



Factsheet

ISIL (Da'esh) Chemical and Biological Weapons Program in Iraq

Launch of investigation: May 2020

SCOPE OF INVESTIGATION

The investigation focused on ISIL's (Da'esh) chemical and biological weapons' program in Iraq between 2014 and 2017 with emphasis on ISIL's (Da'esh) chemical attack on the Shi'a Turkmen town of Taza Khurmatu in March 2016. The investigation also looked into ISIL's (Da'esh) chemical and biological research and testing sites, including their experimentation on human beings.

DESCRIPTION OF CHEMICAL AND BIOLOGICAL WEAPONS

According to the Chemical Weapons Convention (Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction, entered into force in 1997), chemical weapons are any toxic chemical and its precursor, unless used for purposes not prohibited by the Convention, any munitions and devices, specifically designed to cause death or other harm through the toxic properties of those chemicals. Chlorine gas and sulfur mustard can be used as chemical weapons.

According to the World Health Organization, biological and toxin weapons are either microorganisms like virus, bacteria or fungi, or toxic substances produced by living organisms that are produced and released deliberately to cause disease and death in humans, animals or plants. Biological agents like anthrax, botulinum toxin and plague can be used as biological weapons.

MAIN INVESTIGATION LOCATIONS/AREAS

Mosul city (in Nineveh governorate) as well as Bashir and Taza Khurmatu (in Kirkuk governorate).

MAIN INVESTIGATIVE ACTIVITIES

As part of its work, the Investigative Team screened and/or interviewed dozens of witnesses. It also collected videos, photographs, documentary (medical and expert) evidence as well as open-source information, including social media posts. The Investigative Team conducted several field visits to Bashir and Taza Khurmatu in Kirkuk governorate to meet community representatives and witnesses and to document the use of chemical weapons on these towns.

COOPERATION

The Investigative Team cooperated with Iraqi authorities for the collection of relevant evidentiary materials, including from the Kirkuk Federal Court of Appeal, Taza Khurmatu Central Investigation Court, Rusafa Central Investigative Court, Kirkuk Governorate Civil Defense Directorate, Ministry and Directorate of Health, Taza Khurmatu Health Centre, Chemical Monitoring and Contaminated Sites Department and Iraqi High Commission for Human Rights.



The Investigative Team also benefited from the support of several UN agencies, other organizations and chemical weapons experts.

A confidential report on the development and use of chemical weapons by ISIL (Da'esh) in Iraq was shared with the Iraqi Supreme Judicial Council in October 2023.

OUTREACH

The Investigative Team further organized several meetings with government dignitaries and field visits with local government officials as well as community and civil society representatives, during which UNITAD's mandate and work were explained.

On 13 June 2023, UNITAD, the Permanent Mission of Iraq to the United Nations and the Permanent Mission of India to the United Nations co-hosted at the United Nations Headquarters in New York a [special event](#) entitled "ISIL's (Da'esh) Use of Chemical Weapons: Global Threat." The event showcased, among others, the finding of an initial case assessment report on the development and use of chemical and biological weapons by the terrorist organization ISIL (Da'esh) in Iraq.

OVERVIEW OF FACTUAL FINDINGS

As part of its takeover of Mosul in June 2014, ISIL (Da'esh) occupied the University of Mosul and deliberately misappropriated its financial, commercial and public sector infrastructure for the purpose of establishing a centre of operations to produce chemical weapons. Laboratories, specialized equipment, chemicals and other stores were seized and used by scientific experts working for ISIL (Da'esh). This program produced chemical rockets and mortars, chemical ammunition for rocket-propelled grenades, chemical warheads and improvised explosive devices. Critically, it developed at least eight toxic chemical substances – notably aluminum phosphide, botulinum toxin, chlorine, cyanide ions, nicotine, ricin, sulfur mustard and thallium sulfate – and successfully weaponized two of them. In the act of doing so, toxic chemicals, such as nicotine and thallium sulfate, were tested on prisoners to determine lethal dosages. ISIL (Da'esh) members explored at least the possibility of developing anthrax, a biological agent.

On 8 March 2016, ISIL (Da'esh) attacked the civilian Shi'a Turkmen population of Taza Khurmatu, a small town south of Kirkuk, with chemical weapons that they had produced. At least 27 rockets used in the attack contained sulfur mustard, a schedule 1 chemical under the Chemical Weapons Convention. As a result of the attack, two children died and thousands of residents sought medical treatment for symptoms consistent with exposure to a blistering agent. The use of chemical weapons was authorized and incentivized at the highest levels of ISIL (Da'esh) leadership, and included the provision of specific financial rewards to forces deploying such weapons. In addition to the attack against Taza Khurmatu, ISIL (Da'esh) may have deployed chemical weapons using chlorine and sulfur mustard against military and civilian targets at least 12 additional times across four separate provinces in Iraq between 2014 and 2017. Finally, four attempts to deploy chemical weapons in Baghdad may have been stopped by the authorities between June and August 2016.



OVERVIEW OF PRELIMINARY LEGAL FINDINGS

The Investigative Team found that there were reasonable grounds to believe that the use of chemical weapons in Taza Khurmatu was undertaken with **genocidal intent** towards Shi'a Turkmen as a protected group, in terms of killing and/or causing serious physical and mental injuries to members of that group. To reach a finding that there are reasonable grounds to believe that this act may amount to genocide, other instances of ISIL (Da'esh) killings against Shi'as, within the territory controlled by the armed group and in the context of an ISIL (Da'esh) genocidal policy towards the Shi'as of Iraq, must be corroborated and examined together. Such instances include the massacre at the Tikrit Air Academy, the Badush prison massacre, crimes committed against Shi'a members of the Shabak community as well as other crimes committed against Shi'a Turkmen.

The Investigative Team also found that there were reasonable grounds to believe that the ISIL (Da'esh) chemical weapons program, its use of chemical weapons against the civilian population in Taza Khurmatu and the testing of chemical agents on prisoners were acts that may amount to the:

- **war crimes** of murder, torture, use of poisonous weapons and/or use of asphyxiating gases, directing attacks the civilian population, spreading terror amongst the civilian population and medical experimentation; and
- **crimes against humanity** of murder and torture.