left.”

*Yoshiko Kajimoto, 14 Jahre*

The ICAN report is illustrated with photos and drawings, many of which are just as horrific or touching as the verbal descriptions. One photo, for example, shows a completely devastated school playground in Nagasaki. There are skull



*Of the injured who survived, some were later so disfigured that babies burst into tears at the sight of them. (© Onuka Masami, 『アサヒグラフ』 1952年8月6日号, via Wikimedia Commons Public Domain)*

bones and scattered remains of children lying around. The remains of the little bodies have been pulverised.

The mother of 13-year-old *Shigero Orimen* “recognized” her child because she found his metal lunch box, which she had given her son that morning. The burnt remains of her child’s bones lay next to it. There was no trace of many of the children.

Thousands of survivors – known as “*hibakusha*” in Japanese – became orphans. They wandered around on their own, some ended up in one of the overcrowded orphanages, were handed over to relatives or social services or eked out an existence as labourers. Others fell into the clutches of criminals, were forced into prostitution, fell ill or committed suicide.

A teacher who helped at a school that had been converted into an orphanage described the conditions there:

“Because of the constant diarrhoea, many of the children became thinner and thinner from day to day. Most of them eventually died and their bodies were burnt in a corner of the schoolyard. Wild dogs then rummaged through the bones. Every day, worried parents visited the centre to find their children. But there were very few reunions. When they did, the other children looked on enviously.”

*Yoshie Tomasu, teacher*

ICAN reminds us that almost all countries in the world have committed themselves to



*Nagasaki, 10 August 1945: A mother waits with her injured baby to be treated. Some mothers ran out of milk after the atomic bomb explosion and the rationed milk portions were quickly used up. They then begged other breastfeeding mothers if they could help them out. (© Yamahata Yŋsuke – 「反核・写真運動」監修『決定版 長崎原爆写真集』 勉誠出版、2015年8月、ISBN 978-4-585-27024-9, via Wikimedia Commons Public Domain)*

protecting children in armed conflicts. Compared to adults, their skin is thinner, their bodies are less resilient and their sensitivity to radiation is greater.

Source: *Infosperber*, <https://www.infosperber.ch/politik/taktische-atombomben-und-ihre-grausamen-folgen/>, 11 August 2024

(Translation “Swiss Standpoint”)

### **The dead brother taken to be cremated**

“I saw a boy about 10 years old walking past. He was carrying a baby on his back. The little head was tilted back as if the baby was fast asleep. In those days in Japan, you would often see children playing with their little brothers or sisters on their backs, but this boy was clearly different. I could see that he had come to this place for a serious reason. He wasn’t wearing shoes. His face was hard. The boy stood there for 5 or 10 minutes. The men in the white masks walked over to him and quietly began to remove the rope holding the baby down. At that moment I saw that the baby was already dead. The men held the body by its hands and feet and placed it on the fire. The boy just stood there, unmoving, looking into the flames. He bit his lower lip so hard that it glistened with blood. The flame burned dimly like the setting sun. The boy turned and walked away in silence.”

*Joe O'Donnell, US Marine Corps photographer*



*Carrying his brother on his back, this boy waits in front of the crematorium, for the little corpse to be cremated. (© Joe O'Donnell, US Marine corps via Wikimedia Commons Public Domain)*

- <sup>1</sup> <https://assets.nationbuilder.com/ican/pages/4076/attachments/original/1722507148/Impact-Nuclear-Weapons-Children-web.pdf?1722507148>
- <sup>2</sup> [https://de.wikipedia.org/wiki/Little\\_Boy](https://de.wikipedia.org/wiki/Little_Boy)
- <sup>3</sup> [https://de.wikipedia.org/wiki/Fat\\_Man](https://de.wikipedia.org/wiki/Fat_Man)
- <sup>4</sup> <https://www.tagesschau.de/ausland/taktische-atomwaffen-101.html>
- <sup>5</sup> <https://sicherheitspolitik.bpb.de/de/m6/articles/nuclear-weapons-in-europe>
- <sup>6</sup> <https://www.infosperber.ch/wirtschaft/uebriges-wirtschaft/militaerausgaben-erreichen-neuen-hoehstwert/>
- <sup>7</sup> <https://www.freiburger-nachrichten.ch/putin-bestaetigt-russlands-verzicht-auf-erstschiag-mit-atomwaffen/>
- <sup>8</sup> <https://www.icanw.de/neuigkeiten/update-die-atomarebene-des-russischen-angriffs-auf-die-ukraine/>
- <sup>9</sup> <https://www.zdf.de/nachrichten/politik/ausland/putin-atomkrieg-drohungen-ukraine-krieg-russland-100.html>
- <sup>10</sup> <https://www.tagesschau.de/ausland/europa/atomwaffen-nato-russland-100.html>
- <sup>11</sup> <https://www.telegraph.co.uk/world-news/2024/06/16/nato-jens-stoltenberg-nuclear-weapons-deploy-russia-china/#:~:text=Nato%20is%20in%20talks%20to,an%20interview%20with%20The%20Telegraph.>
- <sup>12</sup> <https://www.pressenza.com/de/2024/08/chinas-initiative-zum-voelkervertraglichen-verzicht-auf-den-ersteinsatz-von-atomwaffen-aufgreifen/>
- <sup>13</sup> <https://www.nzz.ch/nzzas/nzz-am-sonntag/warum-europa-eine-atombombe-braucht-ld.1773165>
- <sup>14</sup> [https://www.icanw.org/nobel\\_prize](https://www.icanw.org/nobel_prize)