

## BRIEFING

# Chemical weapons

Once again, the Syrian regime stands accused of using chemical weapons on its own people. The world has reacted with horror. Indeed, chemical warfare has disgusted us throughout history ...

**CHEMICAL WEAPONS AND THEIR USES**

**SARIN**  
**SMELL & APPEARANCE:** Clear, odourless liquid.  
**EFFECTS:** Blurred vision and tight chest, leading to convulsions and paralysis.  
**FIRST USED:** Developed in 1938; first confirmed use in Iraq in 1988.  
**DEADLINESS:** High doses can kill within minutes.

**MUSTARD GAS**  
**SMELL & APPEARANCE:** Yellow-brown gas. Smells like garlic or horseradish.  
**EFFECTS:** Damage to eyes, skin and respiratory tract; chemical burns.  
**FIRST USED:** First world war.  
**DEADLINESS:** Rarely kills, but can be debilitating.

**CHLORINE**  
**SMELL & APPEARANCE:** Yellow-green gas. Smells like a mix of pepper and pineapple.  
**EFFECTS:** Coughing, vomiting and irritation to the eyes.  
**FIRST USED:** First world war.  
**DEADLINESS:** Kills quickly in high doses, although gas masks give protection.

**TEAR GASES**  
**SMELL & APPEARANCE:** Colourless to light-yellow liquids with fruity odours.  
**EFFECTS:** Crying, coughing, breathing difficulties and temporary blindness.  
**FIRST USED:** First world war.  
**DEADLINESS:** Doesn't kill.

**Mass destruction:** Modern chemical weapons are designed to spread over a wide area.

**Q: What is a chemical weapon?**

A: Think of it as a toxic **chemical** — sarin, say — contained in a delivery system such as a bomb.

**Q: What do these weapons do?**

A: Effects range from sore eyes to near-instant death, depending on the chemical used and the degree of exposure. (See our graphic.) That said, they are generally designed to inflict widespread damage, and are often both invisible and imprecise. They can cause particularly agonizing deaths. These are some of the reasons why they are seen as less humane than “conventional” weapons.

**Q: When were they first used?**

A: Going by the definition above, they are as old as history. Stone Age warriors dipped arrows in deadly snake venom. **Genghis Khan** catapulted burning sulphur pitch into fortified cities. With the progress of chemistry in the 19th century, however, a new class of hugely powerful weapons came into being.

**Q: Give me an example.**

A: Modern chemical warfare began on April 22nd 1915, when the German army attacked Allied troops with chlorine gas. “Suddenly we saw ... this yellow wall moving quite slowly towards our lines,” recalled a British observer. Soon enough, soldiers were choking in their trenches. Throughout the first world war, chemical weapons were used by both sides to devastating effect — the UN blames them for

almost 100,000 deaths.

**Q: That's terrible. Has this happened since?**

A: Not on that scale. The weapons' effects horrified the public and paved the way for the Geneva Protocol of 1925, which banned their use. Chemical weapons were largely absent from the **second world war**, and have been used almost exclusively by rogue nations and terrorists since then. Former Iraqi dictator Saddam Hussein infamously dropped poisonous gases, including the highly toxic nerve gas sarin, on **Iranians and Kurds** in the 1980s.

**Q: So the weapons were banned — but they still exist?!**

A: Oh yes. The Protocol did not prohibit the possession of chemical weapons, so nations continued to develop them, justifying them as a deterrent. Some — notably the USA and the Soviet Union — amassed huge stockpiles. By the end of the Cold War, a new treaty was clearly needed; cue the Chemical Weapons Convention (CWC), which was drawn up in 1992.

**Q: What does it do?**

A: The CWC requires signatory states to destroy all reserves of chemical weapons, and any facility with which it could produce more. States are subjected to thorough inspections by an independent commission. To date, 192 states have ratified the treaty; exceptions

include Israel, Egypt and North Korea (which is believed to possess chemical weapons). And then there is Syria.

**Q: What about it?**

A: In 2012, reports began to emerge of poisonous gases being used in the country's civil war. In August 2013, a sarin attack killed over 1,000 people in the suburbs of Damascus. All the evidence suggested that Bashar Assad's regime was responsible, although it denied this. Western nations threatened military retaliation, but held back in exchange for Assad's promise to ratify the CWC and destroy his stockpiles.

**Q: So, problem solved?**

A: No. Assad apparently held on to some weapons, as they **continue to be used**. On Tuesday scores of people died from a chemical attack in the rebel-held Idlib province as government jets flew overhead. Civilians choked, writhed and foamed at the mouth; according to witnesses, another air strike hit a clinic treating victims.

Western nations suspect sarin was used and blame Assad, who continues to **deny** everything. Donald Trump called the attack an “affront to humanity,” but also blamed Barack Obama's failure to retaliate with force in 2013. Whether Trump opts to do this now remains to be seen.

## YOU DECIDE

Are chemical weapons worse than other equally destructive weapons?

## ACTIVITY

Design a poster calling for donations to the relief effort in Idlib, Syria. Include some facts — but make sure to verify them!

## WORD WATCH

**Chemical** – Chemical weapons differ from nuclear arms, which get their power from a nuclear reaction, and biological ones, which often contain harmful organisms or toxins derived from them. All three are counted as weapons of mass destruction.

**Genghis Khan** – A famously brutal Mongol warlord who established a vast empire across

Asia in the 13th century.

**Second world war** – Chemicals did not feature on Europe's battlefields, but poisonous gases were used in Nazi concentration camps and by the Japanese army in China.

**Iranians and Kurds** – Iraq was engaged in a bitter war with Iran at the time. There is evidence that the USA, which also opposed Iran, assisted the country in its use of toxic gases. Kurds in Iraq were allied with Iran, but

Saddam's chemical attack on their town of Halabja in 1988 targeted mostly civilians.

**Continue to be used** – According to the USA, Islamic State has also used chemical weapons, albeit with more limited results.

**Deny** – Syria's ally Russia argues that Assad's jets accidentally bombed a chemical depot belonging to the rebels. Almost all weapons experts dismiss this claim.

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