

Biochemical Warfare and Human Experimentation

Abridged Prezi Script



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Last updated: October 3, 2015

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Accompanying Handouts

- Asia-Pacific War Student Backgrounder
- Geneva Protocol for the Prohibition of Biochemical Warfare

(All the above materials can be downloaded [here](#).)

Notes About Script Format

Each frame of the Prezi is titled in this script to represent the content covered therein, and includes a snapshot of the corresponding frame as seen on Prezi. Key information to be included in the presentation of each frame is provided in either paragraph or bullet-point form. Further information can always be found at www.alpha-canada.org. Teachers will also note that colored boxes appear with some frame descriptions. The **pink boxes** highlight important resources that BC ALPHA highly recommends that teachers peruse. The **green boxes** provide instructions for classroom activities. The **blue boxes** contain questions to be asked to students for either large- or small-group discussion. The **orange boxes** contain special advisories for teachers about sensitive content or topics.

Introduction

NOTE: It is recommended that the introduction take 2-3 minutes.

[Frame 1] Home Screen



Use the backdrop of the home screen to introduce the topic of Biochemical Warfare and Human Experimentation. Suggested points to include:

- While many people are aware of the biochemical warfare programs and human experimentation that were being conducted in Europe during WWII, not many people know that Imperial Japan was running similar programs in the invaded territories of Mainland China.
- Unlike in Europe, where Germany has gone to great lengths to acknowledge and reconcile its past, the Japanese government has not only failed to adequately reconcile its wartime crimes (such as the use of biochemical weapons and the human experimentation) but systematically whitewashes and even sometimes outright denies them.
- The barbed wire transforming into a flower in the photo symbolizes the transformation of suffering into peace. This is an image that was developed for a Holocaust Remembrance Day poster. It also applies to this presentation's theme, which is that reconciliation and awareness of past injustices will lead to peace.

Section A: Background of the Asia-Pacific War

NOTE: It is recommended that Section A take 3-4 minutes.

[Frame 2] Map of Asia-Pacific During War



Students require a background on the Asia-Pacific War (1931-1945) to understand the historical context for the Biochemical Warfare and Human Experimentation programs. If the students read through the Asia-Pacific War Student Background, then this frame is an opportunity to review the information in that handout. If students haven't read the Background, then you will need to briefly explain the concepts and events highlighted in that document.

[Frame 3] Reasons for Imperial Expansion and Expansion Strategy



It's important to review the following information with the students:

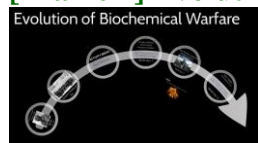
- Reasons for Japanese imperial expansion
 - Trying to establish itself on world stage following over two centuries of isolation
 - Small country with limited natural resources
 - Threatened by Western colonialism in the region
 - Japan's native religion of Shintoism fostered the belief of Japan's divine origin, its Emperor as a direct descendent of the sun goddess, and the destiny of the Emperor to rule the world
- Imperial Japan's strategy for expansion
 - Develop capitalist economy
 - Bolster its military
 - Acquire foreign markets and territories through imperial expansion

RESOURCE FOR TEACHERS A more comprehensive background of the historical and socio-political reasons for Japan's Imperial expansion is provided in the [Teacher Background](#) of the BC Ministry of Education's Teacher's Guide, *Human Rights in the Asia-Pacific 1931-1945: Social Responsibility and Global Citizenship*.

Section B: Background of Biochemical Warfare Development

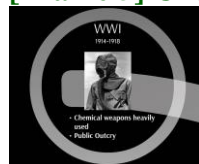
NOTE: It is recommended that Section B take 4-5 minutes.

[Frame 4] Evolution of Biochemical Warfare Overview



In order to situate biochemical warfare in this historical context, it's important to understand what the legal standards were at the time, and what kind of biochemical warfare development programs already existed. This section will look at the evolution of biochemical warfare from WWI to WWII.

[Frame 5] Chemical Weapons During WWI



Chemical weapons were used heavily in the First World War, but by the end of the war they had lost their effectiveness against better-trained and well-prepared troops. They were still used in conflicts following the First World War, but public opinion about the use of chemical weapons was increasingly negative.

[Frame 6] Geneva Protocol



The public outcry over the use of chemical weapons during WWI led to the development of the [Geneva Protocol](#) in 1925. Prior to WWI, there were already international laws in place regarding the prohibition of poisonous weapons and asphyxiating or deleterious gases. These were the Brussels Convention on the Law and Customs of War of 1874 and the Hague Peace Conference of 1899. But the Geneva Protocol responded to public opinion on biochemical warfare in much more sweeping terms than ever before by clearly prohibiting and condemning both chemical and biological warfare.

[Frame 7] Activity Break: Geneva Protocol



NOTE: This frame requires clicking one-by-one to make the questions for the activity appear on the screen. Here students have the opportunity to look at a primary source document—the Geneva Protocol for the Prohibition of Biochemical Warfare—to gain insight into the legal standards of the time.

ACTIVITY PROCESS

- Give students 1-2 minutes to read their own copy of the Geneva Protocol for the Prohibition of Biochemical Warfare handout individually
- **[Click 1]** First ask students: Give students a chance to identify the following as being prohibited by the protocol:
 - The use in war of asphyxiating, poisonous or other gases and all analogous liquids, materials or devices
 - The use of bacteriological methods of warfare
- **[Click 2]** Then ask the students to **find where in the Protocol deals with the development and stockpiling of biological or chemical weapons**
 - **This is a trick question!** While the Protocol banned the use of biochemical warfare, it did not address the stockpiling or development of these weapons
- You may want to also ask the students what kinds of weapons issues we are still dealing with today in terms of creating laws related to prohibiting development, stockpiling and use (i.e. nuclear weapons). You may encourage students to make comparisons and parallels.
- However, any international agreement is ineffective without compliance, monitoring and verification, and without a binding international court to settle disputes.

INTERESTING FACT You can also let the students know that it wasn't until 1993 that the [Chemical Weapons Convention](#) banned the development, production and stockpiling of chemical weapons. It also covered disarmament of CW and cleaning up of abandoned chemical weapons used on other states in past wars.

[Frame 8] Chemical Weapons During WWII



During WWII, all of the major militaries had their own stockpiles of chemical weapons, but the only known uses of chemical weapons were by Japan in China and a very few occurrences in Europe.

[Frame 9] Biological Weapons Development WWII



The threat of biological weapons was always looming, so most militaries were interested in developing their capacities. Germany had already made some attempts at developing biological warfare in WWI. Thus, by the 1920s, the U.S., the UK, Germany and the Soviet Union had established their biological warfare development programs.

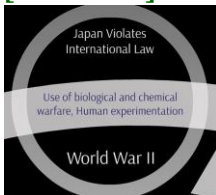
INTERESTING FACT You may wish to point out to the students that it wasn't until the [Biological and Toxic Weapons Convention](#) of 1972 that the development, production and stockpiling and use of biological weapons were banned. However, much like with the Chemical Weapons Convention of 1993, its effectiveness depends on the ability of the international community to monitor, verify and enforce compliance.

[Frame 10] Nazi Mosquito Warfare



As an interesting side note, it was reported in National Geographic early 2014 that Nazi scientists had been working on a plan to use mosquitos to spread germ warfare, indicating that their biological warfare program was for offensive purposes rather than just defensive use.

[Frame 11] Use of Biochemical Warfare During WWII



Imperial Japan's biological and chemical weapons development programs during WWII violated international norms and law not only because both types of weapons were actually widely used during the conflict but also because of the use of human subjects for experimentation.

Section C: Unit 731

NOTE: It is recommended that Section C take 8-10 minutes.

[Frame 12] ISHII Shiro



The mastermind behind Imperial Japan's biochemical warfare programs was the medical doctor, microbiologist and lieutenant general ISHII Shiro.

[Frame 13] ISHII Shiro (Continued)



NOTE: This frame requires clicking once to make the facts appear on the screen.

[Click 1] Before the war, ISHII Shiro was the biggest advocate in Japan for the development of biological warfare capacities. He spent two years between 1928 and 1930 touring the West and learning from their biological and chemical weapons programs. He returned to Japan eager to start his own research. He initially worked in Tokyo. However, after touring Manchuria shortly following the invasion in 1931, he decided to move operations to the occupied territories, with the blessing of Japan's leader at the time, Emperor Hirohito.

[Frame 14] Move of Biochemical Weapons Development to Manchuria



In 1932, Imperial Japan established Unit 731 in Manchuria as the key overseas biological warfare and human experimentation unit, and located its top-secret complex near Harbin in Beiyinhe. Military officers, scientists, and doctors were sent to work there. But the escape of a group of prisoners being used as human subjects at this facility in 1934 led to fears about the exposure of the human experimentation program.

[Frame 15] Biochemical Warfare Program Sites in Occupied Territories



NOTE: This frame requires clicking one-by-one to make the locations appear on the screen.

[Click 1-2] As a result, the facility was relocated to the more isolated Pingfang, 24 kilometers south of Harbin. The Pingfang complex became the new headquarters of [Unit 731](#), Japan's largest and most notorious biochemical warfare development program and human experimentation site.

[Frame 16] Question – Advantages of Moving Development Program

Question

What would be the benefit of moving the biological warfare development program from Japan to Manchuria?

- Easier to deploy weapons for use
- Less threat to environment/people in Japan
- No criminal accountability
- Access to people for human experiments

NOTE: This frame requires clicking once to make the possible responses appear on the screen

QUESTION FOR STUDENTS

What would be advantage of doing the research and development in China?

- [Click 1] Easier development and deployment of weapons
- Less environmental/health threat in Japan
- Easier to hide the biological and chemical weapons development—and in particular the human experimentation—from Japanese and international public
- Access to human experimentation subjects

NOTE: It is recommended that you use around 2-3 minutes for this discussion.

[Frame 17] Unit 731's Pingfang Complex - Aerial View



NOTE: This frame requires clicking once to make the facts appear on the screen.

This photo shows an aerial view of Unit 731's Pingfang complex. [Click 1] It covered an area of six square kilometers and consisted of more than 150 buildings. It was a well-funded and well-supported research facility, with 3,000 personnel, 300 to 500 doctors and scientists, and 600 to 800 technicians on staff.

[Frame 18] Unit 731's Pingfang Complex – Front View



This is a photo of what the entrance to the Pingfang complex looks like today. There used to be train tracks leading into the complex, which is how they brought in the human subjects. There were also crematoria with tall chimneys within the complex where they cremated dead bodies, as demonstrated by the photograph in the upper left-hand corner. The grounds contained an airfield and a prison as well.

[Frame 19] Auschwitz



The Pingfang Complex was eerily similar to the concentration camps in Germany, and in particular to Auschwitz, which is pictured in this frame.

[Frame 20] Comparison of Pingfang and Auschwitz, ISHII and Mengele



NOTE: This frame requires clicking once to make the items appear on the screen.

Here the side-by-side photos of each complex highlight how similar Pingfang and Auschwitz were in both appearance and set-up. **[Click 1]** Even more disturbing are the similarities between General ISHII Shiro and Dr. Joseph Mengele, the Nazi officer and physician who performed human experiments at the Auschwitz concentration camp and who was called the “Angel of Death.” Although there was no known contact between these individuals, the similarities are striking.

[Frame 21] Map of Major Biochemical Warfare Program Sites in China and Other Occupied Territories



NOTE: This frame requires clicking one by one to show the major sites.

Although the initial programs were established in Beiyinhe and Pingfang, other biochemical warfare development and human experimentation programs were set up across China and other occupied territories. The known major sites included Harbin, **[Click 1]** Hailar, **[Click 2]** Changchun, **[Click 3]** Mukden (Shenyang), **[Click 4]** Beijing, **[Click 5]** Nanjing, **[Click 6]** Shanghai, **[Click 7]** Guangzhou, **[Click 8]** Rangoon (Yangon), **[Click 9]** Bangkok, and **[Click 10]** Singapore. All of the locations are indicated with a star on the map.

From this point on, you will discuss the biological and chemical warfare and human experimentation programs in depth. The next three sections of the presentation are divided into three categories: chemical warfare, biological warfare and human experimentation.

Section D: Chemical Warfare

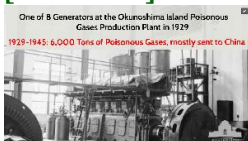
NOTE: It is recommended that Section D take 3-4 minutes.

[Frame 22] Imperial Japan’s Chemical Warfare Development Program

1925 Chemical Weapons Program Set Up in Tokyo

In 1918, Imperial Japan became interested in chemical warfare. By 1925, the Japanese Army’s Institute of Science and Technology had started a full-scale chemical weapons program modeled after those of the US and Europe.

[Frame 23] The Secret Production at Okunoshima Island



By 1929, they had secretly opened a large production facility on Okunoshima Island. It operated for 16 years until 1945, and produced over 6,000 tons of poisonous gases. Most of this gas was sent to China.

[Frame 24] Chemical Weapons Developed and Tested in Manchuria After 1931



Following the Invasion of Manchuria in 1931, most of these chemical weapons went to China. They were used in China against opposition forces and civilians in estimated 2,900 attacks, violating the 1925 Geneva Protocol. They also continued chemical warfare development and testing on human subjects at Qiqihar, Pingfang and other sites in China.

Section E: Biological or Germ Warfare

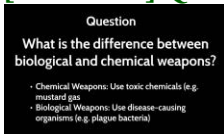
NOTE: It is recommended that Section E take 8-10 minutes.

[Frame 25] Imperial Japan's Biological or Germ Warfare Program



Japan's biological or "germ" warfare program was set up in Tokyo in 1931. It was the main weapons development program at Unit 731. Research on chemical weapons and a variety of other medical and scientific research were also conducted, taking advantage of the availability of human subjects for experimentation.

[Frame 26] Question –Biological Warfare vs. Chemical Warfare



NOTE: This frame requires clicking once to make the answers appear on the screen.

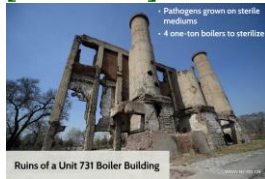
QUESTION FOR STUDENTS

What is the difference between biological and chemical weapons?

- ***[Click 1]*** Students should be able to distinguish between chemical and biological warfare
- It's also a good idea to point out that "biological" and "germ" warfare are synonymous terms

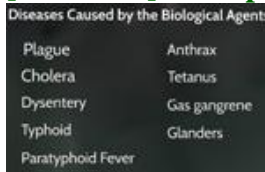
NOTE: It is recommended that you use around 1-2 minutes for this discussion.

[Frame 27] The Mass Production of Pathogens



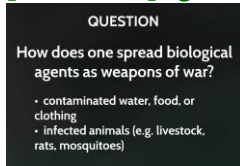
At Pingfang and other sites, biological warfare pathogens were mass produced in sterile growing mediums and then harvested for use as biological weapons. To prepare the large quantities of sterile culture mediums needed for this purpose, Pingfang was equipped with four boilers of one-ton capacity each to produce the necessary steam for sterilization.

[Frame 28] Examples of Diseases Caused by the Biological Agents Developed for Warfare



The kinds of pathogens developed included the ones listed in this frame: plague, cholera, dysentery, typhoid, paratyphoid fever, anthrax, tetanus, gas gangrene, and glanders.

[Frame 29] Question –Spreading of Biological Agents as Weapons of War



NOTE: This frame requires clicking once to make the answers appear on the screen.

QUESTION FOR STUDENTS

How does one spread these biological agents as weapons of war?

- [Click 1]** Some of the most common ways included: contaminating water supplies and food sources with the germs; spreading through livestock or other animals (such as rats and fleas); and contaminating blankets or clothing.

NOTE: It is recommended that you use around 1-2 minutes for this discussion.

[Frame 30] The Breeding of Rats and Fleas for Spreading Plague



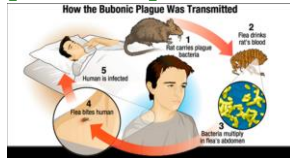
Once the pathogens developed at Unit 731 were ready, many of them were then used to infect rats and fleas. Rats and fleas were particularly crucial for the spread of plague germs. Rats were bred in cement pens such as the ones pictured in this frame, and Pingfang had a target of keeping around 3 million rats annually. These rats were infected with the plague germ, and then feeding on the blood of these infected rats subsequently infected the adult fleas.

[Frame 31] The Oriental Rat Flea



One of the most successful methods of spreading biological warfare agents involved the use of fleas as a carrier of diseases, specifically the bubonic plague. The Oriental Rat Flea was one of the most commonly used carriers.

[Frame 32] Transmission Route of Bubonic Plague Using Fleas



Adult fleas get infected when they feed on blood of plague-infected rats. The infected adult fleas then feed on healthy people's blood and infect them as well.

[Frame 33] The Uji Bomb



To harness the fleas as weapons, they would encase around 30,000 active and infected fleas into each ceramic bomb—called Uji Bombs—and drop them from planes. The benefit of the ceramic bomb was that it easily shattered, which meant less of an explosion was required to break it open. The less heat and pressure the plague-infected fleas were exposed to, the better protected they were. To determine how effective these bombs and other biochemical weapons would be, they tested them on human subjects.

Section F: Human Experimentation

NOTE: It is recommended that Section F take 10-12 minutes.

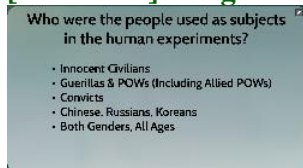
ADVISORY Some of the upcoming frames include photographs and videos contain graphic and disturbing images. While including these visual aids in the presentation is necessary and appropriate in the context of teaching about Imperial Japan’s biochemical warfare and human experimentation programs, some students may feel emotionally triggered by what they see and hear. In this situation, we advise teachers to allow the students to leave the room until Frame 52.

[Frame 34] Human Experimentation



The primary reasons for moving the biochemical warfare development programs to occupied Manchuria and later to other occupied territories were the abundance of human test subjects, the absence of restrictions for them to perform these experiments (which went against international norms and law), and not being under the radar of international community. Unit 731 had at their disposal arrested or detained Chinese and Russian civilians (including women and children), forced laborers, underground agents and prisoners of war from China, Russia, Korea, U.S and other allied countries.

[Frame 35] “Logs”: Human Experimentation Subjects



At Pingfang, the victims were euphemistically called “logs,” referring to the story that they told the local population near the site about the complex being a lumber mill. But in reality, the people used as subjects in the human experiments were innocent civilians, guerilla soldiers, POWs (including Allied POWs) and convicts. They were from China, Russia, Korea and other countries, and were both males and females of all ages.

[Frame 36] Video about the Pingfang Complex and the “Logs” (2 min.)

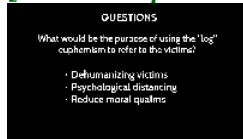


[Source: History Channel, Japanese Unit 731: Nightmare in Manchuria]

<https://www.youtube.com/watch?v=GZW38-WXdYM>

This short video explains the “log” euphemism in reference to the Pingfang complex’s victims. It’s a good summary and visual representation of what was discussed in the previous frame.

[Frame 37] The Purpose of the “Log” Euphemism



QUESTION FOR STUDENTS

What would be the purpose in using the euphemism “log” to refer to the victims? In other words, what do we use euphemisms for?

- *[Click 1]* To dehumanize the victims
- To psychologically distance the offenders from human emotions that would interfere with them committing the atrocities
- To facilitate moral disengagement

NOTE: It is recommended that you use around 2-3 minutes for this discussion.

NOTE: This frame requires clicking once to make the answers appear on the screen.

[Frame 38] Uji Bomb Testing



NOTE: This frame requires clicking once to make the title appear on the screen.

There were many kinds of human experiments performed. The picture in this frame depicts one type of experiment where victims were tied to stakes in the ground while planes dropped the Uji bombs containing plague-infected fleas. This allowed the Unit 731 scientists to test which bomb design could best ensure the effectiveness of the released fleas. In other experiments, prisoners were similarly tied to stakes and exposed to grenade blasts at differing distances to study what happens to soldiers when exposed to grenade attacks.

[Frame 39] Experimenting with Injected Germs and Vaccines



Victims were inoculated with pathogens and vaccines so that Unit 731 researchers could test the effectiveness of vaccines they were developing and could also study the progression of different diseases. This included inoculating victims— both men and women—with pathogens that caused venereal diseases.

NOTE: Teachers may choose to make links between the testing of vaccines at Unit 731 and TB vaccination and nutritional experiments performed on [aboriginal children in Canada](#).

[Frame 40] Pressure Chamber Experiments



Another type involved putting people in pressure chambers to experiment on the amount of pressure the human body could withstand.

[Frame 41] Frostbite Experiments



Frostbite experiments involved exposing people's body parts to extreme cold. For example, naked limbs would be doused with water and exposed to freezing and sub-freezing temperatures to see how long it took for frostbite to develop. Then victims would be literally defrosted using different experimental techniques. The purpose of these experiments was to improve survival rate and treatment of frostbitten Japanese soldiers when fighting against the Russians in sub-zero weather.

[Frame 42] Frostbite Experiments (Continued)



This photograph shows the hands of a victim of frostbite experimentation.

[Frame 43] Question: Dissection vs. Vivisection



In addition, vivisections without anesthesia were performed on victims after infecting them with various diseases.

QUESTION FOR STUDENTS

What is the difference between a dissection and a vivisection?

- A dissection occurs when a dead person is cut open for observation or study of the organs, whereas a vivisection occurs while the person is still alive and usually without anesthesia.

NOTE: It is recommended that you use around 1 minute for this discussion.

Organs were removed to study the effects of disease on the body while the victims were still alive because it was feared that the decomposition process after death would affect the results. Many reports, including testimonies by former Imperial Japanese doctors and researchers, corroborate that vivisections were routinely administered.

[Frame 44] Video about Vivisections (1 min.)



[Source: *History Channel, Japanese Unit 731: Nightmare in Manchuria*]

<https://www.youtube.com/watch?v=GZW38-WXdyM>

This video gives a brief overview of the use of vivisections at Unit 731 and includes testimony by [Yoshio Shinozuka](#), a former Unit 731 soldier who assisted doctors with the experiments and vivisections.

[Frame 45] Number of Victims of Human Experimentations



No victims survived the human experiments. All records were destroyed when Unit 731 retreated or remains undisclosed by the Japanese government. It's estimated that there were at least 3,000 victims at Pingfang alone from 1941 to 1945 and thousands more at other facilities. It's hard to know the exact numbers. One researcher, Sheldon Harris (2002), estimated conservatively that between 10,000 and 12,000 people were killed in Unit 731's human experimentations.

Section G: Germ Warfare Attacks

NOTE: It is recommended that Section G take 3 minutes.

[Frame 46] Extent of Germ Warfare Attacks



According to latest findings, it is estimated that 270,000 were killed and 2.3 million Chinese were victimized by germ warfare. Japan used biological weapons in many provinces of China.

[Frame 47] Video of Survivor Testimonies (1 min.)

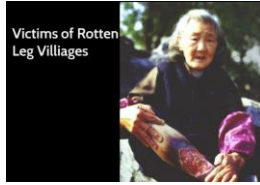


[Source: *History Channel, Japanese Unit 731: Nightmare in Manchuria*]

<https://www.youtube.com/watch?v=GZW38-WXdyM>

This video includes testimonies by a survivor of the biological warfare attacks and a victim's family member.

[Frame 48] Victim of Biological Warfare – 1



The biological warfare attacks left survivors with long-term injuries and health issues. Many of the survivors were left with festering ulcers on their legs that never healed. It is suspected that these wounds were caused by glanders. These survivors now live in what are known as “rotten leg villages” throughout Zhejiang province of China.

[Frame 49] Victim of Biological Warfare – 2



[Frame 50] Victim of Biological Warfare - 3



[Frame 51] Victim of Biological Warfare - 4



Section H: The Post-War Period: Justice and Reconciliation?

NOTE: It is recommended that Section H take 25-30 minutes.

[Frame 52] End of the Asia-Pacific War: Justice and Reconciliation?



The Asia-Pacific War ended on the August 15th, 1945 with Emperor Hirohito's announcement of surrender to the Allies following the United States' dropping of the atomic bombs. However, while many people equate the end of war with liberation and peace, the post-war period for those who suffered under Imperial Japan's biochemical warfare and human experimentation programs has been far from liberating.

[Frame 53] Question: Affects of Wounds for Survivors and their Families



NOTE: This frame requires clicking once to make the question appear on the screen.

Some victims of the “Rotten Leg Villages” have received financial assistance from their local governments for medical expenses, but it is a very small amount. However, because the Japanese government still denies responsibility for the biological attacks, the victims have never been compensated nor have they received due justice and reconciliation.

NOTE: The topic of legal redress will be explored in depth several frames later in the presentation.

QUESTION FOR STUDENTS

[Click 1] How do you think these open wounds have affected the survivors of biological warfare attacks and their families in the long-term?

- Students should understand the social, financial and logistical consequences for not only the survivors but for their families and subsequent generations as well
- An example of a **social consequence** would be the isolation that victims experience due to people being scared of catching a disease from them
- As for **financial consequences**, the fact that they are mainly subsistence farmers means that their livelihood is dependent on being able to work in the fields. However, their wounds have impeded their ability to do such work and to generate income for their families
- Another **financial consequence** was the money that families have had to spend on medical care for the victims
- The financial hardships faced by victims and their families contributes to intergenerational poverty

NOTE: It is recommended that you use around 3-4 minutes for this discussion.

[Frame 54] The Dumping of Chemical Weapons at the End of the War



Japan used chemical weapons in an estimated 2,900 attacks throughout many provinces of China. At the end of the war, the chemical weapons were dumped in rivers or buried underground. Many have leaked, polluting into the environment and causing death and injuries to civilians. Japan abandoned an estimated 2 million items of chemical weapons throughout China and 330,000 items at one major dump site alone (Haerbaling area in Jilin province). It is estimated that there are over 90 abandoned chemical weapons sites in 17 provinces, most of them in the three northeastern provinces of China, namely Jilin, Liaoning and Heilongjiang.

Even though the Organization for the Prohibition of Chemical Weapons (OPCW) conferred upon Japan in 1997 to remove the chemical weapons within 10 years, Japan didn't start taking action until 2005, and did not fulfill its obligation by 2007. It then failed again to meet the extended deadline of 2012. Up to 2010, Japan had only excavated and safely removed 47,000 items, and the first abandoned chemical weapons were not destroyed until the fall of 2010. The new deadline is now 2022, resulting in continued casualties from the dumped chemical weapons.

[Frame 55] Abandoned Chemical Weapons Victim 1



As already mentioned, many people have been harmed as a result of the chemical weapons that were dumped and left behind by the Imperial Japanese Army. This is a photo of a victim who was injured by Japan's abandoned chemical weapons while working on a dredging boat on the Songfa River in Heilongjiang Province in 1974.

[Frame 56] Chemical Weapons Dump Victim 2



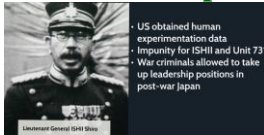
This is a photo of a victim who was injured by Japan's abandoned chemical weapons in Mudanjiang City in Heilongjiang Province in 1982. There were a total of five people injured in this incident.

[Frame 57] Military Tribunals and War Crimes Trials



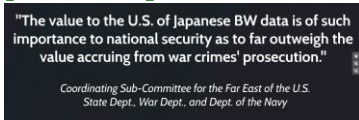
Following the end of the Asia-Pacific War, military tribunals and war crimes trials were set up and carried out by the Allied Forces in Japan and other Asian countries to try Imperial Japan for war crimes.

[Frame 58] Impunity for Unit 731 War Criminals



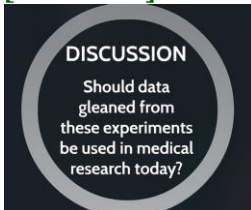
Although the U.S. and allied forces arrested many of the key orchestrators and perpetrators of Unit 731 at the end of the war, the US pardoned them in exchange for the research data garnered from their human experimentations. They did so with the consent of both Britain and Canada. The research was used by the American military to further its own chemical and biological warfare programs, and to contribute to existing medical literature. Impunity for the war criminals not only set them free without punishment for their crimes but also allowed them to take leading roles in postwar Japan in medical institutions, government, universities and the private sector.

[Frame 59] Justification for Impunity



The quote in this frame is the conclusion reached by the US State-War-Navy-Coordinating Sub-Committee for the Far East (coordinating the US State Dept., War Dept. and Dept. of the Navy) in 1947, and sums up the rationale behind the impunity granted to the war criminals. This Coordinating Sub-Committee was the top US body deciding on postwar policy for Japan.

[Frame 60] Discussion Break – Ethical Question About Research Data



QUESTION FOR STUDENTS

Should data gleaned from these experiments be used in medical research today?

Would your answer change if it were your family member whose life could be saved by a cure developed as a result of that research?

NOTE: It is recommended that you use around 3-4 minutes for this discussion.

*As with all ethical questions, there are not right or wrong answers about whether or not the data should be used. Even the medical and scientific communities are divided on this topic. **However, the impunity for those who were responsible for the human experiments is unacceptable by any account.***

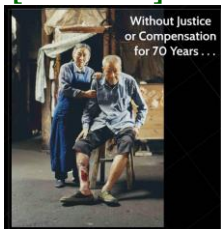
*You may wish to mention to the students that U.S. Senator Dianne Feinstein successfully lobbied for the release of U.S. documents pertaining to Imperial Japan's human experimentation. Her lobbying resulted in the passing of the [Japanese Imperial Army Disclosure Act](#) of 1999, which was officially approved in May of 2000. It was supported by Prof Sheldon Harris (historian and author of *Factories of Death: Japanese Biological Warfare, 1932-45* and the *American Cover-Up*), and Bert V.A. Roling (a judge from the International Military Tribunal for the Far East).*

[Frame 61] Japan's Denials and History Whitewashing



Much like other atrocities committed by the Imperial Japanese Army during Asia-Pacific War, the current Japanese government denies its responsibility for crimes related to biochemical warfare and human experimentation. Not only does it continue to deny responsibility on a political level but it also deliberately whitewashes historical accounts in school textbooks. This is part of a broader neo-nationalist framing of the Asia-Pacific War that the Japanese government has promoted since the 1950s. Thus, despite demands for redress from victims across the world, justice has not yet been served as a result of Japan's policy of denials.

[Frame 62] Lack of Reconciliation



Reconciliation and the effects of a lack of redress are lessons of history that we have to learn from the Asia side of WWII. As students have learned, Japan, unlike Germany, has not reconciled its wartime past. Victims of atrocities committed during the war, such as biochemical warfare and human experimentation, have suffered without redress or justice for 70 years. By learning about this chapter of history, we come to understand the vital role that reconciliation and redress play in ensuring human rights are upheld and respected. It is an essential foundation of justice and peace.

[Frame 63] Discussion Break – Reconciliation

GROUP DISCUSSION

What does reconciliation over crimes against humanity or war crimes entail?

Divide students into small groups to discuss what reconciliation is and what it entails. The purpose of this discussion is to get students thinking about the meaning of reconciliation so that they can determine what victims and survivors of Biochemical Warfare and Human Experimentation during the Asia-Pacific War need to feel they can move on from this chapter of history.

QUESTION FOR STUDENTS

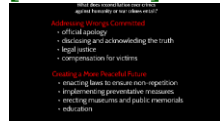
What does reconciliation over crimes against humanity or war crimes involve?

Students should call upon their understanding of post-war Europe and of more contemporary reconciliation movements here in Canada and abroad. If students do not have a solid grasp on the concept of reconciliation, a large-group discussion about what reconciliation means will work better.

NOTE: It is recommended to use 4-5 minutes for this discussion (including Frames 68 and 69)

RESOURCE FOR TEACHERS For a good handbook on reconciliation following a violent conflict published by the United Nations, click [here](#).

[Frame 64] Discussion Break – Reconciliation (Continued)



NOTE: This frame requires clicking one-by-one to make the points appear on the screen.

Some key elements of reconciliation to highlight in the discussion include:

- **[Click 1]** Official apology by the offending national government
- Disclosure and acknowledgement of truth
- Legal justice for offenders
- Compensation to victims and their families
- **[Click 2]** Legislations and other preventive measures to ensure non-repetition, including plans of action for implementing preventative measures
- Establishment of museums and implementation of other forms of public education about the atrocities
- Memorials to commemorate those who suffered

[Frame 65] Activity Break: Role Play



This is the major activity for this presentation and requires students to draw on the previous discussion around reconciliation and to incorporate details of what they learned throughout the presentation.

ACTIVITY PROCESS

Divide students up into small groups and assign each group to one of the following roles included in the frame:

- Former Japanese Soldier
- Biological Attack Survivor
- Family of Human Experimentation Victim
- Victim of Chemical Warfare
- Canadian Student
- Japanese Student

The groups should be given **4-5 minutes** to discuss and come up with three responses to the following question:

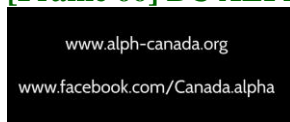
What does the person to whom you've been assigned need most in order to feel that reconciliation over the wartime past has been achieved? Pick the top two things that you think would be important to them, and be prepared to explain why.

Each group is then given **1-2 minutes** to present their ideas to the rest of the class.

NOTE: Students should be thinking empathetically from the point of view of the role they've been assigned.

It is good if teachers summarize at the end of this activity that reconciliation is about people, people who endured hardship as a result of violations of their human rights and people who acknowledge their wrongdoings. Thus, reconciliation is at once personal, social and political, and affects every level of our global society.

[Frame 66] BC ALPHA Resources



BC ALPHA's [website](http://www.alph-canada.org) provides extensive resources on this issue and other human rights issues related to the Asia-Pacific War. Our [Facebook page](https://www.facebook.com/Canada.alpha) also provides up-to-date news about the redress movements.

[Frame 67] Home Screen

