The American Thoracic Society (ATS) thanks OPCW for the invitation to submit a written statement for preparation to the 28th Conference of State Parties. The ATS is the world’s leading medical society dedicated to accelerating the advancement of global respiratory health through multidisciplinary collaboration, education, and advocacy. The ATS has more than 16,000 members, including physicians, scientists, nurses and other allied healthcare professionals, 32 percent of whom work outside the United States.

The ATS congratulates OPCW and the State Parties of the CWC to their monumental achievement of the complete destruction of all declared chemical weapons. This achievement dramatically reduces the likelihood of severe chemical injuries to the respiratory system in civilians and military personnel due to warfare, an outcome that is critical for ATS’ mission.

In 2006, the ATS established a Section on Terrorism and Inhalation Disasters (TID) that focuses on mechanisms of chemical inhalation injuries by chemical weapons and industrial chemicals, countermeasures development and public health efforts for preparedness and education. The Section published a research report on chemical injury mechanisms and countermeasures in 2017, that includes recommendations for future research priorities:

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5529138/

With OPCW’s primary mission completed, the 28th Conference of State Parties represents a unique opportunity to shape OPCW’s future mission, to identify critical violations and deficiencies of the CWC and associated regulations and alert the State Parties to urgent issues. ATS calls on the 28th Conference of State Parties to address the following urgent issues of concern to ATS’ mission and medical priorities to protect respiratory health worldwide:

1. **Patients’ rights and chemical weapons effects on diverse populations**

ATS stands ready to lend the medical and scientific expertise of its members to OPCW’s efforts to understand the respiratory health effects of chemical weapons, especially their effects on diverse populations. Research by our members has revealed that chemical weapons have divergent health effects in men, women, children and the elderly, requiring
different approaches for therapeutic interventions. It is the goal of the ATS to improve medical treatment of exposure victims, develop countermeasures and educate first responders, physicians and scientists.

ATS urges the OPCW and State Parties to afford chemical weapons victims the highest standard of medical care. Therapeutic regimens need to be optimized for diverse populations of exposure victims, including women, men, children and the elderly.

2. Increasing use of riot control agents against the civilian population in CWC member states.

The ATS is highly concerned about the increasing use of riot control agents (RCA) by law enforcement and militaries against civilian populations in recent years. The CWC defines RCA in its Article II(7), as "any chemical not listed in a Schedule, which can produce rapidly in humans sensory irritation or disabling physical effects which disappear within a short time following termination of exposure." The CWC bans the use of riot control agents in warfare, but exempted domestic riot control agent use by law enforcement from OPCW’s review authority.

However, the CWC relies on OPCW’s Scientific Advisory Board (SAB) for categorization of chemicals as Riot Control Agents and up to date information on their safety. ATS commends the OPCW SAB for their publication “Advice from the Scientific Advisory Board of the Organisation for the Prohibition of Chemical Weapons on riot control agents in connection to the Chemical Weapons Convention” https://doi.org/10.1039/C8RA08273A . In this study by the OPCW SAB, "Assessments of the toxicity of RCAs were made based on acute exposure in outdoor scenarios where the chemicals would be present in low dilution in air, in non-enclosed spaces, with the people affected able to escape unimpeded from the irritant cloud."

ATS is highly concerned that domestic RCA use by some state parties has not conformed to such an exposure scenario. RCA were used in dense city environments with limited or blocked escape routes, or indoors in subway systems, parking garages, housing and prisons. ATS calls special attention to “kettling” strategies by some law enforcement agencies, surrounding protesters and denying escape routes, thereby extending and increasing exposures to riot control agents. As acknowledged by the OPCW SAB, exposure to high levels of riot control agents can cause serious injuries, including to the airways and lungs, and, in some instances, can lead to death.

ATS urges the state parties to strictly adhere to the SAB’s exposure scenario for riot control agents and insert the SAB’s pertaining language into the CWC and national and local regulations.

3. Riot Control Agent Use During Respiratory Pandemics

The ATS called for a world-wide moratorium on RCA use during the Covid-19 pandemic:


The ATS is concerned that recent research calls into question the assumed safety of RCAs such as 2-chlorobenzalmalononitrile (CS), and highly concentrated pepper oils (Oleoresin
Capsicum, OC, PAVA). **RCAs are also of concern to ATS medical personnel** exposed when treating protestors, since the agents can contaminate clothing and medical equipment.

The ATS is concerned that exposure to RCAs may facilitate the transmission of COVID-19 and other respiratory pathogens. An RCA-exposed person with asymptomatic COVID-19 would be unable to maintain a safe distance and is likely to spread the SARS-CoV2 virus and other respiratory viruses much more efficiently to bystanders, increasing the risk of infection. Outcomes of a **study by the U.S. military** are a clear warning sign. Recruits exposed to CS in training just once had a strongly increased likelihood to develop respiratory illnesses such as influenza, pneumonia, or bronchitis, conditions often caused by viral infections. This may also apply to COVID-19.

**ATS strongly urges the OPCW and State Parties to cease the use of riot control agents during respiratory pandemics (Covid-19, RSV, influenza).**

4. **Safety of RCA for vulnerable populations.**

The industry manufacturing tear gas systems have developed advanced launching technologies allowing deployment of much higher amounts of tear gas over longer distances. Much of what we currently know about the **health effects of exposure to RCA** is based on military research conducted in the 50s, 60s, and 70s using young healthy male research participants. These studies are outdated and do not address the potential health effects of RCAs on vulnerable populations, including children, older adults, and people with underlying health conditions. The science of toxicology and respiratory health research have made tremendous advances in recent decades, detecting severe health effects of chemical exposures at low levels. Investments by the state parties law enforcement and militaries in riot control agent deployment systems and munitions dwarf their investments in toxicological and epidemiological research investigating their safety.

**ATS urges the OPCW and State Parties to establish research programs to reassess the safety of CS and other agents in diverse vulnerable populations using state of the art toxicological and epidemiological approaches.**

5. **Diversion of industrial chemicals.**

ATS calls for the Fifth Review Conference to strengthen world-wide policies to restrict the diversion of industrial chemicals (chlorine, acids etc.) for chemical weapons use. For example, the chlorine gas cylinders dropped by the Syrian regime on its civilian population were sourced from industrial manufacturers in a neighboring country.

**The ATS urges the OPCW and State Parties to implement strong policies and regulations preventing the cross-border flow of industrial chemicals with diversion risks into countries with a record of chemical weapons use.**

Sincerely,

Sven-Eric Jordt, Ph.D. *(Representative of ATS @CSP-28)*

Executive Committee, Terrorism and Inhalation Disaster Section (TID)

American Thoracic Society
Dr. Jordt is attending CSP-28 in person, and is available for scheduling at:

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