Poison Gas Weapons
By Gwynne Roberts
Public opinion had by then turned against the use of such poison gas weapons which led to the Geneva Protocol, an updated and extensive prohibition of poison weapons. The Protocol, which was signed by most First World War combatants in 1925, bans the use (but not the stockpiling) of lethal gas and bacteriological weapons. Most countries that signed ratified it within around five years, although a few took much longer – Brazil, Japan, Uruguay, and the United States did not do so until the 1970s, and Nicaragua ratified it only in 1990. [49] The signatory nations agreed not to use poison gas in the future, stating "the use in war of asphyxiating, poisonous or other gases, and of all analogous liquids, materials or devices, has been justly condemned by the general opinion of the civilised world."[50]

Long-term health effects Of Poison Gas:
Soldiers who claimed to have been exposed to chemical warfare have often presented with unusual medical conditions which has led to much controversy. The lack of information has left doctors, patients, and their families in the dark in terms of prognosis and treatment. Nerve agents such as sarin, tabun, and soman are believed to have the most significant long-term health effects.[73] Chronic fatigue and memory loss have been reported to last up to three years after exposure. In the years following World War One, there were many conferences held in attempts to abolish the use of chemical weapons all together, such as The Washington Conference (1921–22), Geneva Conference (1923–25) and the World Disarmament Conference (1933). Although the United States was an original signatory of the Geneva Protocol in 1925, the US Senate did not formally ratify it until 1975. Although the health effects are generally chronic in nature, the exposures were generally acute. A positive correlation has been proven between exposure to mustard agents and skin cancers, other respiratory and skin conditions, leukemia, several eye conditions, bone marrow depression and subsequent immunosuppression, psychological disorders and sexual dysfunction.[74] Chemicals used in the
production of chemical weapons have also left residues in the soil where the weapons were used. The chemicals that have been detected can cause cancer and can have an impact on a person's brain, blood, liver, kidneys and skin.[75] Despite the evidence in support of long-term health effects, there are studies that show just the opposite. Some US veterans who were closely affected by chemical weapons showed no neurological evidence in the following years. These same studies showed that one single contact with chemical weapons would be enough to cause long-term health effects.[76]

Although chemical weapons have been used in at least a dozen wars since the end of the First World War,[48] they were not used in combat on a large scale until mustard gas and the more deadly nerve agents were used by Iraq during the 8-year Iran-Iraq War. It killed around 20,000 Iranian troops (and injured another 80,000), which is around a quarter of the number of deaths caused by chemical weapons during the First World War.[51]

Shaho was nine when the Iraqi Kurdish town of Halabja was chemically bombed by the Iraqi Air Force in 1988. He still vividly remembers the planes overhead, the clouds of gas smelling of fruit, and then fleeing for his life to Iran. Within weeks, Shaho began to suffer back pains and has been unable to stand or walk for the past six years. His condition is known as scoliosis, severe curvature of the spine. He has no doubt what caused it. “Before the chemical attack, I was perfectly healthy,” says Shaho. “I am certain that poison gas caused my illness. My mother lost her sight at the time, and I’ve got gradually worse ever since.” He spends each day at home lying on his mattress, turned every thirty minutes by his devoted sister to avoid bedsores. His family has gone deep into debt to try to find a cure—without success. (Although research into the effects of nerve and mustard gas on the human body is limited, such agents are known to cause disorders in a range of tissues in addition to the brain and spinal cord and may thus be responsible for abnormal growth of cells in bone.)

Nizar, twenty-three, also from Halabja, is hardly able to walk and crumples to the floor after a few paces. He bursts into tears. “I can’t even go to the toilet on my own,” he says. “Please help
me. I am afraid of ending up in bed forever." He too was gassed and he lay unconscious for two days. The gases, which smelled of apples, attacked his nervous system, and over the years he has gradually lost control of his muscles. Both cases link severe neurological damage to chemical weapons. In one way both were lucky—they, at least, survived the bombardment.

The battle for Halabja began on March 15, 1988, when Kurdish rebels and Iranian Revolutionary Guards, equipped with chemical warfare suits, moved into the town, driving out Iraqi units in heavy fighting. Townspeople were then stopped from fleeing Halabja and forced by the invaders to return to their homes. This tactic was to cost thousands of lives.

- See more at: http://www.crimesofwar.org/a-z-guide/poisonous-weapons-2/#sthash.KPKE98QX.dpuf

Chemical weapons in World War I
From Wikipedia, the free encyclopedia

British troops blinded by tear gas during the Battle of Estaires, 1918

Chemical weapons were first used in World War I. They were primarily used to demoralize, injure, and kill entrenched defenders, against whom the indiscriminate and generally very slow-moving or static nature of gas clouds would be most effective. The types of weapons employed ranged from disabling chemicals, such as tear gas and the severe mustard gas, to lethal agents like phosgene and chlorine. The first killing agent employed by the German military was chlorine. Chlorine is a powerful irritant that can inflict damage to the eyes, nose, throat and lungs. At high concentrations and prolonged exposure it can cause death by asphyxiation.[8] This chemical warfare was a major component of the first global war and first total war of the 20th century. The killing capacity of gas was limited, with four percent of combat deaths caused by gas. Gas was unlike most other weapons of the period because it was possible to develop effective countermeasures, such as gas masks. In the later stages of the war, as the use of gas
increased, its overall effectiveness diminished. The widespread use of these agents of chemical warfare, and wartime advances in the composition of high explosives, gave rise to an occasionally expressed view of World War I as "the chemists' war".[1][2]

The use of poison gas performed by all major belligerents throughout World War I constituted war crimes as its use violated the 1899 Hague Declaration Concerning Asphyxiating Gases and the 1907 Hague Convention on Land Warfare, which prohibited the use of "poison or poisoned weapons" in warfare. [3][4]

[NOTE: Although Chlorine Gas Is Banned Worldwide as a Chemical weapon, it is still used in water purification, bleaches, swimming pools etc. The difference in toxicity between Chlorine in Water versus Gaseous form is massive: Because Deliberate Chlorine Gas Exposure is a War Crime, because it causes massive Respiratory Damage, suffering and death: While Chlorine in water purification is not a war crime! Thus Mr. Almeida's Attempted Murder By The Poison Gas Delivery Mechanism of Clozapine Was A War Crime: Prohibited By The Geneva Convention --although Clozapine delivered orally is not!!! Chlorine inhalation toxicity can occur during routine attendance at swimming pools, and in higher-level exposures at swimming pools when accidents occur with systems used for water purification (1, 2), during military exposures, following transportation accidents, upon industrial exposure, with misuse of domestic cleaners, and, more recently, as a result of chemical terrorism. The modern use of bleach combined with HCl in developing or developed societies has led to a spectrum of abnormalities from reactive airways dysfunction syndrome (RADS) to adult respiratory distress syndrome (ARDS; acute lung injury, ALI) with fatality (3). Thus, the forms of chlorine involved in respiratory toxicity are not limited to chlorine gas.
Chlorine Gas
The German Army first used chlorine gas cylinders in April 1915 against the French Army at Ypres. French soldiers reported seeing yellow-green clouds drifting slowly towards the Allied trenches. They also noticed its distinctive smell which was like a mixture of pineapple and pepper. At first the French officers assumed that the German infantry were advancing behind a smoke screen and orders were given to prepare for an armed attack. When the gas arrived at the Allied front-trenches soldiers began to complain about pains in the chests and a burning sensation in their throats.
Chlorine gas destroyed the respiratory organs of its victims and this led to a slow death by asphyxiation. One nurse described the death of one soldier who had been in the trenches during a chlorine gas attack. "He was sitting on the bed, fighting for breath, his lips plum coloured. He was a magnificent young Canadian past all hope in the asphyxia of chlorine. I shall never forget the look in his eyes as he turned to me and gasped: I can't die! Is it possible that nothing can be done for me?" It was a horrible death, but as hard as they tried, doctors were unable to find a way of successfully treating chlorine gas poisoning.

John French, the commander of the British Expeditionary Force at Ypres later recalled: "The effect of the gas was so overwhelming that the whole of the positions occupied by the French divisions were rendered incapable of resistance. It was impossible at first to realise what had actually happened. Fumes and smoke were thrown into a stupor and after an hour the whole position had to be abandoned, together with 50 guns."

CONCLUSIONS
In summary, chlorine gas exposure results in a direct chemical toxicity to the airways that is potentiated by the ensuing inflammatory response. Oxidative damage to airways may result during either stage of illness. Acute airways obstruction followed by airways remodeling and/or airways hyperresponsiveness may be seen following chlorine exposures both in animal models and in humans. The results of human chlorine inhalation may range from acute overwhelming
intoxication with acute lung injury and/or death to intermittent or repeated accidental or unintentional occupational exposure. The latter tends to result in greatly increased hazard ratios for chronic bronchitis or isolated wheezing attacks, but with less likelihood of development of clinical asthma than occurs in those with occupational exposures to ozone. Cigarette smokers may be particularly vulnerable to these results of occupational chlorine inhalation exposures. Alternatively, lung damage due to chlorine and that due to smoking could be additive or synergistic. Chronic low-level exposures to chlorine also may be associated with considerably greater odds ratios for having or developing asthma, hay fever, and allergic rhinitis in vulnerable atopic populations exposed to chlorinated, but not copper-silver-treated, swimming pools (9). There is no evidence that youth protects against such insults, or that it necessarily carries excessive risk of poor outcomes. Thus, while those fortunate to survive acute severe chlorine inhalation may eventually be left without pulmonary disability, a pattern of findings indicates that specific vulnerable populations of individuals such as smokers and atopic individuals may suffer from chronic respiratory disorders resulting from less profound unintentional exposures. At present, recommended treatment of persons suffering from acute accidental chlorine inhalation exposures is supportive and symptomatic. Development of new therapies, with trials in appropriate models, could lead to improvements in care of these individuals.

Know Your World War I Chemical Weapons

Three substances were responsible for most chemical-weapons injuries and deaths during World War I: chlorine, phosgene, and mustard gas.

Chlorine gas, used on the infamous day of April 22, 1915, produces a greenish-yellow cloud that smells of bleach and immediately irritates the eyes, nose, lungs, and throat of those exposed to it. At high enough doses it kills by asphyxiation.

Phosgene, which smells like moldy hay, is also an irritant but
six times more deadly than chlorine gas. Phosgene is also a much stealthier weapon: it's colorless, and soldiers did not at first know they had received a fatal dose. After a day or two, victims' lungs would fill with fluid, and they would slowly suffocate in an agonizing death. Although the Germans were the first to use phosgene on the battlefield, it became the primary chemical weapon of the Allies. Phosgene was responsible for 85% of chemical-weapons fatalities during World War I.

Mustard gas, a potent blistering agent, was dubbed King of the Battle Gases. Like phosgene, its effects are not immediate. It has a potent smell; some say it reeks of garlic, gasoline, rubber, or dead horses. Hours after exposure a victim's eyes become bloodshot, begin to water, and become increasingly painful, with some victims suffering temporary blindness. Worse, skin begins to blister, particularly in moist areas, such as the armpits and genitals. As the blisters pop, they often become infected. Mustard gas could also contaminate land where it had been deployed. Exposure sensitized victims; further exposure even at lower doses produced symptoms. Mustard gas caused the highest number of casualties from chemical weapons—upward of 120,000 by some estimates—but it caused few direct deaths because the open air of the battlefield kept concentrations below the lethal threshold.