## Purpose of the meeting:

Meeting date:	06 June 2018 Location: Designated <u>a</u> State Pa	d Lab of
Present	, Sami Barrek, 3 Toxicologists/Clinical pharmacologists, 1 bioanalytical and toxicological chemist (all specialists in CW)	• •
Duration	c. 1 hour	

- Four staff members from the OPCW travelled to a State Party to conduct discussions with experts in toxicology/clinical pharmacology with a professional background in medical CW protection.
- The purpose of the visit was two-fold:
  - 1. To solicit expert advice on the value of exhuming suspected victims of the alleged chemical attack in Douma on 7 April 2018, in particular whether any evidence of exposure to chlorine gas (since no nerve agents had been detected in environmental or bio samples) could be gathered from biopsy samples.
  - 2. To elicit expert opinions from the forensic toxicologists regarding the observed and reported symptoms of the alleged victims of the Douma chemical attack. More specifically, the OPCW team requested an evaluation by the toxicologists on whether the symptoms observed in victims were consistent with exposure to chlorine or other reactive chlorine gas. For this purpose the toxicologists were shown numerous open source videos and photographs of alleged victims at the suspected scene of use of toxic chemicals.
- With regards to the first point the team was advised that there would be little use in conducting exhumations, as the chances of gathering evidence would almost be impossible. The experts advised that because of the warm climatic conditions, the manner of burial (likely in very shallow graves and without coffins) and the time interval since the alleged incident, any lung tissue would likely have degraded to such an extent that any autopsy would be pointless. Moreover, given they were unaware of any such exhumations being conducted in the past to provide evidence of chlorine exposure, the highly experimental nature of the exercise in such a public forum would represent a risk to benefit ratio that was unacceptably high.
- Regarding the second item above, the chief expert summed up his conclusions by offering two possibilities that included on the one hand a real chemical attack and on the other, the possibility of the event being a propaganda exercise. He elaborated on the possibilities.
- With respect to the consistency of the observed and reported symptoms of the alleged victims with possible exposure to chlorine gas or similar, the experts were conclusive in their statements that there was no correlation between symptoms and chlorine exposure. In particular, they stated that the onset of excessive frothing, as a result of pulmonary edema,

observed in photos and reported by witnesses would not occur in the short time period between the reported occurrence of the alleged incident and the time the videos were recorded (approximately 3-4 hours).

- The experts were also of the opinion that it was highly unlikely that victims would have gathered in piles at the centre of the respective apartments at such a short distance from an escape from any toxic chlorine gas to cleaner air.
- The head of the FFM team for the investigation in Douma informed the experts that a second canister, not witnessed by the FFM team, had landed in front of the building where the alleged exposure took place, which could have contained some other highly toxic chemical that might explain the symptoms observed and reported by witnesses. The experts tried to consider what other known toxic chemical might be consistent with the symptoms observed and their rapid onset. The only possibility that came to mind was some highly experimental and toxic carbamates that they described as reversible cholinesterase inhibitors. However they had low confidence in such a possibility as even the lowest molecular weight carbamate would likely be a solid and therefore be difficult to disperse.
- The OPCW team gathered after the meeting and reviewed the salient points discussed. It was agreed among all present that the key "take-away message" from the meeting was that the <u>symptoms observed were inconsistent with exposure to chlorine</u>, and no other obvious candidate chemical causing the symptoms could be identified.
- On returning to the HQ the team met with the Chief of Cabinet and relayed the conclusions of the experts.