Chemical Weapons

A chemical weapon (CW) is a device designed to release a chemical agent(s) to cause physical harm and potentially death. These chemicals can be divided into categories such as choking, blister, blood, nerve, and riot control agents. CWs can be dispersed using various delivery systems, including grenades, landmines, artillery rounds, rockets, missiles, air-dropped bombs, and spray tanks. Compared to other weapons of mass destruction, CWs are relatively easy to create and to hide. CW components can be stored separately, only becoming a weapon when these components are combined. Further complicating matters, many CWs are made from dual-use components, meaning that some chemicals that are used for peaceful and commercial purposes could also be used to produce a chemical weapon.

Historical Uses of Chemical Weapons

CWs were used extensively in World War I, resulting in approximately 90,000 deaths and more than one million casualties. This devastation led to the creation of the 1925 Geneva Protocol, which prohibits the use of chemical and biological weapons. The agreement did not stop the production of increasingly dangerous CWs and, while not as widespread, the use of CWs continued. During the Iran-Iraq War, Iraq employed chemical weapons in battle, including an attack with mustard and nerve agents that killed thousands of residents of Halabja in what is now Iraqi Kurdistan. On multiple occasions, the Syrian regime has used chemical weapons, including sarin, against its own citizens. In 2017, Kim Jong-nam, the half-brother of North Korean leader Kim Jong-un, was assassinated with a VX nerve agent. In March 2018, a former Russian spy, Sergei Skripal, and his daughter, were attacked with Novichok, a nerve agent. Both Skripals, and a policeman who responded to the call, were treated and released from the hospital. In late June, two more individuals in England were exposed to Novichok, leading to one death. Investigators believe there is a link to these two incidents. Most recently, Alexei Navalny – a Russian opposition figure – was poisoned with the same nerve agent and fell into a coma in August 2020. He has since recovered.

Chemical Weapons Convention

Opened for signature in 1993, the Chemical Weapons Convention (CWC) entered into force in April 1997. The treaty prohibits the production, acquisition, stockpiling, and use of CWs. There are 193 States Parties to the treaty. States Parties were required to destroy their CWs by 2007, with an option to request a one-time, five-year extension. The Organization for the Prohibition of Chemical Weapons (OPCW), the treaty's implementing body, is based in The Hague. When the CWC entered into force, there were approximately 72,300 metric tons of declared toxic chemicals in 8.6 million containers required to be destroyed in possessor states. For reference, 124,000 tons of chemical agents were used during World War I. Today, more than 98.5 percent of all declared chemical weapons have been destroyed. Egypt, Israel and North Korea still remain outside the agreement.

Who Has Chemical Weapons?

Eight States Parties declared their possession of chemical weapons when they joined the treaty including Albania, India, Iraq, Libya, Russia, South Korea, Syria and the United States. Only the United States has not completed the destruction of its declared chemical weapons. The United States is set to eliminate its declared stockpile by 2023. Syria acceded to the CWC in 2013, but has violated its obligations by using CWs and failing to declare and provide full information on its CW production facilities and remaining stocks of CW precursor chemicals. The OPCW's verification of Syria's declared chemical stocks and facilities continues, as do fact-finding missions to investigate claims of CW use in Syria. The use of Novichok nerve agent in the United Kingdom and Russia has renewed concerns that Russia has not fully declared its production and possession of chemical weapons.