POLICY BRIEF
The Russian Chemical Weapon Threat to Ukraine
March 18, 2022

“I’m not going to speak about the intelligence, but Russia would pay
a severe price if they use chemical weapons,”
President Biden at the White House, March 11, 2022.

Insights:

- The Administration’s announcements based on intelligence findings, raise a very real spectre of Russian deployment of chemical weapons use in Ukraine and as with earlier intelligence findings from the Administration, the public announcement is intended to deter the Russians from that use or at a minimum expose their deceit and deflection tactics in advance.

- Russia not only possesses chemical weapons, including some of the most lethal nerve agents, but Putin has already demonstrated his flagrant disregard for international constraints through his use of these weapons against opponents.

- Russia has clearly demonstrated that it embraces the military utility of the use of CW in conflict to demoralize and suppress opposition in urban combat having supported and enabled the use of these weapons in the Syrian conflict. As Putin becomes trapped in the conflict and frustrated with his military operations, concerns will heighten that his risk calculations will tip towards the use of CW.

- Putin is laying the groundwork for an attack whether he decides to use CW or not. Disinformation and obfuscation are tactics Russia is currently employing as the White House has revealed, which is consistent with the role it played in the Syrian conflict. As the Syrian regimes principal ally, Russia shielded Syria through its vetoes in the UN from international investigations, sanctions, and very proactively promoted disinformation campaigns. It is important to note that during the Syrian conflict, China supported Russia in the UN in its efforts to derail action by that international body and undermine the CW control regime.

- NATO and the US have made clear that the response will be “severe.” But, there is also extreme caution not to threaten a military response given the overriding concerns of avoiding a direct military confrontation between the US and Russia, given the risk of escalation to a broader war and nuclear confrontation.
Recent Developments:

The Biden Administration and Ukrainian President Zelensky have warned that Russian President Putin may use chemical or biological weapons against Ukrainian civilians or create a false flag operation, similar to Syria’s barbaric use of the chemical weapons in the Syrian civil war, which was supported by Russia. Britain’s foreign secretary Liz Truss told the press the United Kingdom was “very concerned about the potential use of chemical weapons,” and said such a move would be a “grave mistake” on the part of Russia. NATO Secretary General Jans Stoltenberg has said such a move would be a war crime. Poland’s President Andrzej Duda said in an interview Sunday that the use of chemical weapons in Ukraine by Russia could change the West’s calculus over the conflict and that “… if he uses any weapons of mass destruction then this will be a game changer in the whole thing.”

While refusing to share detail on the intelligence information, President Biden responded to a press query last week that Russia would pay a “severe price” if they used chemical weapons, as he announced further trade sanctions against Russia. The US appears to be reluctant to draw “redlines” given the difficulties the US faced in 2012/2013 responding to the Syrian regimes use of CW after President Obama indicated a redline on the use of chemical weapons in Syria. Drawing a redline is also complicated by the caution that NATO and the US have implemented since the onset of the Cold War to ensure that the conflict does not escalate into a direct conflict between the nuclear superpowers.

The concern about creating a false flag operation to use chemical weapons has been building for months as Russian defense officials have spread accusations that the US was supporting Ukrainian biolaboratories that were conducting research that could allow the spread of diseases through wild birds migrating between Russia and Ukraine, adding that “biolaboratories set up and funded in Ukraine have been experimenting with bat coronavirus samples.” The Russian accusations have been amplified by China. Russia seized on the congressional testimony of a State Department official who spoke about the concerns of Russian troops seizing Ukrainian “biological research facilities” and raised the accusations at a special meeting UN Security Council that it called at the end of last week.

The US Ambassador to the UN Linda Thomas-Greenfield forcefully told the members of the UN Security Council that Ukraine does not have a bioweapons program. In Washington, a senior U.S. defense official detailed to reporters that there are five legitimate biological research labs in Kyiv that are focused on protecting against pathogens such as anthrax, botulism and tuberculosis. The U.S. has spent about $200 million since 2005, as part of its Threat Reduction program to support Ukrainian labs and prevent the production of biological weapons, work that began as an effort to help rid Ukraine of remnants of Soviet biological weapons program, the official said. “There are no (Pentagon) bio-weapon labs in Ukraine or anywhere else in the world,” the official said. A second senior defense official said there are no U.S. personnel at the five labs. The removal of nuclear weapons from Ukraine in the mid-1990s was funded by the same program.

The lengths that Russia is going through to broadcast its accusations, the support it has received from China, and the opposition it is confronting from the Ukrainian population has raised the level of concern that Russia may resort to the indiscriminate use of chemical weapons against the civilian population in Ukraine.
Faced with similar challenges, the Syrian regime’s resort to the use of chemical weapons against civilians starting in 2012/2013, was to gain the upper hand or break a stalemate in areas where it had struggled to seize and hold strategically valuable territory. Assad regime’s strategy paralleled Saddam Hussein’s strategy towards the end of the Iran Iraq War. Two-thirds of the chemical weapons Saddam Hussein used were deployed in the last eighteen months of the war, including the 1988 chemical attack against Iraqis to regain control of Halabja, a Kurdish city in northern Iraq.

Following is a brief description of Russian chemical weapons capabilities, Russian use of chemical weapons during Putin’s tenure, Russia’s enabling of that use of chemical weapons by the Syrian regime in the Syrian conflict; and the US and allied response. The main insights include:

- The use of chemical and biological weapons is banned under international law by the 1925 Geneva Protocol. The landmark 1997 Chemical Weapons Convention, with 193 parties to the treaty, 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 under extensive verification procedures.

- Under the CWC, 71,614 metric tons of chemical weapons have been destroyed. The 1972 Biological Weapons Convention seeks the same goals but does not have verification provisions.

- The Chemical Weapons Convention, has been a central target for Putin, since he came to power in 2000, in his efforts to undermine the international arms control regimes and the rules based international order established in the wake of the collapse of the Soviet Union.

- While Russia, the world’s largest possessor of chemical weapons destroyed close to 40,000 metric tons of chemical weapons, Russia has demonstrated to the world that it still possesses chemical weapons with its use of the very lethal chemical weapon Novichok, a nerve agent, against a former double agent in the UK in 2017 and political dissident Alexei Navalny in 2020. Russia is also suspected in the 2004 poisoning of Ukrainian presidential candidate Viktor Yushenko, the pro-Western presidential candidate facing off against the Kremlin's preferred nominee, Viktor Yanukovych. The US has questioned the accuracy of the Russian CWC declaration of its chemical weapons since 2002.

- Throughout the Syrian civil war, Putin has been Syria’s enabler of the Syrian regimes chemical weapons use and continued possession, denying the use by the regime, supporting an inaccurate CWC declaration of possession and capacity, presenting false narratives, vetoing UN Security Council resolutions with the support of China to obstruct fact finding missions and the implementation of sanctions, shattering the CWC control regime and then violating it directly with targeted attacks against opponents.

- The challenges and frustrations Russian forces are facing militarily in overtaking and controlling population centers in Ukraine have been the main drivers of Syria’s use of chemical weapons against civilian targets in Assad’s brutal efforts to maintain power.
The US and allied response to the use of chemical weapons in Syria, took place over a number of years and included trying to isolate Russia and Syria diplomatically and mobilize the international community through the UN, limited sanctions, and two targeted military strikes on Syrian CW capabilities -- a US only and a US, French and British attack, with measures taken through deconfliction channels to avoid direct contact with the Russian military.

These efforts did not deter the use of chemical weapons in that conflict and a military response will be more difficult to implement in Ukraine given NATO’s continuing objective to avoid the escalation that would be provoked by direct engagement with Russian troops. But, Putin must calculate that NATO, the US and its international allies and partners are unified beyond his original expectations and that an attack of this kind in the heart of Europe with western media on the ground in Ukraine will provoke a more “severe” and immediate response than implemented during the Syrian war and the risk of an escalation that will not serve Russian interests and objectives.

Russian Chemical Weapons and The Chemical Weapons Convention (CWC) Regime

The Chemical Weapons Convention (CWC), is a multilateral treaty that bans chemical weapons and requires their destruction and the destruction of production facilities within a specified period of time. It was the first multilateral agreement to call for the elimination of an entire category of weapons of mass destruction within a set timeframe.

Since its entry into force in 1997, 193 States committed to the Chemical Weapons Convention. The Convention is implemented the Organization for the Prohibition of Chemical Weapons (OPCW) and 99% of the chemical weapons stockpiles declared by possessor States have been verifiably destroyed, amounting to 71,614 metric tons.

The large-scale horror of chemical warfare in World War I prompted an international effort to control these weapons and led to the 1925 Geneva Protocol, which banned the use of these weapons in war. Nevertheless, many countries spent considerable resources researching and developing these weapons. The proliferation of CW was also spurred by the dawn of the nuclear era, with those countries that did not have nuclear weapons viewing chemical weapons as the easier and cheaper alternative.

During the Cold War, the United States and the Soviet Union both maintained enormous stockpiles of chemical weapons, amounting to tens of thousands of tons. The amount of chemical weapons held by these two countries was enough to destroy much of the human and animal life on Earth.

Progress on controlling biological and chemical weapons was reinvigorated during the Nixon Administration as détente and controlling weapons of mass destruction were elevated as diplomatic tools in managing the US-Soviet relationship. The Biological Weapons Convention (BWC), which supplements the 1925 Geneva Protocol’s ban on use, effectively prohibits the development, production, acquisition, transfer, stockpiling and use of biological and toxin weapons. The Biological Weapons Convention (BWC) was opened for signature in 1972. This agreement is seen more as an international
norm rather than an enforceable treaty since it lacked verification measures. But, the BWC obliged its States Parties to continue negotiations on chemical weapons, with the goal of instituting verifiable measures mandating their destruction and the prohibition of their development, production and stockpiling.

While chemical weapons were used in the Iran-Iraq War in the 1980's, it was Saddam Hussein’s chemical attack against the Kurdish population in Halabja, Iraq in 1988 towards the end of the war, combined with the thawing in US-Soviet relations, which helped to reinvigorate the negotiations on the Chemical Weapons Convention. After almost a decade of negotiations, the Chemical Weapons Convention (CWC) was open for signature in 1997, an historic symbol of post-Cold War collaboration between the US and Russia.

The CWC 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 under extensive verification procedures. A chemical weapon is defined as toxic chemicals, including any chemicals which through its chemical action on life processes can cause death, temporary incapacitation or permanent harm to humans or animals. There are three types of chemical weapons: choking agents (including chlorine, ammonia, phosgene), blister agents (most common are mustard agents), and the more advanced and lethal nerve agents (sarin, soman, VX).

Russia, the world’s largest possessor of chemical weapons, declared nearly 39,967 metric tons under the CWC and verifiably completed their destruction by 2017. The US, the world’s second largest possessor of chemical weapons, declared 28,000 metric tons and will complete its destruction by 2023.

Starting as early as 2002, the United States has not believed that Russia's CW declaration is complete, in particular with its chemical agent weapons stockpiles and with the number of facilities it has declared.

Putin’s Russia has been at the epicenter of the effort to undermine the arms control and non-proliferation regime and its centerpiece, the 1997 Chemical Weapons Convention. From the outset of Putin’s leadership in 2000, this has been an important element of Russia’s overall efforts to undermine the international order with irresponsible and illegal behavior.

**Syria, US Redlines, and the Shattered Norm Against CW Use**

Syria first admitted it had chemical weapons in July of 2012. Shortly afterwards, at a news conference on August 20, 2012, President Obama was asked about whether he “envisioned using U.S. military, if simply for nothing else, the safe keeping of the chemical weapons, and if you’re confident that the chemical weapons are safe?” In response, the President articulated his now famous “CW redline” stating, "We have been very clear to the Assad regime, but also to other players on the ground, that a red line for us is we start seeing a whole bunch of chemical weapons moving around or being utilized," the president said. "That would change my calculus. That would change my equation."

A number of small scale CW attacks were reported over the next year. But, the August 2013 large scale, coordinated rocket and artillery attack using nerve agent in a Damascus suburb, catapulted the chemical
The weapons issue to the top of the international agenda. Only the regime forces had the capability to carry out the attack, putting a laser focus on whether the US “redline” had been crossed and what that would mean regarding a US and international response.

Assad denied the accusation and a special session of the UN called for an investigation. Yet, a day after the US concluded the Assad regime conducted the attack, the UK parliament voted against supporting military action in Syria. President Obama, appearing to walk back his redline, decided to ask Congress for authorization to use force for a limited strike.

As evidenced mounted against the Syrian regime, Russia announced on September 9, 2013 a Russian proposition whereby Syria would agree to join the CWC and to place its chemical weapons under international control and dismantle them and the United States would agree not to conduct a military strike on the country. Prior to the Russian announcement, Secretary of State Kerry, speaking in the United Kingdom, suggested that if the Assad regime turned over all of its chemical weapons to the international community "without delay", a military strike could be averted.

Syria’s agreement to accede to the CWC with Russia as guarantor, solidified Russia’s role in Syria and the Middle East, as well as Russian influence over the future and viability of the Chemical Weapons Control Regime. By January of 2016, the entirety of Syria’s declared stockpile of 1,308 metric tons of chemical weapons and precursor chemicals had been destroyed on board the US Merchant Marine ship, Cape Ray, and in four countries – Finland, Germany, the United Kingdom, and the United States.

But what started as a possible high point for the chemical weapons control regime with Syria’s accession, soon spiraled into its unraveling with Putin orchestrating its near collapse. While both the Syrian government and the Islamic State have been found by international investigators to be responsible for chemical weapons attacks, the Syrian government has been found to be responsible for most of these attacks. Reports continued of chemical weapon use in Syria, reaffirming to the US and the implementing body of the CWC that the Syrian declaration is incomplete. Russia became an enabler of the Syrian regimes chemical weapons use and continued possession, denying the use by the regime, presenting false narratives, vetoing UN Security Council resolutions with the support of China to obstruct fact finding missions and the implementation of sanctions.

**US Responds Militarily**

Two more large scale devastating chemical weapons attacks followed prompting a military response, the first by the US alone and the second in consort with the British and French.

On April 4, 2017, the Assad regime launched a sarin nerve agent attack against the opposition-controlled town of Khan Shaykhun. Russia and Syria’s response was consistent, responding with disinformation and false claims. To deter further chemical weapons use, the United States launched cruise missiles against the Syrian airfield where the attacking aircraft originated.

Importantly, in order to prevent an escalation of the war in Syria into a US-Russian conflict, the US warned Russia before the U.S. launched at least 59 tomahawk missiles aimed at Syria. At the time, Pentagon spokesman Captain Jeff Davis said in an official statement: “Russian forces were notified in
advance of the strike using the established deconfliction line. U.S. military planners took precautions to minimize risk to Russian or Syrian personnel located at the airfield.”

A year later, on April 7, 2018, multiple chlorine-filled barrel bombs were dropped on the Damascus suburb of Douma, killing dozens of civilians. A retaliatory military strike followed against Syrian government facilities by France, the UK, and United States. Russia and Syria responded with disinformation, claiming the UK and the United States did a false flag operation staging the attacks with the help of the White Helmets, an organization of volunteer first responders in Syria that Russia has tried to label as terrorists.

The U.S. described the strikes as causing Syria to lose years of research and development data, specialized equipment, and expensive chemical weapons (CW) precursors. But the Pentagon was careful to say that the strikes would not render the Assad regime unable to conduct a chemical attack in the future. The intent was to degrade that capability without risk to civilians, and to send a strong message that their actions were inexcusable and that violations of the international norms regarding chemical weapons will not be tolerated. However, responding to chemical weapon use in Syria with a one-off show of force was not effective. Despite international efforts to remove its stockpile and limited military strikes by the US and its allies, Syria continued to cling to a residual chemical weapons capability, which it has used effectively to defeat rebel strongholds.

Russia’s use of chemical weapons:

Before the second large scale attack in April 2018, Russia moved from being an enabler to a perpetrator with its use of novichok in the March 2018 attack on former Russian double agent Sergei Skripals.

Skripal’s 2018: US concern about Russian non-compliance was validated 2018 with the Russian use of the military grade Novichok nerve agent against former Russian double agent Sergei Skripal and his daughter, Yulia, in Salsbury, UK. Manufacturing this agent, which is 10 times more lethal than VX, which is reportedly the agent used in the 2017 assassination of Kim Jung-un’s brother in Malaysia, requires the highest grade laboratories and expertise. The development of Novichok, which means “newcomer” in Russian, was revealed in two articles, in 1991 and 1992, by Dr. Vil Mirzayanov, who until January 1992 held the position of senior lead scientific researcher at the State Research Institute of Organic Chemistry and Technology, the main developer of chemical weapons in Russia. Mirzayanov was subsequently jailed for his revelations. The investigation into the Skripal attack determined that the operation was conducted by Russia’s military intelligence group. Russia denied responsibility with a litany of excuses and alternative explanations.

Navalny 2020: Subsequently, in 2020, Russian opposition activists Alexei Navalny was also poisoned with Novichok in Russia and almost died from the exposure. In August 2020, Navalny fell ill on a flight to Moscow. After public outcry, authorities allowed him to be evacuated to Germany for medical care. German officials later cited “unequivocal” evidence Navalny had been poisoned with a Novichok nerve agent, developed by the Soviet Union and presumably accessible only to Russian state authorities. Other official international investigations reached similar conclusions, including the US.
2004 Viktor Yushenko, the pro-Western presidential candidate facing off against the Kremlin's preferred nominee, Viktor Yanukovych, became violently ill, suffering severe abdominal pain and facial lesions, which was later determined to be caused by the ingestion of the chemical dioxin. Yushenko eventually won the election and the perpetrator was not determined, although Russian involvement was suspected.

US & Allied Response:

In March 2018, President Trump ordered the expulsion of 60 Russian intelligence officers from the United States and ordered the closure of the Russian consulate in Seattle. This action was taken in coordination with U.S. allies and partners around the world and, consequently, over 120 Russian agents and diplomats were expelled from several countries.

The United States imposed two rounds of sanctions on Russia pursuant to the Chemical and Biological Weapons Control and Warfare Elimination Act of 1991 (CBW Act) in August 2018 and August 2019. The Department of Commerce also added two Russian military institutes associated with the CW program to its Entity List in August 2020. These sanctions were imposed in coordination with the EU.

On March 2, 2021, the Biden Administration determined that Russian government agents were responsible for the attack on Navalny which triggered further sanctions under the CBW Act. The Department of State called the attack an “attempted assassination,” and the White House stated that the intelligence community assessed with “high confidence” that officers of Russia’s Federal Security Service (FSB) were responsible for the Novichok attack. Russian authorities deny involvement in the attack or possession of chemical weapons.

Conclusion:

Russian use of chemical weapons in Ukraine and the US and allied response are demonstrably different from the experience in the Syrian conflict because of the threat of direct conflict between the US and Russia. But there are several important lessons that can be learned. The US and allied efforts in the Syrian conflict did not deter the use of chemical weapons in that conflict and a military response will be more difficult to implement in Ukraine given NATO’s continuing objective to avoid the escalation that would be provoked by direct engagement with Russian troops. But, Putin must calculate that NATO, the US and its international allies and partners are unified beyond his original expectations and that an attack of this kind in the heart of Europe with western media on the ground in Ukraine will provoke a more “severe” and immediate response than implemented during the Syrian war and the risk of an escalation that will not serve Russian interests and objectives.