

# BACKGROUNDER

No. 3446 | OCTOBER 28, 2019 KATHRYN AND SHELBY CULLOM DAVIS INSTITUTE FOR NATIONAL SECURITY AND FOREIGN POLICY

# Syria's Use of Chemical Weapons Demands Further U.S. Action

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### **KEY TAKEAWAYS**

Syria's possession and use of chemical weapons raises the specter of additional victims in Syria, and of others now deeming the use of such weapons acceptable.

The U.S. should work with its partners to hold Syria accountable for its past actions involving chemical weapons, and work to dissuade, deter, and deny future use.

To counter Syria's chemical weapons program, the U.S. should keep the military option open while enhancing counter-proliferation and export-control measures. n August 2013, Syrian President Bashar al Assad unleashed sarin gas—a highly toxic chemical warfare agent (CWA)—on his own people in the Ghouta district of the Syrian capital Damascus. The nerve agent attack killed more than 1,400 Syrians and injured thousands more.<sup>1</sup>

Today, the Syrian regime seemingly continues to maintain the capability to use chemical weapons (CWs) against its opponents as demonstrated by the regime's reported use of CWs in an assault in Syria's Idlib province in May 2019.<sup>2</sup>

These two incidents are not alone in the Syrian regime's reported use of CWs during the eight-year civil war; various governmental and non-governmental estimates on Damascus' alleged use of CWs during the conflict run from 50 cases to several hundred.

Syria's deep embrace of CWs for offensive military purposes is troubling for a number of reasons. First,

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there is the human tragedy associated with the use of this weapon of mass destruction (WMD) against innocent, defenseless civilians, killing and injuring an untold number of victims.

Next, a 2013 signatory to the Chemical Weapons Convention (CWC),<sup>3</sup> Syria has repeatedly violated it, not only weakening the arms control treaty, but the long-standing, widely accepted international norm against the use of CWs as well.

Moreover, Syria's use of CWs as a tool of coercion and conflict with limited accountability might increase the chances of other state and non-state actors using this WMD against any number of targets, including U.S. forces, allies, and partners in the Middle East—and elsewhere—in the future.

It is clear that Syria's CW program is a threat to international peace and security, an unspeakable affront to humanity, and an egregious violation of international norms, treaties, law, and Syria's own agreements.

While full accountability for what some might call Syria's war crimes or crimes against humanity may be a long time coming due to a number of factors, it is critical for the U.S. to take steps now to dissuade, deter, and if possible deny, Syria's—and others'—current or future use of CWs.<sup>4</sup>

To accomplish this, the Trump Administration should take the following actions: First, it must publicly keep open the military option for responding to Syria's current and future possession or use of CWs. Beyond CW-related targets, the Administration should consider the regime's high-value targets for strikes in anticipation of, or in response to, the imminent threat or confirmed use of CWs to discourage, deter, or deny their use.

Next, the Administration should also continue to highlight the Syrian CW issue in international venues and forums to express its continuing concern about Syria's CW program, support international efforts that may lead to Syrian CW accountability, and encourage potential foreign reconstruction providers to withhold aid until Syria comes into full compliance with the CWC.

In addition, the Administration should work to improve international export-control awareness and enhance counter-proliferation efforts to stem CW precursor proliferation to Syria, and ensure that U.S. forces deployed to Syria are prepared for a potential CW environment.

## The Enduring Challenge of Chemical Weapons

The use of both man-made chemicals and natural poisons as weapons has been a part of humankind's story of conflict for some time, dating back perhaps to the Peloponnesian War.<sup>5</sup>

#### TEXT BOX 1

## **Types of Chemical Warfare Agents**

According to the OPCW, there are five types of CWAs:

- 1. Choking agents: These agents inflict injury on the respiratory tract when inhaled, potentially drowning a victim in his own lung fluids. Examples include chlorine and phosgene.
- 2. Blister agents: These agents inflict injury to both the skin and respiratory tracts when a victim comes into contact with it, creating burnlike blisters. Examples include sulfur mustard and lewisite.
- **3.** Blood agents: These agents prevent blood from transferring oxygen to the body, causing the victim to suffocate. Examples include hydrogen cyanide and arsine.

- **4. Nerve agents:** These agents affect the victim's nervous system, rapidly interrupting vital body functions. Examples include VX and sarin.
- 5. Riot-control agents: These agents temporarily incapacitate a person through the irritation of the eyes, mouth, throat, lungs, and skin. They are only considered chemical weapons if used in warfare. Examples include tear gas and pepper spray.

Despite prohibitions on the use of poisonous gases, such as those found in the Hague Convention of 1899, World War I witnessed the horrors of chlorine, phosgene, and mustard gases loosed on the battlefields of Europe by both sides of the conflict.<sup>6</sup>

In the aftermath of World War I, the League of Nations banned the use of chemical and biological weapons under the Geneva Protocol of 1925.<sup>7</sup> Unfortunately, the Geneva Protocol did not prevent the use of CW in the interwar period, during World War II, or afterwards.

In another international effort to end the possession and use of CWs, the CWC was completed in 1993 and entered into force in 1997. "The Convention aims to eliminate an entire category of weapons of mass destruction by prohibiting the development, production, acquisition, stockpiling, retention, transfer or use of chemical weapons by States Parties," according to the Organization for the Prevention of Chemical Weapons (OPCW), the implementing organization for the CWC.<sup>8</sup> Under the CWC:

All States Parties have agreed to chemically disarm by destroying any stockpiles of chemical weapons they may hold and any facilities which produced them, as well as any chemical weapons they abandoned on the territory of other States Parties in the past. States Parties have also agreed to create a

#### TEXT BOX 2

## **Chemical Weapons Convention**

Article 1 of the CWC decrees that each state party to the convention commit, never under any circumstances,

- To develop, produce, otherwise acquire, stockpile or retain chemical weapons, or transfer, directly or indirectly, chemical weapons to anyone;
- C. To engage in any military preparations to use chemical weapons;

**b.** To use chemical weapons;

**d.** To assist, encourage or induce, in any way, anyone to engage in any activity prohibited to a State Party under this Convention.

verification regime for certain toxic chemicals and their precursors (listed in Schedules 1, 2 and 3 in the Annex on Chemicals) in order to ensure that such chemicals are only used for purposes not prohibited under the Convention.<sup>9</sup>

According to the U.S. State Department, as of December 31, 2018, 192 countries were party to the CWC.<sup>10</sup> Four states are not a full party to the CWC. These include signatory Israel and three non-signatory states, Egypt, North Korea, and South Sudan.<sup>11</sup>

Often referred to as the "poor man's nuclear weapon," CWs remain despite the bans on their production, stockpiling, and use—potentially attractive options to some state and non-state actors in the pursuit of deterrence, coercion, and violent conflict.

This certainly has been true in Syria since 2012.

## Syria and Chemical Weapons

Besides the tremendous bloodshed during the eight-year civil war—that included the Arab Spring and the rise and fall of the Islamic State caliphate—the world witnessed the Syrian regime's almost unbridled use of CWs to advance its military campaign and arguably kill, injure, punish, and work to break the will of its varied opponents and other innocents.

The then–Director of National Intelligence (DNI), Daniel R. Coats, reported to Congress in January 2019 that the "Syrian regime has repeatedly used chemical weapons—including chlorine and sarin—despite acceding to the Chemical Weapons Convention in 2013."<sup>12</sup> The exact death toll from chemical weapons use in Syria is seemingly unknown.

But Syria's history with CWs precedes the civil war by decades. Syria probably sought to develop a CW program, with the support of Egypt, starting in the mid-1970s as a result of its conflict with neighboring Israel.<sup>13</sup>

Beyond military defeats at the hands of Israel, Syria's political relations with the Soviet Union and Turkey became strained, encouraging Damascus to undertake a concerted effort beginning in the mid-1980s to develop a self-sufficiency in CWs.<sup>14</sup>

In Damascus' view, CWs, combined with a large missile arsenal, would serve as a strategic deterrent in a region fraught with regional and Cold War security challenges.<sup>15</sup> Syria was one of the few countries that initially refused to sign the CWC, citing concerns about its security.<sup>16</sup>

Throughout the first decade of the 2000s, the U.S. government assessed that Syria possessed sarin nerve agent, had tried to develop more toxic agents, and was dependent on foreign sources for critical parts of its CW program, including precursor chemicals.<sup>17</sup>

There were clearly concerns about Damascus' CW program as the Middle East faced its largest upheaval in quite some time with the Arab Spring uprisings across the region in 2011, including in Syria.

But these concerns about instability became more exigent as the Assad regime came under increasing pressure from the Syrian Arab Spring in 2012, leading to worries in Washington about the security of Damascus' CWs should the regime fall.<sup>18</sup>

Perhaps responding to international concerns and potential external actions against the regime in July 2012, a Syrian Foreign Ministry spokesman publicly acknowledged Syria's possession of chemical and biological weapons.<sup>19</sup>

The Syrian government spokesman promised that Syria would never use chemical or biological weapons inside Syria, that the army had secure possession of the stockpiles, and that the weapons would only be used in the case of external aggression.<sup>20</sup> Nevertheless, reports of CW use in Syria began to filter out in late 2012.<sup>21</sup>

Though not the first use of CW in the Syrian civil war, the Syrian government's forces infamously struck with sarin nerve agent using CW-filled surface-to-surface rockets at Ghouta in August 2013, killing and injuring a large number of civilians.<sup>22</sup>

United Nations Secretary-General Ban Ki Moon believed that the Ghouta attack constituted a war crime and was the "most significant confirmed use of chemical weapons against civilians since [Iraqi President] Saddam Hussein used them" in Halabja, Iraq, in 1988.<sup>23</sup>

#### TEXT BOX 3

## **Characteristics of Chemical Weapons in Syria's Arsenal**

According to the U.S. Center for Disease Control and Prevention:

- Chlorine: Chlorine is a toxic gas that is widely used in industrial processes. Heavier than air, this yellow-green-colored, bleach-smelling choking agent irritates or burns the skin, eyes, nose, and throat and could result in tissue damage, pulmonary edema, and death.
- Sarin: This clear, colorless, tasteless, and heavierthan-air nerve agent can be ingested via eye or skin contact from the air, food, clothing, or liquids, and can result in paralysis and death from respiratory failure.
- Sulfur mustard: This heavier-than-air blister agent can smell of garlic, onion, or mustard. It can be a vapor, liquid, or solid form, and ranges from yellow to brown in color. Contact can burn and damage the eyes, skin, and the respiratory tract. Sulfur mustard affects numerous body functions; death can come from respiratory failure.
- VX: This amber-colored nerve agent is an odorless and tasteless oily liquid. Affliction can come from skin or eye contact, inhaling vapors, or consuming liquids or food laced with VX. It is considered the most potent of nerve agents. Exposure can result in paralysis and death from respiratory failure.

The deaths of more than 1,400 people at Ghouta—likely the single deadliest day in the Syrian civil war yet—brought pressure from the United States, including a U.S. congressional debate on whether to authorize the use of force against Syria.<sup>24</sup> Likely fearing a military strike, Damascus unexpectedly agreed to became party to the CWC in mid-September 2013.<sup>25</sup>

Shortly thereafter, Washington and Moscow negotiated a diplomatic agreement, the Framework for Elimination of the Syrian Chemical Weapons, which was followed by an OPCW Executive Council decision and U.N. Security Council Resolution (UNSCR) 2118 in late September.<sup>26</sup>

In their totality, these agreements required Syria to fully declare its CW holdings and facilities, make CW available for destruction, and allow for OPCW investigation and verification, including "unfettered access for the OPCW to Syrian sites and individuals."<sup>27</sup>

The regime admitted to having tons of CW at more than 20 sites, more than 100 CW missile warheads (mainly for SCUD missiles), more than 1,000 aerial bombs, and a number of commercially disguised mobile CW-production facilities housed on 18-wheeler trucks.<sup>28</sup>

Despite the OPCW announcing the complete destruction of 1,328 tons of Syrian-declared CWAs in January 2016 from stockpiles and 27 declared CW production facilities, the Assad regime's seeming cooperation turned out to be a deception.<sup>29</sup>

#### MAP 1



## Noteworthy Chemical Weapons Attacks in Syria

Reports of the regime's use of CWs continued despite its commitments under the CWC and after the supposed surrender of Syria's chemical weapons arsenal.<sup>30</sup>

Indeed, in April 2017, Damascus was accused again of using sarin, this time in Khan Shaykhun, which killed about one hundred Syrians and injured several hundred more.<sup>31</sup> A joint United Nations–OPCW investigation later attributed the attack to the Assad regime.<sup>32</sup>

In April 2018, a widely reported CW attack took place in the Syrian city of Douma, likely involving the use of weaponized chlorine.<sup>33</sup> Washington claims that Damascus was responsible for this CW attack, which killed more than 40 people, and that "Russian officials colluded with the SAR [Syrian Arab Republic] to build a false narrative" about the attack.<sup>34</sup>

Damascus denies ever using WMDs; its ally, Moscow, supports this claim. Both blame terrorist groups, rebels, and others involved in "false flag" operations meant to implicate the regime.<sup>35</sup>

In a spring 2019 report to Congress, the State Department asserted that:

The United States certifies that the Syrian Arab Republic is in non-compliance with its obligations under the CWC. The United States assesses that Syria has used chemical weapons systematically and repeatedly against the Syrian people every year since acceding to the Convention, and therefore is in violation of its obligations under Article I of the CWC.... In addition, the United States assesses that Syria did not declare all the elements of its CW program, as required by Article III of the CWC, and that Syria retains chemical weapons as defined by the CWC.<sup>36</sup>

The State Department also reported to Congress in April 2019 that "[t]he United States assessed that the Syrian regime repeatedly used chlorine and sarin as chemical weapons from 2013 through 2018 in violation of Article I of the CWC."<sup>37</sup>

According to a State Department spokesperson in May 2019, citing United Nations work: "The facts, however, are clear: the Assad regime itself has conducted almost all verified chemical weapons attacks—a conclusion the United Nations has reached over and over again."<sup>38</sup>

Further, Syria violated UNSCR 2118 operative paragraph 4, which provides that "the Syrian Arab Republic shall not use, develop, produce, otherwise acquire, stockpile or retain chemical weapons."<sup>39</sup>

In July 2019, OPCW members continued to express concerns about Syria's uncooperativeness with investigations and continued maintenance of a CW program after inspectors found traces of nerve agent late last year at Syria's Scientific Studies and Research Center at Barzah.<sup>40</sup>

A Canadian OPCW envoy expressed concern at a meeting of the organization that month, saying there was "growing evidence of deliberately false declarations by Syria, destruction of possible evidence, and the alarming likelihood that Syria continues to possess Schedule 1 chemicals."<sup>41</sup> For example, sarin, VX, and sulfur mustard are Schedule 1 chemicals under the CWC.<sup>42</sup>

While numbers are likely inexact due to the challenges of investigating such incidents in a country embroiled in conflict, one 2019 Global Public Policy Institute (GPPI) report asserts that over the course of the civil war through April 2018, chemical weapons were used 336 times.<sup>43</sup>

The GPPI report also claims that, as part of its counterinsurgency strategy, the Assad regime conducted 98 percent (about 329 attacks) of the 336 chemical weapons attacks tallied in Syria since 2012, using, predominantly, chlorine gas and sarin nerve agent indiscriminately on Syrian civilians.<sup>44</sup>

Chlorine gas, which falls outside the CWC schedule of banned substances due to its widespread civilian and industrial use, reportedly constituted more than 90 percent of the CW attacks in Syria attributed to the Assad regime, often delivered to their targets by barrel bombs.<sup>45</sup> Sarin comprised another 7 percent of total regime CW attacks.<sup>46</sup>

The GPPI report on Syrian CWs also judges that the Assad regime "prioritized striking [with chemical weapons] population centers over rebel positions on the frontlines, even in the face of defeat on the ground" as a means of collectively punishing populations in opposition-held areas.<sup>47</sup> If accurate, the regime clearly used CW as a "terror" weapon.

In other research, Human Rights Watch asserts, based on its multisource inquiry into the matter, that there have been at least 85 confirmed CW attacks in Syria between August 2013 and February 2018 and that the Syrian regime is responsible for at least 50 of them.<sup>48</sup>

In April 2018, then U.S. Ambassador to the United Nations Nikki Haley said: "The United States estimates that Assad has used chemical weapons in the Syrian war at least 50 times. Public estimates are as high as 200."<sup>49</sup>

The Syrian regime is not alone in its use of CW in Syria. The OPCW has attributed sulfur mustard use to ISIS.<sup>50</sup> The GPPI attributes 2 percent of the CW attacks in Syria to the Islamic State.<sup>51</sup> Indeed, it is possible that ISIS was able to access Syrian CW stockpiles and used the seized CWs in its chemical attacks.<sup>52</sup>

While the Syrian civil war may be far from settled, with the support of Moscow, Tehran, and Hezbollah, the Assad regime seems likely to survive the conflict, retaining power over a good portion—and perhaps more—of the deeply traumatized country.

Given Russia's political and military support to the Syrian regime and its broken promises in preventing the regime's use of CWs—not to mention Moscow's reported use of a nerve agent in the United Kingdom<sup>53</sup>—it can be presumed that it will be exceedingly difficult to get Russian support for pressuring Syria to give up its CW arsenal or hold Damascus accountable for its heinous use.

Indeed, as a result of the investigative work of the OPCW–U.N. Joint Investigative Mechanism (JIM), authorized by UNSCR 2235, which attributed responsibility for at least four CW attacks to Damascus, Moscow opted to thwart efforts to renew the JIM's mandate beyond November 2017, rendering it inactive.<sup>54</sup>

The regime's possession and use of CWs is only part of the problem: There are serious concerns about direct Iranian and proxy Hezbollah activities in

Syria and the region, as well as Iran's and Hezbollah's ties to the Syrian CW program, which require further consideration and study.

According to a news report, Iran is developing CWs in Syria and building and testing short-range and medium-range missiles there, which are capable of carrying CWs.<sup>55</sup> The same news report claims that the Assad regime has transferred CWs to Hezbollah.<sup>56</sup> Indeed, a 2017 Israeli airstrike in Syria targeted a Syrian CW plant that may also have an association with Hezbollah and Iran.<sup>57</sup>

## **Recent U.S. Actions**

In 2017, the U.S. Treasury Department, in separate actions, sanctioned "18 senior regime officials and five branches of the Syrian military, along with entities associated with its chemical weapons program" for three chlorine attacks in 2014 and 2015 as a result of OPCW–JIM investigations, and 271 Syrian Scientific Studies and Research Center staffers for the sarin attack at Khan Shaykhun for their work on CWs and associated delivery systems.<sup>58</sup>

The United States has taken military action twice against the Syrian regime, once in 2017 and once in 2018, for the use of CWs in the conflict. The April 2017 strike targeted Shayrat Airbase with nearly 60 cruise missiles in response to an April 4 nerve agent attack in Idlib province.<sup>59</sup>

The April 2018 strike on three CW-related facilities was conducted alongside French and British forces and reportedly included more than 100 missiles.<sup>60</sup> The United States has also repeatedly raised the issue of Syria's CW use in international institutions, such as the United Nations and the OPCW.

In January 2018, the United States was involved in the establishment of the International Partnership Against Impunity for the Use of Chemical Weapons, a French-led initiative driven by alarm at the increase in the use of CWs globally since 2012.<sup>61</sup> As of the end of 2018, the group had 38 countries that have pledged to increase pressure on those responsible for CW use.<sup>62</sup>

Washington also supported improving the OPCW's technical secretariat's capabilities and urged the organization to attribute responsibility for CW attacks.<sup>63</sup> To this end, last year, the Administration was part of an effort led by the British to establish an Investigation and Identification Team (ITT) under the OPCW to identify the users of CWs in Syria; its first mission is to examine nine alleged attacks in Syria.<sup>64</sup> Interestingly, until a June 2018 favorable vote of OPCW member states on the U.K.-led proposal to expand the mandate of the OPCW, under the CWC, the organization was tasked only with investigating whether CWs have been used, but not by whom.<sup>65</sup>

## Implications and Ramifications of Syria's CW Use

Clearly, there are a number of troubling issues related to Syria's possession and use of CWs. First, there is the humanitarian horror associated with the domestic use of these weapons by a state against its own people and others. Then, there is the blatant violation of Syria's commitments under the 2013 framework deal and the widely accepted international norms that are prejudiced heavily against the use of CWs.

In addition, Syria has also flouted the CWC to which it is now a signatory, further undermining its own credibility. Moreover, Syria may well be working to reconstitute its pre–CWC CW program for both domestic and foreign security purposes.

The fact that the regime has done all of this with arguably limited accountability and cost for a number of years raises the possibility not only of additional victims in Syria, but of others deeming the use of CWs acceptable, reducing the reluctance of these actors to use it elsewhere.

Indeed, according to the DNI earlier this year:

[W]e note in particular the threat posed by chemical warfare (CW) following the most significant and sustained use of chemical weapons in decades. This trend erodes international norms against CW programs and shifts the cost-benefit analysis such that more actors might consider developing or using chemical weapons.<sup>66</sup>

There should also be concerns about the proliferation of these weapons or the means of production to state and non-state actors, such as Iran, Hezbollah, and Hamas. The possibility of stockpiles falling into the hands of radical groups, including violent Islamist groups, such as ISIS, is also very troubling.

It is clear that Syria's possession and use of CWs could have serious consequences for a range of U.S. national security interests. These include U.S. forces deployed to the region and important allies, such as Israel.

## Recommendations

In response to the continuing Syrian CW challenge, the Trump Administration should:

Keep the U.S. Military Option Open and Clearly Visible, in Order to Enhance the Prospects of Dissuading and Deterring Syria's Use of CWs. While the cause and effect are currently inexact, it can be suggested that the Syrian regime responded to the threat of U.S. force in 2013 by agreeing to the framework agreement and to the military strikes in 2017 and 2018, which all arguably resulted in a decrease in the regime's use of CWs for various lengths of time.<sup>67</sup>

The regime may use CWs again if it feels it militarily necessary to regain control over lost territory, especially where conventional weapons and tactics may not be achieving the desired outcomes. The regime may also use CWs to punish particular opposition or other groups as the conflict progresses.

Indeed, while the regime's use of CWs in the conflict appear to be down since last spring, the Assad regime reportedly used a CW, in this case chlorine, again in northwest Syria in May 2019.<sup>68</sup> Dissuasion and deterrence can weaken over time and may need to be reinforced.

Regularly reminding the regime that CW use will have a price will dissuade and deter the regime, potentially obviating the need for military action. But, if necessary, the United States should also not shy away from a military strike to deny the Syrian regime use of CWs.

While a military strike may not end Syria's CW program or aspirations for it, it could re-establish a deterrence factor as well as curtail or cripple the program's capabilities in the short term. This could possibly inhibit Syria's CW use in the future as well as potentially limit any CW work with, or CW transfers to, allies and proxies, including foreign terrorist organizations (FTOs).

Moreover, if necessary, U.S. kinetic or non-kinetic (such as cyber) strikes on Syria's CW capabilities could support diplomatic efforts focused on addressing the issue. It would also signal to the international community that there is a deep cost for violating international norms, treaties, and pacts, potentially dissuading and deterring other actors from pursuing or using CW.

**Keep Military Targeting Flexible to Enhance CW Dissuasion and Deterrence.** Beyond CW delivery systems, production, stockpiles, airfields, and other CW-support facilities, the regime's political, military, security, and intelligence headquarters should also be considered targets for preventive, pre-emptive, or retaliatory military strikes in response to the regime's threats of, or confirmed use of, CWs.

These are targets that the regime likely values more than traditional CW targets, and striking them creates the perception of a serious threat to regime survival, Assad's number one priority. Going beyond CW-related targets sends a strong signal to the regime that more may be at stake than its CW arsenal and infrastructure.

The Administration should also work diligently, alongside ally Israel, to prevent the sharing or transfer of Syrian CW capabilities to Iran, Iranian militias in Syria, Hezbollah, or other FTOs.

**Continue to Highlight the Issue in International Institutions and Forums.** While not always as effective as other means of national power, calling out states for their violations of international norms and agreements is important. Rhetoric has its place in international affairs, and the Syrian regime and its supporters should continue to suffer reputational costs for Damascus' use of CWs.

This effort should include consistent "naming and shaming" of the Syrian regime and its supporters in international institutions and forums, including the OPCW, the Conference on Disarmament, and the United Nations and its agencies.

In the past, the United States has backed U.N. resolutions supporting the CWC and the OPCW and condemning the use of CWs in Syria and elsewhere, such as in U.N. General Assembly Resolution 73/45.<sup>69</sup>

Despite Moscow's support of Damascus, Washington should continue to offer resolutions and seek votes on them in the U.N. General Assembly and Security Council to make a point of its continuing concern about Syria's CW program, especially in the direct aftermath of another confirmed CW attack.

The United States and other countries should also seek strong statements of condemnation on a regular basis from the Arab League and the Organization of Islamic Cooperation castigating Syria for its CW use and calling for its CW disarmament.

**Support International Efforts that May Lead to Syrian CW Accountability.** Accountability for the use of CWs in Syria will help to uphold and strengthen the CWC as well as the currently stressed international norm against the use of CWAs.

The International Partnership against Impunity for the Use of Chemical Weapons is tasked with collecting and sharing information on those persons involved in the use of CWs, with the goal of holding them accountable.<sup>70</sup> The United States is a member of this group and should continue to support its efforts to deter future CW use worldwide and make perpetrators answerable for their actions.

Washington should also support the OPCW's new ITT, which seeks to identify the users of CWs in Syria.<sup>71</sup>

The success of the ITT will strengthen the CWC and the OPCW, and will be helpful to future investigations and accountability efforts, if necessary. A glaring gap in this process is a yet-to-be-designated or yet-to-be-devised legal means or venue to hold those responsible for CW use in Syria accountable. This should not discourage ongoing efforts toward justice.

**Encourage Potential Foreign Reconstruction Providers to Withhold Aid Until Syria Comes into Full Compliance with the CWC.** Though Syria has suffered significant destruction as a result of the eightyear-plus civil war, the United States should not provide reconstruction aid to Syria if the Assad regime remains in power due to its human rights record, its CW use, and ties to FTOs, among other reasons.

Indeed, some states have advocated withholding reconstruction funds for Syria until a political settlement is reached that ends hostilities.<sup>72</sup> But a political settlement alone is not sufficient, especially in regards to aid, which might directly or indirectly benefit the Syrian regime.

At a minimum, the regime must fully declare and fully surrender, in a completely verifiable manner, the entirety of its CWs program—as well as put its civilian chemical industry under strict international monitoring as prescribed by additional CWC protocols before Damascus receives any foreign reconstruction assistance.

While a UNSCR to this effect is impossible due to, at least, a Moscow veto, Washington could pursue a non-binding resolution in the General Assembly that publicly commits state parties to this course of action.

**Improve International Export-Control Awareness and Enhance Counterproliferation Measures.** Without significant international pressure or the political downfall of the Assad regime, Syria is likely to continue its CW programs for tactical as well as strategic military purposes.

But CWAs, such as sarin, require precursor chemicals to produce, which Syria must often import. Increasing international industry awareness and expanding bans on associated precursor chemicals that are needed to produce CWs could reduce the ability of the Syrian regime to import these chemicals.

Indeed, despite European Union sanctions, in 2014, German and Belgian firms reportedly sold sarin-precursor chemicals that ultimately made their way to Syria.<sup>73</sup> While not confirmed publicly, it is possible that these precursors could have been used to replace the Syrian sarin stocks that were turned over to international authorities that same year as part of the 2013 framework deal.<sup>74</sup>

Moreover, a 2018 U.N. report on North Korean sanctions reportedly indicates that Pyongyang has supplied CW capabilities to Damascus in 2016 and 2017, using a Chinese trading firm, which likely served to facilitate the transaction secretly.<sup>75</sup>

These alleged situations could repeat themselves and must be prevented through counterproliferation measures and industry awareness. The Australia Group, an informal international organization dedicated to fighting the proliferation of chemical and biological weapons, should be encouraged in its work with members, and especially non-members, in fighting the sophisticated trafficking of CW-associated chemicals.

**Ensure that U.S. Forces Deployed to Syria Are Fully Prepared for a Potential Future CW Environment.** American troops could come into contact with CWs if the Syrian forces use them as the regime moves to expand and consolidate control over the country. The same precaution for U.S. forces applies to potential actions by ISIS—or other militant groups involving CWs in Syria as well.

## Conclusion

The DNI hauntingly reminded the U.S. in early 2019 congressional testimony that: "We [the U.S. intelligence community] expect the overall threat from weapons of mass destruction (WMD) to continue to grow during 2019."<sup>76</sup> Not surprisingly, the DNI listed Syria as a "major WMD proliferation concern."<sup>77</sup>

Syria will almost certainly remain a rogue state under Assad, operating outside the constraints of international norms and agreements on a number of issues, including the use of CWs. Syria is clearly a serial violator of the WMD proliferation regimes and norms, and this behavior will likely continue as long as the current regime prevails.

There should be a deep concern about this from a number of different perspectives, including political, economic, security, legal, arms control, and humanitarian, among others.

The United States should lead and work with like-minded members of the international community to hold Syria accountable for its past actions involving CWs, deter future actions involving CWs, deny CW use, and work toward CW disarmament in Syria.

These efforts will help to strengthen the international norm against CW use and serve to dissuade, deter, and perhaps even deny other state and non-state actors from producing, possessing, and using CWs.

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## Endnotes

- 1. Joby Warrick, "More than 1,400 killed in Syrian Chemical Weapons Attack, U.S. says," *The Washington Post*, August 30, 2013, https://www. washingtonpost.com/world/national-security/nearly-1500-killed-in-syrian-chemical-weapons-attack-us-says/2013/08/30/b2864662-1196-11e3-85b6d27422650fd5\_story.html (accessed September 9, 2019), and "MSF-Backed Hospitals Treated Syria 'Chemical Victims," BBC, August 24, 2013, https:// www.bbc.com/news/world-middle-east-23827950 (accessed September 9, 2019).
- 2. Bradford Betz, "Pompeo Accuses Syria of Using Chemical Weapons in May Attack," Fox News, September 26, 2019, https://www.foxnews.com/politics/ pompeo-syria-chemical-weapons-idlib-may (accessed October 16, 2019).
- The full name of the convention is: The Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction. See Organization for the Prohibition of Chemical Weapons, "Chemical Weapons Convention," https://www.opcw.org/chemicalweapons-convention (accessed October 8, 2019).
- 4. United Nations Office on Genocide Prevention and the Responsibility to Protect, "Crimes Against Humanity: Background," https://www.un.org/ en/genocideprevention/crimes-against-humanity.shtml (accessed August 8, 2019); "Use of Chemical Weapons in Syria Would Be 'Crime Against Humanity'-Ban," UN News, August 23, 2013, https://news.un.org/en/story/2013/08/447352-use-chemical-weapons-syria-would-be-crime-againsthumanity-ban (accessed August 22, 2019); and Stephanie Nebehay, "Syria Chemical Attack Is War Crime: Human Rights Watch Chief," Reuters, April 9, 2018, https://www.reuters.com/article/us-mideast-crisis-syria-warcrimes/syria-chemical-attack-is-war-crime-human-rights-watch-chiefidUSKBN1HG28U (accessed August 22, 2019).
- Rachel Nuwer, "One of the First Known Chemical Attacks Took Place 1,700 Years Ago in Syria: Sasanian Persians Gassed at Least 19 Romans by Adding Sulfur Crystals and Bitumen to Fire in 256 CE," *Smithsonian Magazine*, September 6, 2013, https://www.smithsonianmag.com/smart-news/one-of-thefirst-known-chemical-attacks-took-place-1700-years-ago-in-syria-4498664/#LZGak6LLSeiDbUIR.99 (accessed August 9, 2019).
- 6. Encyclopaedia Britannica, "Hague Convention," https://www.britannica.com/event/Hague-Conventions (accessed August 22, 2019).
- 7. United Nations Office of Disarmament Affairs, "1925 Geneva Protocol," https://www.un.org/disarmament/wmd/bio/1925-geneva-protocol/ (accessed August 9, 2019).
- 8. Organization for the Prevention of Chemical Weapons, "Chemical Weapons Convention," https://www.opcw.org/chemical-weapons-convention (accessed August 9, 2019).
- 9. Ibid.
- 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)–2019," https://www.state.gov/compliance-with-the-convention-on-the-prohibitionof-the-development-production-stockpiling-and-use-of-chemical-weapons-and-on-their-destruction-condition-10c-report-2019/#note1 (accessed August 7, 2019).
- 11. Ibid.
- 12. Daniel R. Coats, "Worldwide Threat Assessment of the US Intelligence Community," Office of the Director of National Intelligence, January 29, 2019, https://www.dni.gov/files/ODNI/documents/2019-ATA-SFR---SSCI.pdf (accessed September 3, 2019).
- 13. Nuclear Threat Initiative, "Syria: Chemical," April 2018, https://www.nti.org/learn/countries/syria/chemical/ (accessed July 18, 2019).
- 14. Ibid.
- 15. Dany Shosham, "Guile, Gas and Germs: Syria's Ultimate Weapons," *Middle East Quarterly* (Summer 2002), https://www.meforum.org/493/guile-gasand-germs-syrias-ultimate-weapons (accessed July 19, 2019), and Nuclear Threat Initiative, "Syria: Missiles," August 2014, https://www.nti.org/learn/ countries/syria/delivery-systems/ (accessed August 8, 2019).
- 16. Nuclear Threat Initiative, "Syria: Chemical."
- 17. Ibid.
- 18. Josh Rogin, "Exclusive: State Department Quietly Warning Region on Syrian WMDs," *Foreign Policy* (February 24, 2012), https://foreignpolicy. com/2012/02/24/exclusive-state-department-quietly-warning-region-on-syrian-wmds/ (accessed July 18, 2019).
- 19. Nuclear Threat Initiative, "Syria: Chemical."
- 20. Ibid.
- 21. Mathew Weaver, "Syria Conflict: UN Envoy Meets Assad," *The Guardian*, December 24, 2012, https://www.theguardian.com/world/middle-east-live/2012/dec/24/syria-conflict-brahimi-meets-assad-live (accessed August 23, 2019).
- 22. "Syria Chemical Attack: What We Know," BBC, September 24, 2013, https://www.bbc.com/news/world-middle-east-23927399 (accessed July 19, 2019).

23. Ibid.

24. Nuclear Threat Initiative, "Syria: Chemical."

- 25. Ibid., and 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)–2019."
- 26. 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)–2019."
- 27. Nuclear Threat Initiative, "Syria: Chemical," and ibid.
- 28. Adam Entous and Naftali Bendavid, "Mission to Purge Syria of Chemical Weapons Comes Up Short," *The Wall Street Journal*, July 23, 2015, https://www.wsj.com/articles/mission-to-purge-syria-of-chemical-weapons-comes-up-short-1437687744 (accessed August 27, 2019).
- 29. Organization for the Prevention of Chemical Weapons, "Destruction of Declared Syrian Chemical Weapons Completed," January 4, 2016, https://www.opcw.org/media-centre/news/2016/01/destruction-declared-syrian-chemical-weapons-completed (accessed July 19, 2019); Organization for the Prevention of Chemical Weapons, "Disposal of Effluents from Neutralised Syrian Chemical Weapons Completed," June 17, 2015, https://www.opcw.org/media-centre/news/2015/06/disposal-effluents-neutralised-syrian-chemical-weapons-completed (accessed July 19, 2019); and 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)–2019."
- Adam Entous and Naftali Bendavid, "Mission to Purge Syria of Chemical Weapons Comes Up Short: International Inspectors Rid Nation of Many Arms, But Assad Didn't Give Up Everything," *The Wall Street Journal*, July 23, 2015, https://www.wsj.com/articles/mission-to-purge-syria-of-chemicalweapons-comes-up-short-1437687744 (accessed August 23, 2019).
- "Both ISIL and Syrian Government Responsible for Use of Chemical Weapons, UN Security Council Told," UN News, November 2017, https://news. un.org/en/story/2017/11/570192-both-isil-and-syrian-government-responsible-use-chemical-weapons-un-security (accessed July 19, 2019).
- 32. Ibid.
- Organization for the Prevention of Chemical Weapons, "OPCW Issues Fact-Finding Mission Report on Chemical Weapons Use Allegation in Douma, Syria, in 2018," March 1, 2019, https://www.opcw.org/media-centre/news/2019/03/opcw-issues-fact-finding-mission-report-chemical-weapons-useallegation (accessed August 12, 2019).
- 34. 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)–2019," and "Chemical Weapons Watchdog Says Chlorine Was Used in Syria's Douma," France 14, March 2, 2019, https://www.france24.com/en/20190302-chemical-weapons-opcw-chlorine-chemical-attacks-douma-russia-assad (accessed August 12, 2019).
- 35. 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)–2019," and Ryan Browne, "US Warns Syrian Regime Following Allegations of Chemical Weapons Use," CNN, https://www.cnn.com/2019/05/21/politics/us-syria-chemical-weapons-warning/index.html (accessed July 22, 2019).
- 36. 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)–2019." According to the State Department, "In accordance with CWC Article I, paragraph 1(b) each State party is obligated never under any circumstances to use CW."
- 37. 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)–2019."
- 38. Browne, "US Warns Syrian Regime Following Allegations of Chemical Weapons Use."
- 39. 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)–2019."
- 40. Mike Corder, "Chemical Weapons Watchdog Members Voice Concerns over Syria," Associated Press, July 9, 2019, https://www.apnews. com/82e448f70bdf4cd6876947b350a31326 (accessed August 8, 2019).
- 41. Ibid.
- 42. Ibid.
- 43. Tobias Schneider and Therese Lutkefend, "Nowhere to Hide: The Logic of Chemical Weapons Use in Syria," Global Public Policy Institute, February 2019, https://www.gppi.net/2019/02/17/the-logic-of-chemical-weapons-use-in-syria (accessed August 22, 2019); Clare Lombardo, "More Than 300 Chemical Attacks Launched During Syrian Civil War, Study Says," National Public Radio, February 17, 2019, https://www.npr.org/2019/02/17/695545252/morethan-300-chemical-attacks-launched-during-syrian-civil-war-study-says (accessed July 22, 2019).
- 44. Schneider and Lutkefend, "Nowhere to Hide: The Logic of Chemical Weapons Use in Syria," and Lombardo, "More Than 300 Chemical Attacks Launched During Syrian Civil War, Study Says."
- 45. Ibid.
- 46. Schneider and Lutkefend, "Nowhere to Hide: The Logic of Chemical Weapons Use in Syria."
- 47. Ibid.

- Louis Charbonneau, "Ensure Justice for Victims of Syria Chemical Weapons Attacks," Human Rights Watch, November 19, 2018, https://www.hrw.org/ news/2018/11/19/ensure-justice-victims-syria-chemical-weapons-attacks (accessed August 27, 2019).
- 49. Rick Gladstone, "U.S. Says Syria Has Used Chemical Weapons at Least 50 Times During War," *The New York Times*, April 13, 2018, https://www.nytimes. com/2018/04/13/world/middleeast/un-syria-haley-chemical-weapons.html (accessed September 9, 2019).
- 50. 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)–2019."
- 51. Lombardo, "More Than 300 Chemical Attacks Launched During Syrian Civil War, Study Says."
- 52. Harald Doornbos and Jenan Moussa, "How the Islamic State Seized a Chemical Weapons Stockpile," *Foreign Policy*, August 17, 2016, https:// foreignpolicy.com/2016/08/17/how-the-islamic-state-seized-a-chemical-weapons-stockpile/ (accessed August 23, 2019).
- 53. "Russian Spy Poisoning: UK Warns Russia over Chemical Weapons," BBC, September 27, 2018, https://www.bbc.com/news/uk-45668986 (accessed October 16, 2019).
- 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)–2019."
- Gideon Kouts, "Former Syrian General: Hezbollah Is in Possession of Chemical Weapons," *The Jerusalem Post*, March 8, 2018, https://www.jpost.com/ Middle-East/Former-Syrian-official-to-Maariv-Hezbollah-has-chemical-weapons-544567 (accessed August 20, 2019).
- 56. Ibid.
- 57. Jack Khoury and Gili Cohen, "Israel Attacked Chemical Weapons Plant in Syria, Local Reports Claim," *Haaretz*, September 7, 2017, https://www.haaretz. com/middle-east-news/syria/reports-israel-attacked-chemical-weapons-plant-in-syria-1.5449000 (accessed August 20, 2019).
- News release, "Treasury Sanctions 271 Syrian Scientific Studies and Research Center Staff in Response to Sarin Attack on Khan Sheikhoun," U.S. Department of the Treasury, April 24, 2017, https://www.treasury.gov/press-center/press-releases/Pages/sm0056.aspx (accessed August 23, 2019).
- 59. Jim Gamarone, "Trump Orders Missile Attack in Retaliation for Syrian Chemical Strikes," U.S. Department of Defense, April 6, 2017, https://www.defense. gov/Newsroom/News/Article/Article/1144601/trump-orders-missile-attack-in-retaliation-for-syrian-chemical-strikes/ (accessed August 23, 2019).
- 60. Julian Borger and Peter Beaumont, "Syria: US, UK and France Launch Strikes in Response to Chemical Attack," *The Guardian*, April 14, 2018, https:// www.theguardian.com/world/2018/apr/14/syria-air-strikes-us-uk-and-france-launch-attack-on-assad-regime (accessed August 19, 2019), and James Griffiths and Laura Smith-Spark, "What We Know About the Syria Strikes," CNN, April 14, 2018, https://www.cnn.com/2018/04/14/middleeast/syriastrikes-what-we-know-intl/index.html (accessed August 21, 2019).
- 61. 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)–2019," and International Partnership Against Impunity for the Use of Chemical Weapons, updated June 19, 2019, https://www.noimpunitychemicalweapons.org/-en-.html (accessed August 21, 2019).
- 62. 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)–2019."
- 63. Ibid.
- 64. Anthony Deutsch, "Exclusive: New Chemical Weapons Team to Launch First Syria Investigations," Reuters, July 10, 2019, https://www.reuters.com/ article/us-mideast-syria-chemicalweapons-exclusi/exclusive-new-chemical-weapons-team-to-launch-first-syria-investigations-idUSKCN1U51XO (accessed August 20, 2019).
- 65. Organization for the Prohibition of Chemical Weapons, "Three Types of Inspections," *Fact Sheet* No. 5, November 2017, https://www.opcw.org/ sites/default/files/documents/Fact\_Sheets/English/Fact\_Sheet\_5\_-\_Inspections.pdf (accessed September 6, 2019), and "UN Chemical Weapons Watchdog Adds New Powers to Assign Blame, Following Attacks," *UN News*, June 27, 2018, https://news.un.org/en/story/2018/06/1013322 (accessed September 4, 2019).
- 66. Coats, "Worldwide Threat Assessment of the US Intelligence Community."
- 67. Schneider and Lutkefend, "Nowhere to Hide: The Logic of Chemical Weapons Use in Syria."
- 68. Ryan Browne, "US Warns Syrian Regime Following Allegations of Chemical Weapons Use," CNN, May 21, 2019, https://www.cnn.com/2019/05/21/ politics/us-syria-chemical-weapons-warning/index.html (accessed August 21, 2019), and Betz, "Pompeo Accuses Syria of Using Chemical Weapons in May Attack."
- United Nations General Assembly, "Implementation of the Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction," Resolution A/RES/73/45, December 12, 2018, https://undocs.org/en/A/RES/73/45 (accessed September 9, 2019).
- 70. International Partnership Against Impunity for the Use of Chemical Weapons.
- 71. Organization for the Prevention of Chemical Weapons, "Decision: Addressing the Threat from Chemical Weapons Use," June 27, 2018, https://www. opcw.org/media-centre/featured-topics/decision-addressing-threat-chemical-weapons-use (accessed June 27, 2018).

- 72. Angus McDowall, "Long Reach of U.S. Sanctions Hits Syria Reconstruction," Reuters, September 2, 2018, https://www.reuters.com/article/us-mideastcrisis-syria-sanctions/long-reach-of-u-s-sanctions-hits-syria-reconstruction-idUSKCN1LI06Z (accessed August 21, 2019).
- 73. "German Firms Sent Weapons-Grade Chemicals to Syria Despite Sanctions—Report," Deutsche Welle, June 25, 2019, https://www.dw.com/en/germanfirms-sent-weapons-grade-chemicals-to-syria-despite-sanctions-report/a-49355063 (accessed August 16, 2019), and Gabriela Galindo, "Belgian Company Targetted in Syrian Chemical Weapons Probe," *The Brussels Times*, June 3, 2019, https://www.brusselstimes.com/all-news/belgium-allnews/57719/belgian-company-targetted-in-syrian-chemical-weapons-probe/ (accessed August 27, 2019).
- 74. "German Firms Sent Weapons-Grade Chemicals to Syria Despite Sanctions—Report," Deutsche Welle.
- 75. Ina Talley, "U.N. Report Links North Korea to Syrian Chemical Weapons," *The Wall Street Journal*, February 27, 2018, https://www.wsj.com/articles/u-n-report-links-north-korea-to-syrian-chemical-weapons-1519760023 (accessed August 27, 2019).
- 76. Coats, "Worldwide Threat Assessment of the US Intelligence Community."
- 77. Ibid.