

COUNTERING IRAN'S COVERT CHEMICAL WEAPONS PROGRAM

BY ANDREA STRICKER

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INTRODUCTION

The United States, Israel, and several Western allies assess that the Islamic Republic of Iran has long had an illicit chemical weapons program despite its status as a state party to the 1997 Chemical Weapons Convention (CWC).¹ During the regime's deadly January 2026 crackdown, Tehran may have used poisonous chemicals against Iranian protesters, several groups and individuals allege.² While the CWC does not ban the use of riot-control agents (RCAs) — such as tear gas — for domestic law enforcement purposes, state parties must declare their stocks of RCAs and refrain from the use of aerosolized chemicals that act against the central nervous system or chemicals that produce lingering, debilitating effects. Such use is tantamount to using chemical weapons.³

The new allegations underscore that Tehran's traditional battlefield-capable chemical weapons program, which began during the 1980-1988 Iran-Iraq War, has likely evolved into a more sophisticated effort designed for targeted offensive and domestic use. During the 12-Day War in June 2025, Israel destroyed one alleged Iranian chemical weapons site. But with Iran's nuclear capabilities largely decimated, and in the face of unprecedented domestic dissent, the regime may devote renewed focus to unconventional armaments such as chemical weapons.⁴

This memorandum assesses the status, background, and policy implications of Iran's chemical weapons program, based on U.S. and Israeli assessments. While any government's estimates warrant scrutiny, these disclosures

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1. Organization for the Prohibition of Chemical Weapons, "Evolution on the Status of Participation in the Convention," updated June 2018. (<https://www.opcw.org/evolution-status-participation-convention>)

2. Reza Akvanian, "People collapsed': mystery chemicals lobbed at Iran protesters — eyewitnesses," *Iran International*, January 23, 2026. (<https://www.iranintl.com/en/202601235991>); "Over 36,500 killed in Iran's deadliest massacre, documents reveal," *Iran International*, January 25, 2026. (<https://www.iranintl.com/en/202601255198>); Mansoureh Galestan, "Day 22 of Iranian Uprising: Regime Deploys Chemical Agents and Foreign Militias as Death Toll Rises," *National Council of Resistance of Iran*, January 18, 2026. (<https://www.ncr-iran.org/en/news/iran-protests/day-22-of-iran-uprising-regime-deploys-chemical-agents-and-foreign-militias-as-death-toll-rises>); CBN News, "Iran Regime Using Chemical Weapons on Protesters?" *YouTube*, January 19, 2026. (<https://www.youtube.com/watch?v=iszxOpGFdQ>); Hugh Cameron, "Iran May Have Used 'Toxic Chemical Substance' on Protesters: Ex-Official," *Newsweek*, January 17, 2026. (<https://www.newsweek.com/iran-may-have-used-toxic-chemical-substance-on-protesters-ex-official-11375983>)

3. Organization for the Prohibition of Chemical Weapons, Conference of the States Parties, "Decision: Understanding Regarding the Aerosolized Use of Central Nervous System-Acting Chemicals for Law Enforcement Purposes," December 1, 2021. (<https://www.opcw.org/sites/default/files/documents/2021/12/c26dec10%28e%29.pdf>)

4. "Iran developing unconventional warheads for ballistic missiles, sources say," *Iran International*, December 29, 2025. (<https://www.iranintl.com/en/202512289252>)

represent the richest available source of information about the opaque Iranian chemical weapons program, to which policymakers have often paid insufficient attention in light of the pressing Iranian nuclear threat. Likewise, analysts have not effectively synthesized the contents of U.S. and Israeli disclosures. This memorandum systematically brings together such material with an eye toward spurring U.S. and allied action to address the chemical weapons challenge.

The report begins by detailing new accusations against Iran and the regime's legal obligations as a state party to the CWC, which outlaws chemical weapons. It then examines the history of Tehran's chemical weapons enterprise. Finally, the memo examines how the Trump administration can hold Iran accountable for its CWC violations, especially at the Organization for the Prohibition of Chemical Weapons (OPCW), the body that oversees implementation of the CWC. To that end, Israel should consider whether now is the time to join the CWC to augment its ability to highlight Tehran's violations in OPCW forums. America and its partners should also strive to curtail new Iranian imports for its chemical weapons program. Washington and Jerusalem may ultimately need to conduct additional strikes on Tehran's chemical weapons assets to diminish the threat.

NEW ALLEGATIONS ABOUT IRAN'S CHEMICAL WEAPONS ACTIVITIES

In addition to new claims about Iran's use of chemical weapons against protesters, Israel's deputy ambassador to the Netherlands, Yaron Wax, declared on July 1, 2025, "Over the past two decades Iran has been developing a chemical weapons program based on weaponized pharmaceutical agents. These agents, primarily anesthetics, affect the central nervous system, and can be lethal even in small doses." Wax made these accusations before a special meeting — called by Iran — of the OPCW.⁵

His statement underscored an important issue often lost in the greater focus on Iran's nuclear weapons program: Despite Tehran joining the CWC in 1993 and reportedly telling the OPCW in 1998 it had abandoned a limited chemical weapons program following the Iran-Iraq War of 1980-1988, Iran has engaged in the research and development of a modern chemical weapons program for nearly 30 years.⁶

These weapons pose a direct threat to the Iranian people — especially protesters. They also pose a threat to Israel. Jerusalem remains concerned that the Islamic Republic may continue to transfer chemical weapons to terrorist proxies, such as Hezbollah in Lebanon, Hamas in Gaza, the Houthis in Yemen, or other groups, to facilitate cross-border raids, kidnappings, or other kinds of asymmetric warfare. Such transfers would allow plausible deniability regarding Tehran's hand in the attacks.

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5. Organization for the Prohibition of Chemical Weapons, Executive Council, "Note by the Director-General: Request by the Islamic Republic of Iran to Convene a Meeting of the Executive Council," June 22, 2025. (<https://www.opcw.org/sites/default/files/documents/2025/06/ecom6701%28e%29.pdf>); Organization for the Prohibition of Chemical Weapons, Executive Council, "Statement by Mr. Yaron Wax, Deputy Ambassador of Israel in The Netherlands, Sixty-Seventh meeting of the Executive Council," July 1, 2025. (https://www.opcw.org/sites/default/files/documents/2025/07/Israel_EC-M-67_National%20Statement_%28e%29.pdf); Organization for the Prohibition of Chemical Weapons, Chemical Weapons Convention, "Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction," 1997. (https://www.opcw.org/sites/default/files/documents/CWC/CWC_en.pdf)

6. Michael Eisenstadt, "What Iran's Chemical Past Tells Us About Its Nuclear Future," *The Washington Institute for Near East Policy*, April 2014. (https://www.washingtoninstitute.org/sites/default/files/pdf/ResearchNote17_Eisenstadt2.pdf); Göran Bucht, John Hart, Karin Hjalmarsson, Anders Lindblad, Roger Roffey, Roger Sundqvist, Lars Trogen, Jean Pascal Zanders, and Kristina S. Westerdahl, "Iran's Disarmament and Arms Control Policies for Biological and Chemical Weapons, and Biological Capabilities," *Swedish Defence Research Agency*, December 2003, page 8. (<https://www.the-trench.org/wp-content/uploads/2018/07/Iran-200312-FOI-CBW-study.pdf>); Author interview of Israeli government officials, March 25, 2025.

Accordingly, Israel has already acted to stem the threat. Wax declared that during the June 2025 bombings of Iran, Jerusalem destroyed a chemical and nuclear weapons research site, the Shahid Meisami Research Complex, to disrupt Tehran's illicit chemical weapons work, particularly on pharmaceutical-based agents (PBAs).⁷ Weaponized PBAs are made from legitimate pharmaceutical compounds and are typically aerosolized, or distributed through the air via a fine spray. They can be delivered, for example, via drone-carried grenade. PBAs target the central nervous system of victims and incapacitate or kill them.

Wax claimed that, at the complex, Iran's Shahid Meisami Group (SMG) was working on fentanyl opioid-derived tactical munitions for military use. Israel suspects that Iran may have even begun providing such weaponized PBAs to the Bashar al-Assad regime in Syria and Iraqi Shiite militias more than a decade ago.

According to Israel, the use of these weapons was possible based on evidence from a 2013 Syrian regime attack on its people in which there was Iranian coordination; 2014 Syrian regime attacks in the Syrian cities of Erbin and Jabar, where victims displayed trouble breathing, headaches, and loss of consciousness and some died; and a 2019 Iraqi militia attack in Baghdad using Iranian-supplied tear gas against civilians protesting the Tehran regime.⁸ Jerusalem fears that Tehran may use weaponized PBAs in the future to facilitate cross-border raids into Israel and more generally "against Israeli and other forces."⁹

Jerusalem has also obtained information about Iran's provision of chemical weapons training to Hezbollah's elite Radwan Force. In 2024, Israel confirmed, after eliminating numerous Hezbollah commanders and officials, that the Radwan Force was in fact "studying plans for a ground invasion" into Israel's northern territory, known as Hezbollah's "Plan to Conquer the Galilee."¹⁰ The Israel Defense Forces (IDF) found chemicals, sedatives, and gas masks indicative of plans to drug and kidnap Israeli troops and civilians.¹¹ Israel necessarily had to assume that Hezbollah was planning to use chemical weapons. The IDF reportedly adjusted its battle plans to counter possible Iran-backed chemical weapons attacks, building on internal findings that the IDF was unprepared to withstand such attacks.¹²

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7. Open-source analysts tracked the site's destruction to June 15 or 16, with a subsequent bombing on June 17 and 18. See: @fab_hinz, X, June 16, 2025. (https://x.com/fab_hinz/status/1934727911883342267); Avery Borens, Ben Schmida, Kelly Campa, Ria Reddy, and Annika Ganzeveld, "Iran Update Special Report, June 17, 2025, Morning Edition," *Institute for the Study of War*, June 17, 2025. (<https://www.understandingwar.org/backgrounder/iran-update-special-report-june-17-2025-morning-edition>); David Albright, Sarah Burkhard, and the Good ISIS Team, "Post-Attack Assessment of Shahid Meysami Research Center," *Institute for Science and International Security*, July 10, 2025. (<https://isis-online.org/isis-reports/post-attack-assessment-of-shahid-meysami-research-center>)

8. Author interview of Israeli government officials, March 25, 2025; See also: Matthew Levitt, "Tehran's Tactical Knockout: Weaponized Pharmaceutical-Based Agents," *Combating Terrorism Center at West Point*, October 2024. (<https://ctc.westpoint.edu/tehrans-tactical-knockout-weaponized-pharmaceutical-based-agents>)

9. Organization for the Prohibition of Chemical Weapons, Executive Council, "Statement by Mr. Yaron Wax, Deputy Ambassador of Israel in The Netherlands, Sixty-Seventh meeting of the Executive Council," July 1, 2025. (https://www.opcw.org/sites/default/files/documents/2025/07/Israel_EC-M-67_National%20Statement_%28e%29.pdf)

10. Matthew Levitt, "Tehran's Tactical Knockout: Weaponized Pharmaceutical-Based Agents," *Combating Terrorism Center at West Point*, October 2024. (<https://ctc.westpoint.edu/tehrans-tactical-knockout-weaponized-pharmaceutical-based-agents>)

11. "Herzog: Hezbollah chiefs were meeting to plan Oct. 7-style invasion when killed," *The Times of Israel* (Israel), September 22, 2024. (<https://www.timesofisrael.com/herzog-hezbollah-chiefs-were-meeting-to-plan-oct-7-style-invasion-when-killed>); Amir Bohbot, "Hezbollah was planning to use chemical weapons against IDF soldiers in Lebanon - report," *The Jerusalem Post* (Israel), November 27, 2024. (<https://www.jpost.com/middle-east/article-831004>)

12. Matthew Levitt, "Tehran's Tactical Knockout: Weaponized Pharmaceutical-Based Agents," *Combating Terrorism Center at West Point*, October 2024. (<https://ctc.westpoint.edu/tehrans-tactical-knockout-weaponized-pharmaceutical-based-agents>); Judah Ari Gross, "IDF unprepared for chemical attacks, comptroller report warns," *The Times of Israel* (Israel), October 19, 2020. (<https://www.timesofisrael.com/idf-unprepared-for-chemical-attacks-comptroller-report-warns>)

Since at least the 1980s, Israel has accused Iran of developing chemical weapons and has worked to stem such proliferation.¹³ Jerusalem's accusations have increased in pace with Tehran's apparent development of PBAs. For example, during 2023 UN General Assembly First Committee proceedings, Israeli Ministry of Foreign Affairs representative Michal Maayan stated, "Iran is pursuing for offensive purposes the manufacture of dual-use chemicals that act on the central nervous system and is aiming to arm its affiliated terrorist groups with such chemical weapons."¹⁴

Iran's continuing development of chemical weapons places it in direct violation of its key legal commitments pursuant to the CWC, to which this memorandum now turns.

THE CWC'S LEGAL OBLIGATIONS

The CWC and OPCW aim to fully rid the world of chemical weapons and uphold a relatively strong global norm against their possession and use.¹⁵ With 193 members, the CWC claims near-universal membership — among UN member states, only Egypt, North Korea, and South Sudan have not signed or ratified the convention — and Israel has signed but not ratified it.

Prior to the CWC's entry into force in 1997, a limited number of treaties and protocols condemned and prohibited the use of chemical weapons in warfare. Two examples include the 1899 Hague Declaration, which forbids the use of asphyxiating gases in warfare, and the 1925 Geneva Protocol, which reaffirmed this obligation.¹⁶ Iran ratified both instruments at the time. After taking power in 1979, the clerical regime did not withdraw from these pacts. However, neither accord ruled out the development, stockpiling, and retaliatory use of chemical weapons.

The CWC took that further step, banning states' development, stockpiling, production, and use of chemical weapons, even for retaliatory reasons, as well as their receipt from or transfer to anyone. The convention requires signatories to declare confidentially and eliminate, under OPCW verification, any chemical weapons facilities and chemical weapons produced or received since 1946.¹⁷ It sets out three different "schedules," or control lists, of chemicals, agents, and precursors that states must declare and subject to OPCW safeguards, depending on their potential military use.

The CWC limits states' production and possession of Schedule 1 substances to minute quantities for research purposes. Schedule 1 substances pose a lethal risk, have little to no peaceful use, and, therefore, have a high potential for use as chemical weapons or are precursors that a state could quickly convert to chemical weapons. It

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13. Joel Greenberg, "Israeli Held In Iran Traffic In Nerve Gas," *The New York Times*, May 7, 1997. (<https://www.nytimes.com/1997/05/07/world/israeli-held-in-iran-traffic-in-nerve-gas.html>)

14. UN General Assembly, "First Committee, Official Record, 7th Meeting," October 9, 2023, page 32. (<https://docs.un.org/en/A/C.1/78/PV.7>)

15. Organization for the Prohibition of Chemical Weapons, Chemical Weapons Convention, "Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction," 1997. (https://www.opcw.org/sites/default/files/documents/CWC/CWC_en.pdf)

16. "International Humanitarian Law Databases," *International Committee of the Red Cross*, accessed September 12, 2025 (<https://ihl-databases.icrc.org/en>); Declaration (IV,2) concerning Asphyxiating Gases, The Hague, July 29, 1899. (<https://ihl-databases.icrc.org/assets/treaties/165-IHL-13-EN.pdf>); Protocol for the Prohibition of the Use of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare, Geneva, June 17, 1925. (<https://ihl-databases.icrc.org/assets/treaties/280-IHL-36-EN.pdf>)

17. CWC states parties must also declare and verifiably dispose of any "old" or "abandoned" chemical weapons — generally unusable — produced or discovered prior to and since 1925, the year the Geneva Protocol was reached. There are reduced OPCW and member state obligations for weapons and facilities before the 1946 cutoff, the year following the conclusion of World War II.

also caps stockpiles of Schedule 2 substances, which have dual civil and military uses or are precursors linked to chemical weapons development. The CWC also imposes large caps on Schedule 3 substances, which are widely available dual-use chemicals used for industrial purposes.¹⁸

None of the three schedules covers RCAs, which the CWC prohibits in warfare but not for domestic law enforcement purposes. According to the CWC, RCAs “can produce rapidly in humans sensory irritation or disabling physical effects which disappear within a short time following termination of exposure.”¹⁹ The RCA exception reflected a compromise regarding states’ need to maintain internal security. Still, states must declare their stocks of RCAs and refrain from using debilitating substances with lingering effects, or else this would be tantamount to the use of chemical weapons. In 2021, the OPCW formally clarified that the RCA exception also does not include states’ use of aerosolized central nervous system (CNS)-acting chemicals. Such use “is inconsistent” with the CWC because such chemicals produce similar debilitating effects as chemical weapons.²⁰

ENSURING COMPLIANCE

To ensure states’ compliance with their CWC obligations, OPCW safeguards can include routine inspections of safeguarded facilities, “challenge” OPCW inspections, and the taking of environmental samples. A challenge inspection refers to a request of the OPCW by one state party to conduct an inspection of a specific facility or location in another member state suspected of illicit activities.

Likewise, CWC states parties must submit regular reporting to the OPCW on their activities regarding chemical weapons, facilities, and scheduled chemicals and precursors and enact domestic legislation to implement CWC provisions. For example, the United States codified its CWC obligations in the 1998 Chemical Weapons Convention Implementation Act.²¹

Avenues for initially addressing CWC compliance at the OPCW are largely procedural and have the effect of highlighting noncompliance and building pressure against a violating state, such as officially asking the state to clarify a situation or appointing expert reviews of compliance issues.²²

A member state can also request an OPCW visit, termed a “technical assistance visit,” if it suspects it has been targeted by chemical weapons. The OPCW will then seek to detect and confirm the presence of chemical weapons via sampling. Independent OPCW-affiliated member state laboratories analyze the samples, and the OPCW collects other evidence, such as munitions and eyewitness testimony.²³ The targeted state or OPCW member states

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18. Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction, Paris, April 29, 1997. (https://www.opcw.org/sites/default/files/documents/CWC/CWC_en.pdf)

19. Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction, Paris, April 29, 1997, page 4. (https://www.opcw.org/sites/default/files/documents/CWC/CWC_en.pdf)

20. Organization for the Prohibition of Chemical Weapons, Conference of the States Parties, “Decision: Understanding Regarding the Aerosolized Use of Central Nervous System-Acting Chemicals for Law Enforcement Purposes,” December 3, 2021. (<https://www.opcw.org/sites/default/files/documents/2021/12/c26dec10%28e%29.pdf>)

21. U.S. Department of Commerce, Bureau of Industry and Security, Treaty Compliance Division, “Chemical Weapons Convention Implementation Act of 1998,” accessed January 27, 2026. (https://www.cwc.gov/cwc_authority_legislation.html)

22. Organization for the Prohibition of Chemical Weapons, “Article IX: Consultations, Cooperation and Fact-Finding,” accessed January 27, 2026. (<https://www.opcw.org/chemical-weapons-convention/articles/article-ix-consultations-cooperation-and-fact-finding>)

23. Organization for the Prohibition of Chemical Weapons, “Article X: Assistance and Protection Against Chemical Weapons,” accessed January 27, 2026. (<https://www.opcw.org/chemical-weapons-convention/articles/article-x-assistance-and-protection-against-chemical-weapons>)

may also ask the OPCW to determine the perpetrator of the attacks. All are feats that could be difficult under wartime conditions and amid official disinformation efforts.

In 2024, for example, Ukraine requested an OPCW technical assistance visit due to the possible use of choking chemicals and RCAs by Russia against Kyiv's frontline troops. The OPCW relied in part on Ukraine's collection of samples and other evidence.²⁴ OPCW-affiliated laboratories in member states confirmed the presence of choking chemicals and RCAs. To obfuscate its actions, Russia made unsubstantiated counter-allegations that Ukraine is developing the same chemical weapons.²⁵

A state's noncompliance with the convention may eventually result in authorization by the Executive Council — the OPCW's 41-member policymaking body — of open-ended and well-resourced OPCW missions. Such missions could be long-term, in-depth investigative efforts to examine violations inside the country in question, yet these depend on the country under suspicion authorizing the mission's access.²⁶ In the OPCW's relatively short history, member states have not authorized such missions until violations rise to the level of mass death or injury, as in the case of Syria during the civil war that began in 2011.

Under severe pressure, Syria joined the CWC in 2013 with the purported goal of verifiably dismantling its chemical weapons program. The Assad regime permitted, and occasionally cooperated with, three authorized OPCW missions and two UN-OPCW missions to investigate Syria's use of chemical weapons against its people and oversee dismantlement. The regime only partially complied with its CWC obligations and continued to stockpile and use chemical weapons.²⁷

By contrast, member states did not apply similar pressure or call for an OPCW investigation of Russia's chemical weapons violations following Moscow's use of chemical weapons against a Russian double agent on UK territory in 2018 and against dissident Alexei Navalny in 2020. Since 2022, Russia's ongoing utilization of choking chemicals and RCAs against Ukrainian troops has not led to an authorization either.²⁸ This may reflect member states' hesitation to authorize a mission to which Moscow would almost certainly deny access — or that would prompt Russia's hiding of evidence — publicly demonstrating the OPCW's impotence.

The CWC also does not legally endow the OPCW with the independent, legal right to inspect suspected covert sites and capabilities — those that a state has not disclosed in its declarations to the OPCW but might be of interest

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24. Organization for the Prohibition of Chemical Weapons, "Ukraine," accessed January 27, 2026. (<https://www.opcw.org/media-centre/featured-topics/ukraine>)

25. Organization for the Prohibition of Chemical Weapons, "OPCW Issues Report on Third Technical Assistance Visit to Ukraine following an incident of alleged use of toxic chemicals as a weapon," June 26, 2025. (<https://www.opcw.org/media-centre/news/2025/06/opcw-issues-report-third-technical-assistance-visit-ukraine-following>); Andrea Stricker, "To Distract from Its Own Violations, Russia Accuses Ukraine Anew of Developing Chemical Weapons," *Foundation for Defense of Democracies*, October 17, 2025. (<https://www.fdd.org/analysis/2025/10/17/to-distract-from-its-own-violations-russia-accuses-ukraine-anew-of-manufacturing-chemical-weapons>)

26. Organization for the Prohibition of Chemical Weapons, "Verification Annex: Part XI: Investigations in Cases of Alleged Use of Chemical Weapons," accessed January 27, 2026. (<https://www.opcw.org/chemical-weapons-convention/annexes/verification-annex/part-xi-investigations-cases-alleged-use>)

27. Organization for the Prohibition of Chemical Weapons, "Syria and the OPCW," accessed January 27, 2026. (<https://www.opcw.org/media-centre/featured-topics/opcw-and-syria>)

28. Organization for the Prohibition of Chemical Weapons, "Incident in Salisbury," accessed January 27, 2026. (<https://www.opcw.org/media-centre/featured-topics/incident-salisbury>); Organization for the Prohibition of Chemical Weapons, "Case of Mr Alexei Navalny," accessed January 27, 2026. (<https://www.opcw.org/media-centre/featured-topics/case-mr-alexei-navalny>); Organization for the Prohibition of Chemical Weapons, "Ukraine," accessed January 27, 2026. (<https://www.opcw.org/media-centre/featured-topics/ukraine>)

to an investigation — if a state refuses access. The mechanism to overcome this — the challenge inspection — has never been triggered by member states, largely out of concern that a scrutinized state may refuse access or that an inspection would invite unnecessary, retaliatory challenge inspections against the state or states that requested the initial one.²⁹ This contrasts, for example, with the mandate of the International Atomic Energy Agency (IAEA), which has the legal right to demand special inspections of any site to detect nuclear weapons proliferation. Legally, a state cannot refuse such demands.³⁰ The IAEA also has a voluntary Additional Protocol that states can ratify that strengthens the agency’s inspection rights.

In other words, to obtain an OPCW investigation inside Iran regarding Tehran’s potential use of chemical weapons against protesters, OPCW member states would first need to lay a sound evidentiary basis establishing the alleged use. Tehran would almost certainly refuse access and cooperation.

With their votes, OPCW member states can also informally block noncompliant member states from holding elected office within the OPCW or formally suspend rights and privileges of voting and holding office, as they did for Syria in 2021 due to its use of, and failure to fully dismantle, chemical weapons.³¹ Such steps have the effect of mitigating the noncompliant state’s disruptive influence at OPCW meetings while holding out the return of its rights and privileges as incentive for returning to compliance.³²

While OPCW member states can also recommend collective penalties, such as embargoes, sanctions, or trade restrictions on chemicals, related equipment, and munitions, they have only done so against Syria.³³ States can also refer matters of noncompliance to the UN Security Council for the council to authorize additional missions, as in the case of Syria, or enact sanctions that all countries are bound to implement.³⁴

MULTILATERAL ENFORCEMENT OUTSIDE THE OPCW

Other multilateral enforcement mechanisms outside the OPCW assist the CWC’s implementation. While not an exhaustive list, such initiatives with particular applicability to Iran’s CWC compliance include the Australia Group, the UN Resolution 1540 Committee, and the Proliferation Security Initiative (PSI).

In 1985, to bolster the work of the OPCW and ensure key chemical-supplier states were not inadvertently arming chemical weapons programs, Australia led 15 states to found the Australia Group. The states created

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29. Organization for the Prohibition of Chemical Weapons, “Article IX: Consultations, Cooperation and Fact-Finding,” accessed January 27, 2026. (<https://www.opcw.org/chemical-weapons-convention/articles/article-ix-consultations-cooperation-and-fact-finding>)

30. International Atomic Energy Agency, “The Structure and Content of Agreements Between the Agency and States Required in Connection with the Treaty on the Non-Proliferation of Nuclear Weapons,” June 1972. (<https://www.iaea.org/sites/default/files/publications/documents/infcircs/1972/infcirc153.pdf>)

31. Organization for the Prohibition of Chemical Weapons, Conference of the States Parties, “Decision: Addressing the Possession and Use of Chemical Weapons by the Syrian Arab Republic,” April 21, 2021. (<https://www.opcw.org/sites/default/files/documents/2021/04/c25dec09%28e%29.pdf>)

32. Andrea Stricker, “Two Years On, Syria’s Suspension from the OPCW Was Beneficial,” *Foundation for Defense of Democracies*, May 10, 2023. (<https://www.fdd.org/analysis/2023/05/10/two-years-on-syrias-suspension-from-the-opcw-was-beneficial>)

33. Organization for the Prohibition of Chemical Weapons, Conference of the States Parties, “Decision: Addressing the Threat from Chemical Weapons Use and the Threat of Future Use,” November 30, 2023. (<https://www.opcw.org/sites/default/files/documents/2023/12/c28dec12%28e%29.pdf>)

34. Organization for the Prohibition of Chemical Weapons, “Article XII: Measures to Redress a Situation and to Ensure Compliance, including Sanctions,” accessed January 27, 2026. (<https://www.opcw.org/chemical-weapons-convention/articles/article-xii-measures-redress-situation-and-ensure-compliance>)

the body, in which 42 nations now participate, including the United States and members of the European Union, amid the realization that Western suppliers had, during the Iran-Iraq War, inadvertently outfitted both sides with chemicals. Until the mid-1980s, America and other suppliers did not implement sound export controls over key precursor chemicals. Meanwhile, Iran and Iraq frequently exploited these weaknesses by using intermediaries to procure needed chemical weapons commodities, shipping them through third-party countries, and concealing the actual buyer.³⁵

The Australia Group meets annually to address both chemical and biological weapons proliferation. It harmonizes common export control lists of dual-use chemicals and precursors and of equipment, technology, and software that produce them. Likewise, the group shares guidelines and information on emerging threats and engages with industry and nonmember countries via consultations, outreach, and awareness efforts.³⁶ Iran is not a member of the Australia Group and regularly decries such “discriminatory” or unilateral export control regimes.³⁷

Like the Australia Group, the UN Security Council Committee, established pursuant to the 2004 UN Security Council Resolution (UNSCR) 1540, supports CWC implementation by serving as a hub for international export control implementation and awareness of chemical weapons and other weapons of mass destruction (WMD) proliferation. UNSCR 1540 requires states to “take and enforce effective measures to establish domestic controls to prevent the proliferation of nuclear, chemical, or biological weapons and their means of delivery.” It requires states to:

Establish, develop, review, and maintain appropriate effective national export and trans-shipment controls over such items, including appropriate laws and regulations to control export, transit, trans-shipment and re-export and controls on providing funds and services related to such export and trans-shipment such as financing, and transporting that would contribute to proliferation, as well as establishing end-user controls; and establishing and enforcing appropriate criminal or civil penalties for violations of such export control laws and regulations.³⁸

The committee also reports annually and conducts five-year reviews of the resolution’s implementation.

Another multilateral coalition, the 116-nation Proliferation Security Initiative, or PSI, was formed by the United States in 2003 and may serve as a chemical weapons counterproliferation enforcement mechanism, although its primary focus has been on stemming nuclear, missile, and conventional arms proliferation. In the PSI Statement of Interdiction Principles, participating nations commit to:

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35. U.S. General Accounting Office, Report to the Chairman, Legislation and National Security Subcommittee, Committee on Government Operations, House of Representatives, “Arms Control: U.S. and International Efforts to Ban Chemical Weapons,” September 1991. (<https://www.iranwatch.org/sites/default/files/us-gao-armscontrol-0991.pdf>)

36. The Australia Group, “What We Do,” accessed January 27, 2026. (<https://www.dfat.gov.au/publications/minisite/theaustraliagroupnet/site/en/objectives.html>)

37. See, for example: UN General Assembly, First Committee, General Debate, “Statement by Mr. Hassan Rahimi Majd, Second Counselor of the Permanent Mission of the Islamic Republic of Iran to the United Nations,” October 15, 2025. (https://estatemnts.un.org/estatemnts/11.0010/20251015150000000/INsuejYwE/xnbrFJo-sk_nyc_en.pdf); Ministry of Foreign Affairs, “Statement by Mr. Ehsan Miri, Representative of the Islamic Republic of Iran, before the Third Meeting of the Working Group on the Strengthening of the Biological Weapons Convention on Organizational, Institutional and Financial Arrangements,” December 8, 2023. (<https://geneva.mfa.gov.ir/portal/newsview/736554/Iran%E2%80%99s-statement-before-the-Third-Meeting-of-the-Working-Group-on-the-Strengthening-of-the-BWC-December-8-2023-Gene>)

38. United Nations Security Council, Resolution 1540, April 28, 2004. (<https://digitallibrary.un.org/record/520326?ln=en&v=pdf>)

Undertake effective measures, either alone or in concert with other states, for interdicting the transfer or transport of WMD, their delivery systems, and related materials to and from states and non-state actors of proliferation concern.³⁹

This means that states agree, consistent with national and international laws, to stop the shipment of commodities that could assist chemical weapons proliferation if they have knowledge of such cargo transiting their territories or areas beyond the territorial seas of any other state.⁴⁰ Several times per year, PSI states hold regional interdiction exercises and other trainings.

Since its founding, the United States and partner countries have invoked the PSI on dozens of occasions to interdict WMD-related cargos, such as in 2003, when they stopped a shipment from the Pakistani A.Q. Khan network to Libya's nuclear weapons program; in 2009, when South Korea seized a North Korean shipment containing protective chemical weapons gear; and in 2011 to block North Korea's proliferation of arms or missiles to Myanmar.⁴¹ In the future, states could seek to use the PSI in a more targeted manner to deter or stop chemical weapons proliferation by states such as Iran.

ISRAEL AND THE CWC

Israel has signed but not ratified the CWC. Jerusalem has never admitted to possessing chemical weapons, although it may have developed them in the past. Former Prime Minister Yitzhak Rabin spearheaded Israel's signing of the CWC in 1993, assessing a "net benefit" to doing so. Subsequent leaders, however, indefinitely postponed a decision on CWC ratification.⁴²

A variety of concerns have influenced Israel's decision to refrain from ratifying the CWC, including the potential for OPCW challenge inspection requests at sensitive Israeli nuclear facilities. Such inspections would threaten Israel's official policy of opacity regarding possession of nuclear weapons. Other Israeli reservations concern the CWC's required disclosures about past chemical weapons efforts to the OPCW; the failure of all regional states to abide by or ratify the CWC; the chemical weapons development by its regional neighbors, Iran, possibly Egypt, and formerly Iraq, Libya, and Syria; and a preference for ambiguity to create deterrence against enemies who may seek to attack Israel.⁴³

However, Israel's success against Iran in the 12-Day War and its need to create a moral alternative to Tehran's chemical weapons violations may create political space for Jerusalem to reassess whether it should ratify the CWC.

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39. Proliferation Security Initiative, "Statement of Interdiction Principles," May 14, 2018. (<https://www.psi-online.info/psi-info-en/botschaft/2077920-2077920>)

40. Ibid.

41. Robin Wright, "Ship Incident May Have Swayed Libya," *The Washington Post*, December 31, 2003. (<https://www.washingtonpost.com/archive/politics/2004/01/01/ship-incident-may-have-swayed-libya/69244c5f-c895-4ec5-87bc-e17d34bfffbe8>); "Seized NK Containers Had Chemical Weapons Items," *The Dong-A Ilbo* (South Korea), October 6, 2009. (<https://www.donga.com/en/List/article/all/20091006/263387/1>); David E. Sanger, "U.S. Said to Turn Back North Korea Missile Shipment," *The New York Times*, June 12, 2011. (<https://www.nytimes.com/2011/06/13/world/asia/13missile.html>)

42. Avner Cohen, "Israel and Chemical/Biological Weapons: History, Deterrence, and Arms Control," *The Nonproliferation Review*, Fall/Winter, 2001. (<https://www.nonproliferation.org/wp-content/uploads/npr/83cohen.pdf>)

43. Avner Cohen, "Israel and Chemical/Biological Weapons: History, Deterrence, and Arms Control," *The Nonproliferation Review*, Fall/Winter, 2001. (<https://www.nonproliferation.org/wp-content/uploads/npr/83cohen.pdf>); Gerald M. Steinberg, "Israeli Policy on the Chemical Weapons Convention," *Organization for the Prohibition of Chemical Weapons*, November 1, 2000, pages 23-31. (<https://www.iranwatch.org/library/international-organization/organisation-prohibition-chemical-weapons-opcw/israeli-policy-chemical-weapons-convention>)

THE HISTORY OF IRAN'S CHEMICAL WEAPONS PROGRAM

The report now turns to the history of Iran's chemical weapons program. In the program's first decades, Tehran pursued battlefield capabilities typical of other countries' chemical weapons enterprises. Yet over the past 15 years, U.S. and Israeli assessments have noted a shift in focus from battlefield utility to the development of PBAs and undeclared RCAs whose use would qualify as employment of chemical weapons. In 2011, the United States began reporting in State Department assessments that it cannot certify Iran's compliance with the CWC.

IRAN'S EARLY CHEMICAL WEAPONS PROGRAM (1980-2010)

The intelligence failures that preceded the 2003 U.S. invasion of Iraq serve as a potent reminder of the difficulty of assessing the status of any chemical weapons program. Nevertheless, a careful review of U.S. intelligence community (IC) assessments from the late 1980s to the present shows that IC findings — those that are public or have been declassified — have remained consistent.

The U.S. IC assessed in 1988 that Iran began developing chemical weapons in 1983 during the Iran-Iraq War, following Saddam Hussein's use of chemical attacks to counter Iranian offensives. Iraq conducted numerous attacks on Iranian troops and civilians, resulting in thousands of deaths.⁴⁴ A UN special investigation was inconclusive regarding Iranian use of chemical weapons against Iraq, yet the U.S. IC assessed that Iran began using them in 1987 against Iraqi troops, via aerial and ground means of delivery.⁴⁵ Tehran may have taken this step after reversing a religious *fatwa* (or edict) against them. The existence and timing of the fatwa remain a matter of debate.⁴⁶

According to the U.S. IC, Iran may have developed traditional chemical weapons for use against Iraq, such as sulfur mustard, phosgene, possibly cyanide, and perhaps other substances.⁴⁷ Decades later, a 2020 State Department assessment maintained that Tehran had filled "artillery projectiles and aerial bombs" with chemicals and "developed mortars, artillery cannon rounds, and aerial bombs for [chemical weapons] agent delivery during the ... Iran-Iraq War."⁴⁸

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44. Central Intelligence Agency, Director of Central Intelligence, "Interagency Intelligence Memorandum: Impact and Implications of Chemical Weapons Use in the Iran-Iraq War," March 22, 1988, page 1. (https://www.cia.gov/readingroom/docs/DOC_0001030207.pdf); UN Security Council, "Report of the Mission Dispatched by the Secretary-General to Investigate Allegations of the Use of Chemical Weapons in the Conflict Between the Islamic Republic of Iran and Iraq," March 12, 1986. (<https://www.iranwatch.org/sites/default/files/unsc-s17911-cwusewar-031286.pdf>)

45. UN Security Council, "Report of the Mission Dispatched by the Secretary-General to Investigate Allegations of the Use of Chemical Weapons in the Conflict Between the Islamic Republic of Iran and Iraq," July 25, 1988. (https://digitallibrary.un.org/record/48548/files/S_20063-EN.pdf); Central Intelligence Agency, Director of Central Intelligence, "Interagency Intelligence Memorandum: Impact and Implications of Chemical Weapons Use in the Iran-Iraq War," March 22, 1988, page 1. (https://www.cia.gov/readingroom/docs/DOC_0001030207.pdf); Defense Intelligence Agency and U.S. Army Intelligence Agency, "Offensive Chemical Weapons Programs in the Middle East (U)," March 15, 1990. (https://www.iranwatch.org/sites/default/files/offensive_chemical_warfare_programs_in_the_middle_east_0.pdf)

46. Michael Eisenstadt, "What Iran's Chemical Past Tells Us About Its Nuclear Future," *The Washington Institute for Near East Policy*, April 2014. (https://www.washingtoninstitute.org/sites/default/files/pdf/ResearchNote17_Eisenstadt2.pdf)

47. Central Intelligence Agency, Director of Central Intelligence, "Interagency Intelligence Memorandum: Impact and Implications of Chemical Weapons Use in the Iran-Iraq War," March 22, 1988, page 1. (https://www.cia.gov/readingroom/docs/DOC_0001030207.pdf); UN Security Council, "Report of the Mission Dispatched by the Secretary-General to Investigate Allegations of the Use of Chemical Weapons in the Conflict Between the Islamic Republic of Iran and Iraq," March 12, 1986. (<https://www.iranwatch.org/sites/default/files/unsc-s17911-cwusewar-031286.pdf>)

48. U.S. Department of State, "Compliance With the Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction – Condition (10) (C) Report," June 2020, pages 8-9. (<https://www.state.gov/wp-content/uploads/2020/06/2020-10C-Report-Unclassified-Version-for-H.pdf>)

In 1988, a now declassified Central Intelligence Agency (CIA) draft white paper indicated that when Iran sought to develop chemical weapons, “West European and Asian firms responded by providing chemical processing equipment and chemical precursors.”⁴⁹ According to a 1997 U.S. IC assessment, during the Iran-Iraq War, Indian suppliers may have also been key to providing Iran with chemical weapons equipment.⁵⁰ Likewise, U.S. companies contributed, triggering an export crackdown.⁵¹ “Foreign assistance has been pivotal in the development and expansion of the Iranian and Iraqi chemical warfare programs,” the U.S. IC assessed in 1988.⁵² After the war, in 1989, Tehran continued actively procuring chemical weapons capabilities, according to U.S. officials.⁵³

Tehran transferred chemical weapons to other countries as well. Iran reportedly provided sulfur mustard to Libya in 1987 to support Tripoli’s war against Chad.⁵⁴ After joining the CWC, Tehran neither disclosed such transfers to the OPCW nor responded to OPCW requests for information — despite Libya’s declaration to the OPCW of its possession of such weapons and substances in 2011 and U.S. assessments indicating they were Iranian-made.⁵⁵

In 1993, the U.S. director of central intelligence (DCI) assessed, “Iran has produced at least several hundred tons of blister, choking and blood agents — possibly as much as 2,000 tons — at a steadily increasing rate since 1984.”⁵⁶ The DCI reported in 1996 that Iran had one of the largest chemical weapons programs in the developing world and produced 1,000 tons of new chemical agents per year.⁵⁷ Tehran did not declare these capabilities

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49. Richard Kerr, “Note to DCI/DDCI,” December 2, 1988. (<https://www.cia.gov/readingroom/document/cia-rdp90g01353r001500180003-8>)

50. “A History of Iran’s Chemical Weapons-Related Efforts,” *Wisconsin Project on Nuclear Arms Control*, July 1, 2005. (<https://www.wisconsinproject.org/a-history-of-irans-chemical-weapon-related-efforts>); Central Intelligence Agency, Director of Central Intelligence, “Unclassified Report to Congress on the Acquisition of Technology Relating to Weapons of Mass Destruction and Advanced Conventional Munitions, July - December 1996,” June 1997. (<https://irp.fas.org/cia/product/wmd.htm>)

51. Michael Ollove, “Iran Got Water, Not Nerve Gas Ingredient: U.S. Customs ‘Sting’ Tracks Illegal Export of Deadly Chemical,” *The Los Angeles Times*, February 26, 1989. (<https://www.latimes.com/archives/la-xpm-1989-02-26-mn-629-story.html>); U.S. General Accounting Office, Report to the Chairman, Legislation and National Security Subcommittee, Committee on Government Operations, House of Representatives, “Arms Control: U.S. and International Efforts to Ban Chemical Weapons,” September 1991, page 13. (<https://www.iranwatch.org/sites/default/files/us-gao-armscontrol-0991.pdf>)

52. Central Intelligence Agency, Director of Central Intelligence, “Interagency Intelligence Memorandum: Impact and Implications of Chemical Weapons Use in the Iran-Iran War,” March 22, 1988, page 2. (https://www.cia.gov/readingroom/docs/DOC_0001030207.pdf)

53. Michael R. Gordon with Stephen Engelberg, “Iran is Expanding Chemical Stocks Used in Poison Gas,” *The New York Times*, January 29, 1989. (<https://www.nytimes.com/1989/01/29/us/iran-is-expanding-chemical-stocks-used-in-poison-gas.html>)

54. U.S. Department of State, “Compliance With the Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction – Condition (10) (C) Report,” June 2020, page 8. (<https://www.state.gov/wp-content/uploads/2020/06/2020-10C-Report-Unclassified-Version-for-H.pdf>); Jonathan B. Tucker, “The Rollback of Libya’s Chemical Weapons Program,” *The Nonproliferation Review*, October 14, 2009, pages 363-384. (<https://www.tandfonline.com/doi/full/10.1080/10736700903255060#d1e158>)

55. U.S. Department of State, “Finding of Non-Compliance With the Chemical Weapons Convention (CWC): Islamic Republic of Iran,” April 16, 2018. (<https://www.state.gov/finding-of-non-compliance-with-the-chemical-weapons-convention-cwc-islamic-republic-of-iran>)

56. Director of Central Intelligence R. James Woolsey, *Remarks at the Smithsonian Institution Distinguished Speakers Program*, March 11, 1993. (<https://www.cia.gov/readingroom/document/cia-rdp97m00518r000600780001-9>)

57. “Iran’s Chemical Milestones, 1929-2011,” *Wisconsin Project on Nuclear Arms Control*, July 1, 2011. ([https://www.wisconsinproject.org/iran-chemical-milestones/#:~:text=March%201990%3A%20U.S.%20Defense,%2DIraq%20Non%2DProliferation%20Act.](https://www.wisconsinproject.org/iran-chemical-milestones/#:~:text=March%201990%3A%20U.S.%20Defense,%2DIraq%20Non%2DProliferation%20Act.;)); Central Intelligence Agency, Director of Central Intelligence, “Unclassified Report to Congress on the Acquisition of Technology Relating to Weapons of Mass Destruction and Advanced Conventional Munitions, July - December 1996,” June 1997. (<https://irp.fas.org/cia/product/wmd.htm>)

upon joining the CWC, reportedly admitting in its confidential declaration to the OPCW only to a past, limited chemical weapon production capacity.⁵⁸

In a report covering 1997 developments, the DCI disclosed, “Iran obtained material related to chemical warfare (CW) primarily from Chinese firms,” triggering U.S. sanctions on Chinese and Hong Kong entities.⁵⁹ Iran sought “foreign equipment and expertise to create a more advanced and self-sufficient CW infrastructure,” the DCI observed.⁶⁰ In 2000, the DCI reported that Tehran “continued to seek production technology, training, expertise, equipment, and chemicals that could be used as precursor agents in its chemical warfare (CW) program from entities in Russia and China.”⁶¹ In 2003, the United States sanctioned additional Chinese entities and a North Korean company for chemical and related equipment transfers to Iran.⁶²

Russia’s use of a PBA, a fentanyl-derived incapacitant, during a counterterrorist operation, reportedly inspired Iran to explore the development of PBAs as well.⁶³ To subdue Chechen hostage-takers at a Moscow theater in 2002, Russia used a “derivative of fentanyl,” according to a 2025 State Department report, that killed not only the militants but some 130 civilians.⁶⁴ Fentanyl can incapacitate soldiers and civilians alike when aerosolized and weaponized and delivered via mechanisms like grenades, bullets, mortars, or drones. In such attacks, the threshold for fatal overdose is so low as to be relatively uncontrollable.⁶⁵ The State Department noted in 2020 how academic Iranian papers “cited the potential weapons applications of the PBAs” after the Moscow theater crisis.⁶⁶

In 2003, the State Department assessed:

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58. Michael Eisenstadt, “What Iran’s Chemical Past Tells Us About Its Nuclear Future,” *The Washington Institute for Near East Policy*, April 2014. (https://www.washingtoninstitute.org/sites/default/files/pdf/ResearchNote17_Eisenstadt2.pdf)

59. Central Intelligence Agency, Director of Central Intelligence, “Unclassified Report to Congress on the Acquisition of Technology Relating to WMD and Advanced Conventional Munitions, 1997 (Excerpts),” January 1, 1998. (<https://www.iranwatch.org/library/government/united-states/executive-branch/central-intelligence-agency/unclassified-report-congress-acquisition-technology-relating-wmd-and-1>); U.S. Department of State, Office of the Spokesman, “U.S. Imposes CW Sanctions Against Chinese Entities,” May 22, 1997. (<https://1997-2001.state.gov/briefings/statements/970522a.html>)

60. Central Intelligence Agency, Director of Central Intelligence, “Unclassified Report to Congress on the Acquisition of Technology Relating to WMD and Advanced Conventional Munitions, 1997 (Excerpts),” January 1, 1998. (<https://www.iranwatch.org/library/government/united-states/executive-branch/central-intelligence-agency/unclassified-report-congress-acquisition-technology-relating-wmd-and-1>)

61. Central Intelligence Agency, Director of Central Intelligence, “Unclassified Report to Congress on the Acquisition of Technology Relating to WMD and Advanced Conventional Munitions, January - June 2000 (Excerpts),” February 1, 2001. (<https://www.iranwatch.org/library/government/united-states/executive-branch/central-intelligence-agency/unclassified-report-congress-acquisition-technology-relating-wmd-and>)

62. U.S. Department of State, Office of the Spokesman, “U.S. Nonproliferation Act Sanctions,” July 3, 2003. (<https://2001-2009.state.gov/r/pa/prs/ps/2003/22238.htm>); “Iran’s Chemical Milestones, 1929-2011,” *Wisconsin Project on Nuclear Arms Control*, July 1, 2011. (<https://www.wisconsinproject.org/iran-chemical-milestones/#:~:text=March%201990%3A%20A%20U.S.%20Defense,%2DIraq%20Non%2Dproliferation%20Act.>)

63. Author interview of Israeli government officials, March 25, 2025.

64. Artem Krechetnikov, “Moscow Theatre Siege: Questions Remain Unanswered,” *BBC (UK)*, October 24, 2012. (<https://www.bbc.com/news/world-europe-20067384>); U.S. Department of State, “Compliance With the Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction – Condition (10) (C) Report,” April 2025, page 13. (<https://www.state.gov/wp-content/uploads/2025/04/Condition-10-c-Report-Inaccessible-Version.pdf>)

65. Author interview of Israeli government officials, March 25, 2025.

66. U.S. Department of State, “Compliance With the Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction – Condition (10) (C) Report,” June 2020, page 12. (<https://www.state.gov/wp-content/uploads/2020/06/2020-10C-Report-Unclassified-Version-for-H.pdf>)

Iran has not submitted a complete and accurate declaration [to the OPCW], and in fact is acting to retain and modernize key elements of its CW program. Some of these elements include an offensive R&D [research and development] CW program, an undeclared stockpile and an offensive production capability.⁶⁷

In 2004, the DCI assessed that Iran “continued to seek production technology, training, and expertise from foreign entities that could further Tehran’s efforts to achieve an indigenous capability to produce nerve agents.”⁶⁸ In 2006, the DCI asserted, “We judge that Iran maintains a small, covert CW stockpile.”⁶⁹ However, by 2007, the DCI appeared to focus on Tehran’s capability to produce chemical weapons, rather than its maintenance of a stockpile. It reported, “We assess that Iran maintains the capability to produce CW agent in times of need and conducts research that may have offensive applications. We judge that Iran still maintains a capability to weaponize CW agents in a variety of delivery systems.”⁷⁰

IRAN’S MODERN CHEMICAL WEAPONS PROGRAM (2011-2025)

Since 2011, State Department and Israeli assessments on Iran’s modern chemical weapons program have focused chiefly on Tehran’s development of undeclared RCAs and PBAs for offensive and domestic use. Washington and Jerusalem assess that Tehran may be developing PBAs under a loophole in the CWC on “purposes not prohibited,” or substances a state can acquire, develop, or transfer so long as they are applied to legitimate “research, medical, pharmaceutical or protective purposes.”⁷¹ However, the CWC prohibits their development and use as weapons.

Beginning in 2011, the State Department’s annual CWC compliance reports, which are based on intelligence findings, stated that the United States lacks the ability to certify Iran’s compliance with the CWC — reflecting Tehran’s persistent failure to address American noncompliance concerns despite Washington raising the matters in various international forums, including the OPCW.⁷² Since 2018, the department has found Iran formally in noncompliance with the CWC.⁷³ Such reporting and determinations are required under the U.S. Senate’s conditions for ratifying the CWC.⁷⁴ Israeli estimates appear to confirm the Iranian violations detailed below.

67. U.S. Department of State, “2003 Adherence to and Compliance with Arms Control and Nonproliferation Agreements and Commitments,” 2003. (<https://2009-2017.state.gov/t/avc/rls/rpt/22322.htm>)

68. Central Intelligence Agency, Director of Central Intelligence, “Unclassified Report to Congress on the Acquisition of Technology Relating to WMD and Advanced Conventional Munitions, January 1 – December 31, 2004,” accessed January 27, 2026. (<https://www.iranwatch.org/sites/default/files/us-cia-wmdacquisitionreport-jandec04.pdf>)

69. Ibid.

70. Central Intelligence Agency, Director of Central Intelligence, “Unclassified Report to Congress on the Acquisition of Technology Relating to WMD and Advanced Conventional Munitions, January 1 – December 31, 2007,” accessed January 27, 2026. (<https://www.iranwatch.org/sites/default/files/us-dni-acquisitiontechnologyreport-2007.pdf>)

71. U.S. Department of State, “Finding of Non-Compliance With the Chemical Weapons Convention (CWC): Islamic Republic of Iran,” April 16, 2018. (<https://www.state.gov/finding-of-non-compliance-with-the-chemical-weapons-convention-cwc-islamic-republic-of-iran>); Author interview of Israeli government officials, March 25, 2025; Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction, Paris, April 29, 1997, page 123. (https://www.opcw.org/sites/default/files/documents/CWC/CWC_en.pdf)

72. U.S. Department of State, “Condition (10) (C) Report: Compliance With the Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction (Excerpts),” 2011. (<https://www.iranwatch.org/library/governments/united-states/executive-branch/department-state/condition-10c-report-compliance-convention-prohibition-development-production>)

73. U.S. Department of State, “Finding of Non-Compliance With the Chemical Weapons Convention (CWC): Islamic Republic of Iran,” April 16, 2018. (<https://www.state.gov/finding-of-non-compliance-with-the-chemical-weapons-convention-cwc-islamic-republic-of-iran>)

74. An executive resolution to advise and consent to the ratification of the Chemical Weapons Convention, subject to certain conditions, S. 75, 105th Congress (1997). (<https://www.congress.gov/bill/105th-congress/senate-resolution/75>)

In April 2018, the State Department reported, “Based on available information, the United States now certifies Iran is in noncompliance with the CWC.” It continued:

The United States cannot certify that the Islamic Republic of Iran is in compliance with the CWC in three areas: (1) its chemical weapons production facilities (CWPF) declaration obligations; (2) its transfer of chemical weapons (CW); and (3) its retention of undeclared CW stockpile.⁷⁵

In 2021, the department reported its concern that “the regime’s true intent with regard to the testing and production of these so-called chemical incapacitating agents” is to use them “for offensive purposes, including against Iranian citizens.”⁷⁶

Likewise, the State Department’s report assessed that Tehran has not declared all its holdings of RCAs, noting that Iran’s SMG advertised products containing undeclared RCAs such as dibenzoxazepine (CR) at defense expositions, including for use in personal and large-area sprays and in hand grenades.⁷⁷ The United States also “has serious concerns that Iran is pursuing [PBAs] for offensive purposes,” the report asserted, and the United States has since raised the matter at OPCW meetings.⁷⁸

In 2020, the State Department reported “Iran’s PBA research includes a wide variety of compounds that have differing sedation, dissociation, and amnestic incapacitating effects.”⁷⁹ For example, “In 2014, Iran’s Chemistry Department of IHU [Imam Hossein University] sought kilogram quantities of medetomidine — a sedative it has researched as an incapacitant — from Chinese exporters.”⁸⁰ The large quantity of medetomidine and the nonmedical nature of the department’s work raised suspicion that it was exploiting its academic veneer to procure chemical weapons commodities. The State Department previously reported in 2014 that IHU has worked on “non-lethal” PBAs in an effort called Project Deterrence, including in collaboration with SPND, or the Organization of Defensive Innovation and Research, which the United States sanctioned that same year.⁸¹ SPND is responsible for advanced weapons development, including nuclear and chemical weapons.⁸²

75. U.S. Department of State, “Finding of Non-Compliance With the Chemical Weapons Convention (CWC): Islamic Republic of Iran,” April 16, 2018. (<https://www.state.gov/finding-of-non-compliance-with-the-chemical-weapons-convention-cwc-islamic-republic-of-iran>)

76. U.S. Department of State, “Compliance With the Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction – Condition (10) (C) Report,” April 2021, page 16. (<https://www.state.gov/wp-content/uploads/2021/04/2021-Condition-10-c-Report.pdf>)

77. U.S. Department of State, “Finding of Non-Compliance With the Chemical Weapons Convention (CWC): Islamic Republic of Iran,” April 16, 2018. (<https://www.state.gov/finding-of-non-compliance-with-the-chemical-weapons-convention-cwc-islamic-republic-of-iran>)

78. U.S. Department of State, “Finding of Non-Compliance With the Chemical Weapons Convention (CWC): Islamic Republic of Iran,” April 16, 2018. (<https://www.state.gov/finding-of-non-compliance-with-the-chemical-weapons-convention-cwc-islamic-republic-of-iran>); Matthew Levitt, “Tehran’s Tactical Knockout: Weaponized Pharmaceutical-Based Agents,” *Combating Terrorism Center at West Point*, October 2024. (<https://ctc.westpoint.edu/tehrans-tactical-knockout-weaponized-pharmaceutical-based-agents>)

79. U.S. Department of State, “Compliance With the Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction – Condition (10) (C) Report,” June 2020, page 12. (<https://www.state.gov/wp-content/uploads/2020/06/2020-10C-Report-Unclassified-Version-for-H.pdf>)

80. U.S. Department of State, “Compliance With the Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction – Condition (10) (C) Report,” June 2020, page 12. (<https://www.state.gov/wp-content/uploads/2020/06/2020-10C-Report-Unclassified-Version-for-H.pdf>)

81. “Organization of Defensive Innovation and Research (SPND),” *Iran Watch*, accessed January 27, 2026. (<https://www.iranwatch.org/iranian-entities/organization-defensive-innovation-and-research>)

82. SPND’s Tehran headquarters was also a target of Israeli strikes in June 2025; U.S. Department of State, “Additional Sanctions Imposed by the Department of State Targeting Iranian Proliferators,” August 29, 2014. (<https://2009-2017.state.gov/t/pa/prs/ps/2014/231159.htm>)

Similarly, IHU documents made public by an unknown hacker organization in 2023 and reviewed by the State Department and Institute for Science and International Security discuss IHU test results and chemical composition of PBA substances used in grenades.⁸³ In addition, IHU and Malek Ashtar University (MUT) researchers have studied weaponizing other PBAs, namely ketamine and sevoflurane anesthetics, as well as fentanyl and analogues, as indicated by published Iranian research on the topics.⁸⁴ In March 2024, Ambassador Laura Gross, the U.S. representative to the OPCW at the time, said before the Executive Council, “The documents explain in detail how to weaponize medetomidine, a pharmaceutical-based agent. These documents confirm our prior concerns about Iranian development of such agents.”⁸⁵

According to published Iranian academic papers, Tehran has researched and produced on a micro-scale lethal nerve agents such as Novichok compounds.⁸⁶ The Iranian researchers — including the sanctioned head of SMG, Mehran Babri — justified the activity as adding to Iran’s chemical weapons detection capabilities and the OPCW’s knowledge base.⁸⁷ Such production in miniscule quantities furthers Tehran’s research while not running afoul of the CWC’s Schedule 1 limits.⁸⁸

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83. Mohammadreza Givoh and the Good ISIS Team, “The Islamic Republic’s Work on Pharmaceutical-Based Agents,” *Institute for Science and International Security*, November 25, 2024. (<https://isis-online.org/isis-reports/the-islamic-republics-work-on-pharmaceutical-based-agents>)

84. Ibid.

85. Amb. Gross also noted, “In addition, the United States was recently made aware that Iran’s Islamic Revolutionary Guard Corps publicly threatened to poison U.S. government officials on its official Telegram channel.” Organization for the Prohibition of Chemical Weapons, Executive Council, “Statement by Ms. Laura Gross, United States of America Representative to the OPCW at the One Hundred and Fifth Session of the Executive Council,” March 7, 2024. (<https://www.opcw.org/sites/default/files/documents/2024/03/United%20States%20of%20America%20-%20Statement%20by%20the%20Delegation%20of%20the%20United%20States%20of%20America%20to%20the%20OPCW%20at%20the%20105th%20Session%20of%20the%20Executive%20Council.pdf>)

86. Lt. Col. (Res.) Dr. Dany Shoham, “The Peculiar Chronology of Persistent Nerve Agents,” *Begin-Sadat Center for Strategic Studies*, August 3, 2018. (<https://besacenter.org/persistent-nerve-agents>); Seyed Esmaeil Hosseini, Hamid Saeidian, Ali Amozadeh, Mohammad Taghi Naseri, and Mehran Babri, “Fragmentation pathways and structural characterization of organophosphorus compounds related to the Chemical Weapons Convention by electron ionization and electrospray ionization tandem mass spectrometry,” *Rapid Communications in Mass Spectrometry*, December 30, 2016. (<https://analyticalsciencejournals.onlinelibrary.wiley.com/doi/epdf/10.1002/rcm.7757>); Fatemeh Mirbabaie, Ali Mohammadkhan, Mohammad Naseri, Mehran Babri, Sajjad Mousavi Faraz, Seyyed Esmaeil Hosseini, Davood Ashrafi, “Unambiguous Identification and Determination of A234-Novichok Nerve Agent Biomarkers in Biological Fluids Using GC-MS/MS and LC-MS/MS,” *Analytical and Bioanalytical Chemistry*, February 21, 2022, pages 3,429-3,442. (https://www.researchgate.net/publication/358771187_Unambiguous_identification_and_determination_of_A234-Novichok_nerve_agent_biomarkers_in_biological_fluids_using_GC-MSMS_and_LC-MSMS)

87. U.S. Treasury Department, Press Release, “Treasury Designates Entity Subordinate to Iran’s Military Firm,” December 3, 2020. (<https://home.treasury.gov/news/press-releases/sm1200>)

88. On classes and types of chemical weapons, see: U.S. Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health, “All Agents: Alphabetized ERSB-DB.” (<https://www.cdc.gov/niosh/ersbdb/agentlistalpha.html>); The Australia Group, “Common Control List Handbook: Vol. 1: Chemical Weapons-Related Common Control Lists,” revised January 8, 2024. (<https://www.dfat.gov.au/sites/default/files/australia-group-common-control-list-handbook-volume-i.pdf>).

Example Classes and Types of Chemical Weapons and Whether Iran Is Suspected of Developing Them	
Nerve Agents	Yes, at least research scale ✓
Blister Agents/Vesicants	Yes ✓
Choking Agents	Yes ✓
Blood Agents	Yes ✓
Riot Control Agents	Yes ✓
Pharmaceutical-Based Agents	Yes ✓
Psychochemical Agents	No/Unknown ✕

Table showing Iran’s chemical weapon types according to public or declassified U.S. intelligence estimates, Israeli statements, and interviews with Israeli officials.

In 2022 and 2023, a series of mysterious incidents affected Iranian schoolgirls and college students amid the “Woman, Life, Freedom” protests.⁸⁹ While no perpetrator has come forward, the Tehran regime may have been behind the attacks, which sickened hundreds and may have killed one girl, in reprisal for national uprisings in support of women.⁹⁰ No U.S. or Israeli assessments yet point to a chemical weapons cause.⁹¹ The Biden administration stated it did not know the cause of the attacks and urged for a UN fact-finding mission.⁹² The State Department’s 2025 CWC compliance report failed to mention the incidents.⁹³

In 2024, the State Department again found Iran in formal noncompliance with the CWC for its illicit PBA and RCA development.⁹⁴ In his July 2025 OPCW statement, Yaron Wax asserted, “Iran’s weaponization of PBAs is no longer just a matter of research and development.” He added, “Iran now appears to have produced fentanyl-based munitions and other types of weaponized PBAs.”⁹⁵

89. Maryam Afshang, “Iran investigates poisoning of hundreds of schoolgirls with toxic gas,” *BBC (UK)*, February 28, 2023. (<https://www.bbc.com/news/world-middle-east-64797957>); European Parliament, “European Parliament Resolution of 16 March 2023 on Iran, in particular the poisoning of hundreds of schoolgirls,” March 16, 2023. (https://www.europarl.europa.eu/doceo/document/TA-9-2023-0083_EN.html)

90. Saeed Ghasseminejad and Mark Dubowitz, “Chemical Attacks on Iranian Students,” *Foundation for Defense of Democracies*, accessed January 27, 2026. (<https://www.fdd.org/iranstudentattacks>)

91. Author interview of Israeli government officials, March 25, 2025.

92. Sarah Kolinovsky and Will Gretsky, “‘We don’t know’ what apparently poisoned Iranian schoolgirls, White House says,” *ABC News*, March 2, 2023. (<https://abcnews.go.com/Politics/white-house-calls-transparent-iranian-investigation-apparent-schoolgirls/story?id=97593961>); “White House urges UN to investigate poisoning of Iran schoolgirls,” *Agence France-Presse (France)*, March 7, 2023. (<https://www.france24.com/en/asia-pacific/20230307-white-house-urges-un-to-investigate-iran-s-school-girls-poisoning>)

93. U.S. Department of State, “Compliance With the Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction – Condition (10) (C) Report,” April 2025. (<https://www.state.gov/wp-content/uploads/2025/04/Condition-10-c-Report-Inaccessible-Version.pdf>)

94. U.S. Department of State, “Condition (10)(C) Annual Report on Compliance with the Chemical Weapons Convention (CWC),” April 4, 2024. (<https://www.state.gov/condition-10c-annual-report-on-compliance-with-the-chemical-weapons-convention-cwc>)

95. Organization for the Prohibition of Chemical Weapons, Executive Council, “Statement by Mr. Yaron Wax, Deputy Ambassador of Israel in The Netherlands, Sixty-Seventh meeting of the Executive Council,” July 1, 2025. (https://www.opcw.org/sites/default/files/documents/2025/07/Israel_EC-M-67_National%20Statement_%28e%29.pdf)

Entities Responsible for Iran's Chemical Weapons Development

The United States and Israel assess that several key entities are responsible for Iran's chemical weapons development. Iran uses military-linked and private companies to procure needed chemicals, precursors, and equipment. A non-exhaustive list of entities that have been subject to U.S. or partner sanctions designations includes:

Defense Industries Organization (DIO)

DIO is a subsidiary of the Iranian Ministry of Defense and Armed Forces Logistics (MODAFL) and, according to the Wisconsin Project on Nuclear Arms Control, “represents a conglomerate of over 300 companies” that materially support various Iranian military programs, including chemical weapons development. DIO itself has numerous subsidiaries and affiliates. The United Nations, United States, European Union, United Kingdom, Australia, and Canada have sanctioned it, and Japan has listed it as an entity of concern.⁹⁶

Shahid Meisami Group (SMG)

Until the destruction of the Shahid Meisami Research Complex by Israel in June 2025, SMG carried out some of Iran's chemical weapons research and development at the site, according to the U.S. Treasury Department.⁹⁷ According to Israel, SMG also worked on developing explosives and materials used in nuclear detonations.⁹⁸ In 2020, the United States sanctioned SMG and its director, Mehran Babri, who previously worked for another possible Iranian chemical weapons development site, the Defense Chemical Research Laboratory. SMG is overseen by MODAFL and is a subsidiary of SPND.

When Washington sanctioned SMG in 2020, the Treasury Department noted that the group's “projects include[d] testing and producing chemical agents and optimizing them for effectiveness and toxicity for use as incapacitation agents.”⁹⁹ Israeli envoy Yaron Wax asserted in his July 2025 OPCW statement that SMG chiefly worked on fentanyl incapacitants for use in grenades, but the project had evolved to using mortars to fire chemical weapons further distances. According to Wax, Israel eliminated SMG's “laboratories, production halls and refinery lines” during its June 2025 bombing of the Shahid Meisami complex.¹⁰⁰

Chemical Industries and Development of Material Group (CIDMG)

CIDMG is a subsidiary of DIO and, according to the Treasury Department, is responsible for producing “military and civil chemical products and materials for the production of powders, propellant charges, and mine explosive materials.”¹⁰¹ The United States sanctioned CIDMG in 2012, and Canada sanctioned the group in 2010 for its support of Iran's and Syria's chemical weapons activities.¹⁰²

Parchin Chemical Industries

A subsidiary of CIDMG, Parchin Chemical Industries imports and exports chemicals and precursors. The United Nations, United States, European Union, United Kingdom, Australia, Canada, and South Korea have sanctioned it, and Japan has listed it as an entity of concern.¹⁰³

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96. “Defense Industries Organization,” *Wisconsin Project on Nuclear Arms Control, Iran Watch Project*, January 26, 2004. (<https://www.iranwatch.org/iranian-entities/defense-industries-organization-dio>)

97. U.S. Treasury Department, “Treasury Designates Entity Subordinate to Iran's Military Firm,” December 3, 2020. (<https://home.treasury.gov/news/press-releases/sm1200>)

98. David Albright, Sarah Burkhard, and the Good ISIS Team, “Post-Attack Assessment of Shahid Meysami Research Center,” *Institute for Science and International Security*, July 10, 2025. (<https://isis-online.org/isis-reports/post-attack-assessment-of-shahid-meysami-research-center>)

99. U.S. Treasury Department, “Treasury Designates Entity Subordinate to Iran's Military Firm,” December 3, 2020. (<https://home.treasury.gov/news/press-releases/sm1200>)

100. Organization for the Prohibition of Chemical Weapons, Executive Council, “Statement by Mr. Yaron Wax, Deputy Ambassador of Israel in The Netherlands, Sixty-Seventh meeting of the Executive Council,” July 1, 2025. (https://www.opcw.org/sites/default/files/documents/2025/07/Israel_EC-M-67_National%20Statement_%28e%29.pdf)

101. U.S. Treasury Department, “Treasury Designates Entities Linked to Iran's Weapons Program,” December 21, 2012. (<https://home.treasury.gov/news/press-releases/tg1813#:~:text=Iran's%20Chemical%20Industries%20and%20Development,charges%2C%20and%20mine%20explosive%20materials>)

102. “Chemical Industries and Development of Material Group,” *Wisconsin Project on Nuclear Arms Control, Iran Watch Project*, January 26, 2004. (<https://www.iranwatch.org/iranian-entities/chemical-industries-development-material-group>)

103. “Parchin Chemical Industries,” *Wisconsin Project on Nuclear Arms Control, Iran Watch Project*, January 26, 2004. (<https://www.iranwatch.org/iranian-entities/parchin-chemical-industries>)

Isfahan Chemical Industries

Isfahan Chemical Industries is a subsidiary of CIDMG that produces chemicals and procures commodities that contribute to Iran's chemical weapons development. Canada sanctioned it in 2010. In 2011, the United Kingdom and Japan listed it as an entity of concern for its role in chemical weapons development.¹⁰⁴

Special Industries Group

The Special Industries Group is a subsidiary of DIO and involved in the procurement of chemical weapon precursors and manufacturing information. The United Nations, European Union, United Kingdom, Australia, and Canada have sanctioned it, and Japan has listed it as an entity of concern.¹⁰⁵

Imam Hossein University and Malek Ashtar University

"Since 2005," the State Department reported in 2020, "some of Iran's military-controlled facilities, Imam Hossein University (IHU) and Malek Ashtar University (MUT), have researched chemical agents intended to incapacitate."¹⁰⁶ In 2014, IHU's chemistry department sought kilogram quantities of medetomidine from China.¹⁰⁷ IHU also worked on tear gas grenades using medetomidine for Project Deterrence. Researchers at the IHU Chemistry Department have published research on aerosolizing medetomidine, ketamine, sevoflurane, fentanyl, and related compounds.¹⁰⁸

Hakiman Shargh Research Company

The United States sanctioned the Hakiman Shargh Research Company in 2024 for "chemical weapons research and development."¹⁰⁹ Washington alleged the company was "engaging or attempting to engage in activities or transactions that materially contribute to the proliferation of weapons of mass destruction by Iran."

RECOMMENDATIONS

The international community has failed to take meaningful action to penalize Iran for several decades of illicit chemical weapons development. The United States, European countries, Israel, and Iran's regional neighbors cannot rule out the possibility that the Islamic Republic will facilitate or undertake terrorist attacks against them using chemical weapons. Tehran may already be using them against its own people. Meanwhile, Iran remains a member in good standing at the OPCW and holds elected office within the body while denying allegations about its noncompliance. At the same time, Israel remains outside the convention and therefore lacks the authority to refute Tehran's misinformation.

Should Iran fail to rectify its CWC violations, the CWC and the OPCW would be weakened and suffer further crises of credibility. Western sanctions also remain a powerful tool for freezing assets and naming and shaming entities and individuals to stop Iran's pursuit of chemical weapons. The Trump administration and its key partners

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104. "Isfahan Chemical Industries," *Wisconsin Project on Nuclear Arms Control, Iran Watch Project*, January 26, 2004. (<https://www.iranwatch.org/iranian-entities/isfahan-chemical-industries>)

105. "Special Industries Group," *Wisconsin Project on Nuclear Arms Control, Iran Watch Project*, January 26, 2004. (<https://www.iranwatch.org/iranian-entities/special-industries-group>)

106. U.S. Department of State, "Compliance with the Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction – Condition (10) (C) Report," June 2020, page 12. (<https://www.state.gov/wp-content/uploads/2020/06/2020-10C-Report-Unclassified-Version-for-H.pdf>)

107. U.S. Department of State, "Compliance with the Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction – Condition (10) (C) Report," June 2020, page 12. (<https://www.state.gov/wp-content/uploads/2020/06/2020-10C-Report-Unclassified-Version-for-H.pdf>)

108. Mohammadreza Giveh and the Good ISIS Team, "The Islamic Republic's Work on Pharmaceutical-Based Agents," *Institute for Science and International Security*, November 25, 2024. (<https://isis-online.org/isis-reports/the-islamic-republics-work-on-pharmaceutical-based-agents>)

109. Department Spokesperson Matthew Miller, U.S. Department of State, "United States Imposes Sanctions Targeting Iran's Chemical Weapons Research and Development," July 12, 2024. (<https://2021-2025.state.gov/united-states-imposes-sanctions-targeting-irans-chemical-weapons-research-and-development>)

should pursue several immediate actions to hold Iran to account, thereby penalizing Tehran and limiting the regime's future ability to use chemical weapons.

1. THE UNITED STATES SHOULD LAUNCH A PRESSURE CAMPAIGN TO HOLD THE ISLAMIC REPUBLIC ACCOUNTABLE AT THE OPCW.

First and foremost, Washington should seek a finding of Iranian noncompliance with the CWC. Together with other OPCW member states, the United States should launch a campaign to publicize Iran's violations — declassifying and sharing its own information to the extent possible, including any information about the use of chemical weapons, such as against civilians during the regime's 2026 crackdown. Iranian protesters or alleged victims can assist in preserving evidence of the regime's chemical weapons use by safely collecting and submitting used gas canisters, grenades, or other munitions containing chemical residue to OPCW-affiliated laboratories for analysis.¹¹⁰ Iranian regime defectors or persons in positions of authority could also provide critical testimony or other documentary evidence of chemical weapons use. The Trump administration should then pursue a formal ultimatum that Tehran demonstrate compliance or else lose its OPCW rights and privileges.

An ultimatum decision must pass in the 41-member Executive Council by a vote of two-thirds. Such a decision must be followed by an Executive Council finding of noncompliance. The OPCW's all-193-member state Conference of States Parties, which approves or rejects Executive Council decisions, must formalize a suspension at its annual meeting, currently scheduled for November 23-27, 2026.¹¹¹

The administration can build on the precedent of Syria's suspension, in which the Executive Council, in July 2020, gave Damascus 90 days to demonstrate compliance. The Conference of States Parties officially suspended Syria's OPCW rights and privileges in April 2021. The first Trump administration spearheaded this effort, and the Biden administration finalized it, underscoring the value of bipartisan support. Like Syria, which in 2024 and 2025 has taken steps to comply with the CWC under Damascus's new leadership, Iran would still retain OPCW membership and have a path back toward reinstated OPCW rights if it resumes compliance.¹¹² Iran could demonstrate compliance by accepting extensive, short-notice OPCW inspections at any site, providing access to documentation, permitting interviews with officials, and cooperating with OPCW efforts to verifiably dismantle covert chemical weapons assets and facilities.

Concurrently, the Trump administration and its key Western partners in the OPCW should step up vote-gathering campaigns to prevent Iran's election to official leadership posts in the Executive Council, the Conference of States Parties, and quinquennial CWC review conferences. Tehran is currently a member of the Executive Council and one of its four vice-executive chairs. Such vote-gathering efforts may require the involvement of high-level U.S. officials.

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110. Note by the Organization for the Prohibition of Chemical Weapons Director General, "Status of Laboratories Designated for the Analysis of Authentic Environmental Samples," August 9, 2024. (<https://www.opcw.org/sites/default/files/documents/2024/08/s-2312-2024%28e%29.pdf>)

111. "CSP-31 – Thirty First Session of the Conference of the States Parties," *Organization for the Prohibition of Chemical Weapons*, accessed January 27, 2026. (<https://www.opcw.org/calendar/2026/11/23/csp-31-thirty-first-session-conference-states-parties>)

112. Organization for the Prohibition of Chemical Weapons, "Conference tasks Executive Council to assess conditions for restoring Syria's full OPCW rights," November 28, 2025. (<https://www.opcw.org/media-centre/news/2025/11/conference-tasks-executive-council-assess-conditions-restoring-syrias>)

2. ISRAEL SHOULD EVALUATE WHETHER NOW IS THE TIME TO RATIFY THE CWC.

Jerusalem should consider whether it could more effectively counter Tehran by working within the OPCW and using it as a platform to publicize Iran's violations and pressure the regime. If Israel joined the CWC as a state that had verifiably abandoned chemical weapons, it could more credibly raise the issue of Iran's development of chemical weapons and the acquisition of chemical weapons by non-state actors like Iran-backed terrorist groups. Of utmost importance should be OPCW efforts to retain strict confidentiality over Israeli disclosures about any dismantled chemical weapons facilities and activities or those slated for dismantlement under OPCW oversight.

3. WASHINGTON SHOULD ENHANCE GLOBAL VIGILANCE, INTERDICTION, AND SANCTIONS EFFORTS TO STOP NEW, ILLICIT, IRANIAN PROCUREMENTS OF CHEMICALS, PRECURSORS, SUBSTANCES, AND EQUIPMENT THAT COULD HELP TEHRAN REBUILD OR EXPAND ITS CHEMICAL WEAPONS EFFORTS.

Iran may have lost significant chemical weapons assets in the Israeli strike against the Shahid Meisami complex. In order to bolster its military capabilities after the 12-Day War, Tehran may seek new chemicals, precursors, other substances, and equipment from abroad. The United States and key chemical supplier nations should raise the urgency of this possibility among the Australia Group and PSI participants, as well as the UN 1540 Committee.

The Australia Group and the UN Resolution 1540 Committee should immediately enhance their outreach to governments and domestic industries, providing potential Iranian shopping lists for red flagging and increased vigilance. They should also educate these interlocutors on transshipment schemes and the use of intermediaries that Iran may employ to obtain needed goods. In particular, Washington should share information about detecting and stopping shipments from key supplier countries, such as China, India, and Mexico, and apply pressure on India and Mexico — Australia Group participants — to crack down on such illicit activity. The Australian Group and UN 1540 Committee must also proactively inform states about countering any Chinese, Russian, or North Korean supply of needed chemicals and substances to Tehran. The Trump administration should also inform PSI participant states about the threat of Iranian chemical weapons-related imports and prepare states to interdict such transfers.

In addition, Washington should issue new, public Treasury Department guidance about Iran's likely chemical, precursor, and equipment acquisition schemes. In this guidance, it should warn countries and suppliers worldwide that it will enforce U.S. Executive Order 13382 and the Iran, North Korea, and Syria Nonproliferation Act (INKSNA) sanctions, which empower the administration to sanction proliferators of WMDs and ban them from U.S. commercial and financial business.¹¹³ Congress can also support such counterproliferation efforts by considering any updates to INKSNA to enhance its impact with regard to stemming Iran's chemical weapons acquisition.

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113. U.S. Treasury Department, Office of Foreign Assets Control, "What You Need to Know About Treasury Restrictions: Executive Order 13382: 'Blocking Property of Weapons of Mass Destruction Proliferators and Their Supporters'; the Weapons of Mass Destruction Trade Control Regulations (Part 539 of Title 31, C.F.R.); and the Highly Enriched Uranium (HEU) Agreement Assets Control Regulations (Part 540 of Title 31, C.F.R.)," accessed January 27, 2026. (<https://ofac.treasury.gov/media/8581/download?inline>); U.S. Department of State, "Iran, North Korea, and Syria Nonproliferation Act Sanctions (INKSNA) [formerly Iran Nonproliferation Act]," accessed January 27, 2026. (<https://www.state.gov/iran-north-korea-and-syria-nonproliferation-act-sanctions-inksna>)

4. THE UNITED STATES SHOULD USE MILITARY FORCE AS NECESSARY, OR EMPOWER ISRAEL TO DO SO, AGAINST ANY IRANIAN CHEMICAL WEAPONS EFFORTS.

If actionable intelligence emerges of Iranian chemical weapons efforts, America should consider undertaking, or support an Israeli decision to undertake, new strikes against the regime to eliminate chemical weapon facilities, chemical stocks, related delivery weapons, and equipment, as well as key personnel. If Israel initiates strikes, Washington should facilitate them with intelligence information, if possible, and join them if Israel needs assistance in reaching deeply buried facilities. In particular, the two should consider acting against any Iranian facilities that might support chemical weapons use against Iranian protesters.

CONCLUSION

With the entry into force of the CWC, chemical warfare should have become a relic of the 20th century. Yet with increased stockpiling and use of chemical weapons by U.S. adversaries — including new forms of chemical weapons by states like Iran that committed to eliminate them — the scourge bleeds into this century. Only when the United States and its partners hold Iran accountable and ensure the verifiable elimination of its illicit weapons programs can the Middle East and the world be safe from this threat.

About the Foundation for Defense of Democracies

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Andrea Stricker serves as an FDD research fellow and is deputy director of FDD's Nonproliferation Program, providing expertise on nonproliferation and counterproliferation, open-source proliferation and policy analysis, and strategic commodity tracking. Her other areas of interest include nonproliferation regimes and related United Nations resolutions, chemical weapons, illicit finance, Middle East security dynamics, sanctions, and U.S. foreign policy.

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