

# Chemical Threats

## National & International Response



CBRNe MiddleEast  
26-28 SEPTEMBER 2016  
KUWAIT CITY, KUWAIT - RADISSON BLU

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**SYRIAN CBRN-TASK FORCE, SYRIA**

# What Going on in Syria?

*“What began as peaceful demonstrations in Syria has become the worst humanitarian crisis since World War II.*

*Over the past five years, civilians have been subjected to indiscriminate and targeted aerial attacks, deprivation through the use of siege, chemical weapons attacks, and other egregious and flagrant violations of international humanitarian law (IHL).*

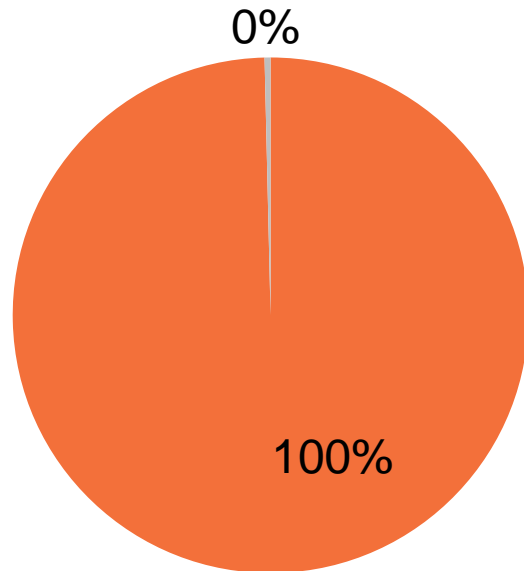
*In Syria, conventional attacks are the most deadly—however, the individual effects of chemical attacks are long-lasting and the fear they inspire can break down communities and drive mass displacement.”*

*A NEW NORMAL Ongoing Chemical Weapons Attacks in Syria, February 2016, SAMS*

# What Going on in Syria?

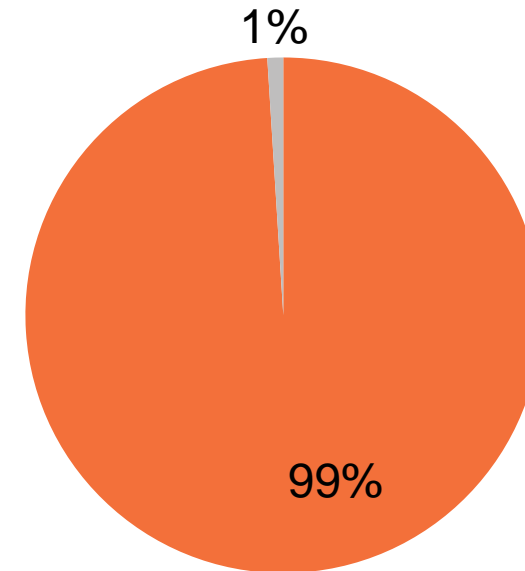
## Cause of War-related Death in Syria

■ Conventional attacks   ■ Chemical attacks



## Death in Aleppo City "August 2016"

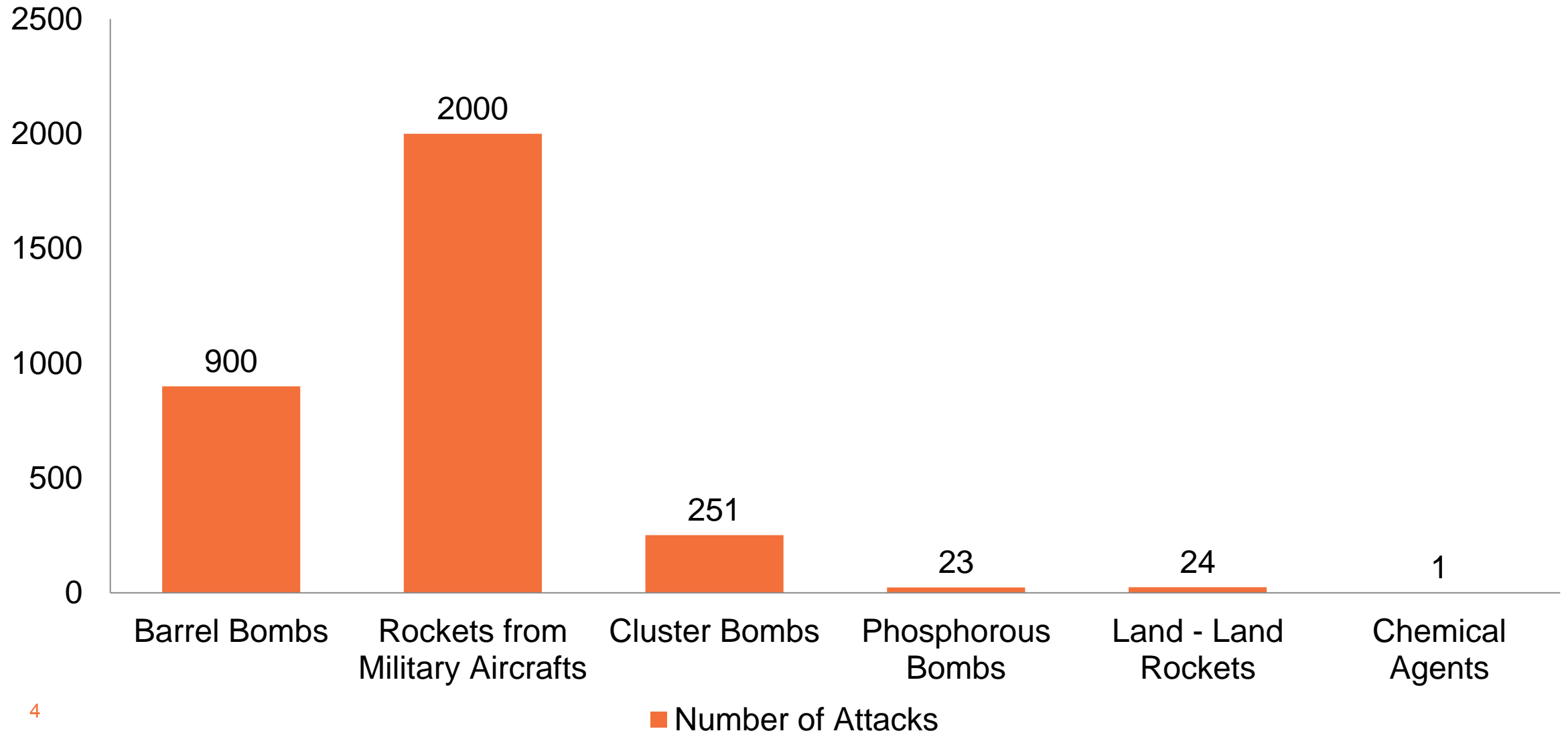
■ Conventional attacks   ■ Chemical attacks



*UN and Arab League Envoy to Syria, 15 March 2011 – 23 April 2016.*

# What Going on in Syria?

## Aleppo City in August 2016



# Chemical Threat & Chemical Attacks

Before 21 August 2013	21 August 2013	After 21 August 2013
<b>31</b> Chemical Attack	<b>02</b> Chemical Attack	<b>128</b> Chemical Attack
<b>1,403</b> Victims	<b>10,626</b> Victims	<b>2,552</b> Victims
<b>67</b> Death	<b>1,347</b> Death	<b>77</b> Death

# Chemical Threat & Chemical Attacks

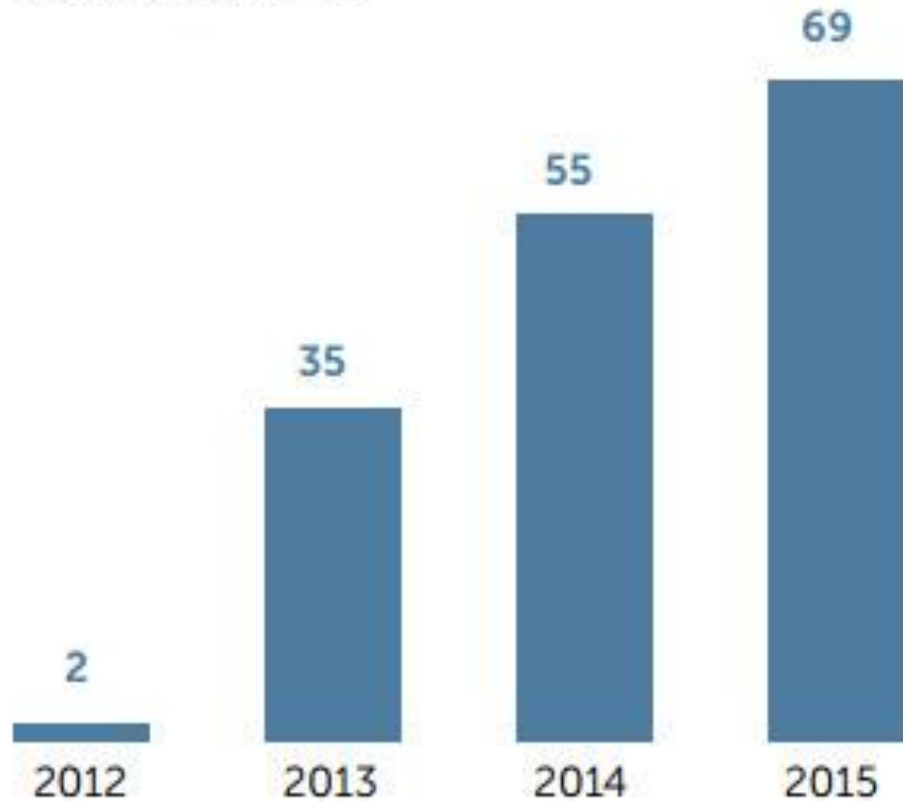
## Syrian Chemical Destruction Data

As of 9 February 2015

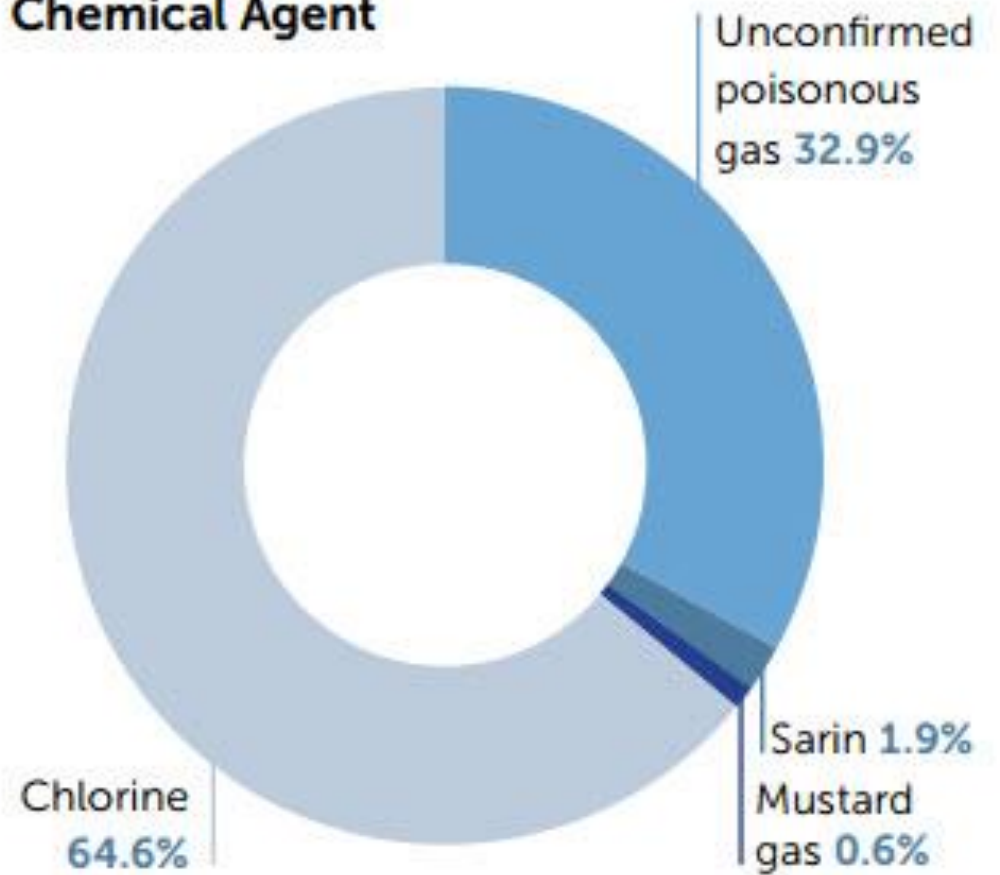
	Total Amount	Amount Destroyed	Destroyed (%)
Total Category 1*	1,046,981 kg	1,046,981 kg	100.0%
Total Category 2**	261,040 kg	234,436 kg	89.8%
Total Chemicals (Cat. 1 and 2)	1,308,021 kg	1,281,417 kg	98.0%

# Chemical Threat & Chemical Attacks

Attacks by Year



Chemical Agent



# National Response

- **(2013):** Public education and basic training sessions (452 advanced healthcare provider, and 890 basic healthcare provider)
- **(June 2013):** First simulation in one of the field hospitals in Aleppo city
- **(21 August 2013):** PPEs level C and antidotes.
- **(31 August 2013):** CBRN-TF” was established



# National Response

**Scientifically:** *“The Syrian Manual in Preparedness And Response to Chemical Attacks”.*

- Risques chimiques Accident, Attentats
- CBRN incidents: clinical management & health protection
- Decontamination and Care of Potentially Contaminated Victims by Healthcare Personnel
- Guidance for MSF Operation in the context of Nuclear, Biological, And Chemical Risks

Scientific consultants

# Lessons Learned From the Syrian Sarin Attack: Evaluation of a Clinical Syndrome Through Social Media

*6 May 2014 | Annals of Internal Medicine | Volume 160 • Number 9*

- Most of the victims in the videos were children.
- Most victims (90.0%) were classified as moderately injured or worse.
- The victims were brought to provisional facilities, not fully equipped hospitals
- Lack of medications, such as atropine autoinjectors, oximes, and benzodiazepines, probably increased the mortality rate
- Patients were intubated but not connected to a mechanical ventilator
- The caregiver mentioned the use of steroids and furosemide

# Lessons Learned From the Syrian Sarin Attack: Evaluation of a Clinical Syndrome Through Social Media

*6 May 2014 | Annals of Internal Medicine | Volume 160 • Number 9*

- The efficient diagnosis of nerve agent exposure resulted from increased awareness by health care providers of the nerve agent's effects and the possibility of their use as a result of previous alleged chemical attacks.
- Decontamination was done with insufficient amounts of water.
- Complete removal of contaminated clothes was uncommon.
- Water did not drain through a proper sewage system
- Severe cases of secondary exposures occurred, including death among medical teams





# Qualification, Training and Public Education

- Training and qualification operations are done in Bab Al-Hawa training center inside Syria
  - Concept of operations
  - Awareness to Chemical Agents
  - General Overview about PPEs (Theoretical and practical session)
  - Decontamination Procedures (Theoretical and practical session)
  - Medical management
  - Practical simulation and evaluation
  - Criminal Documentation

# Qualification, Training and Public Education

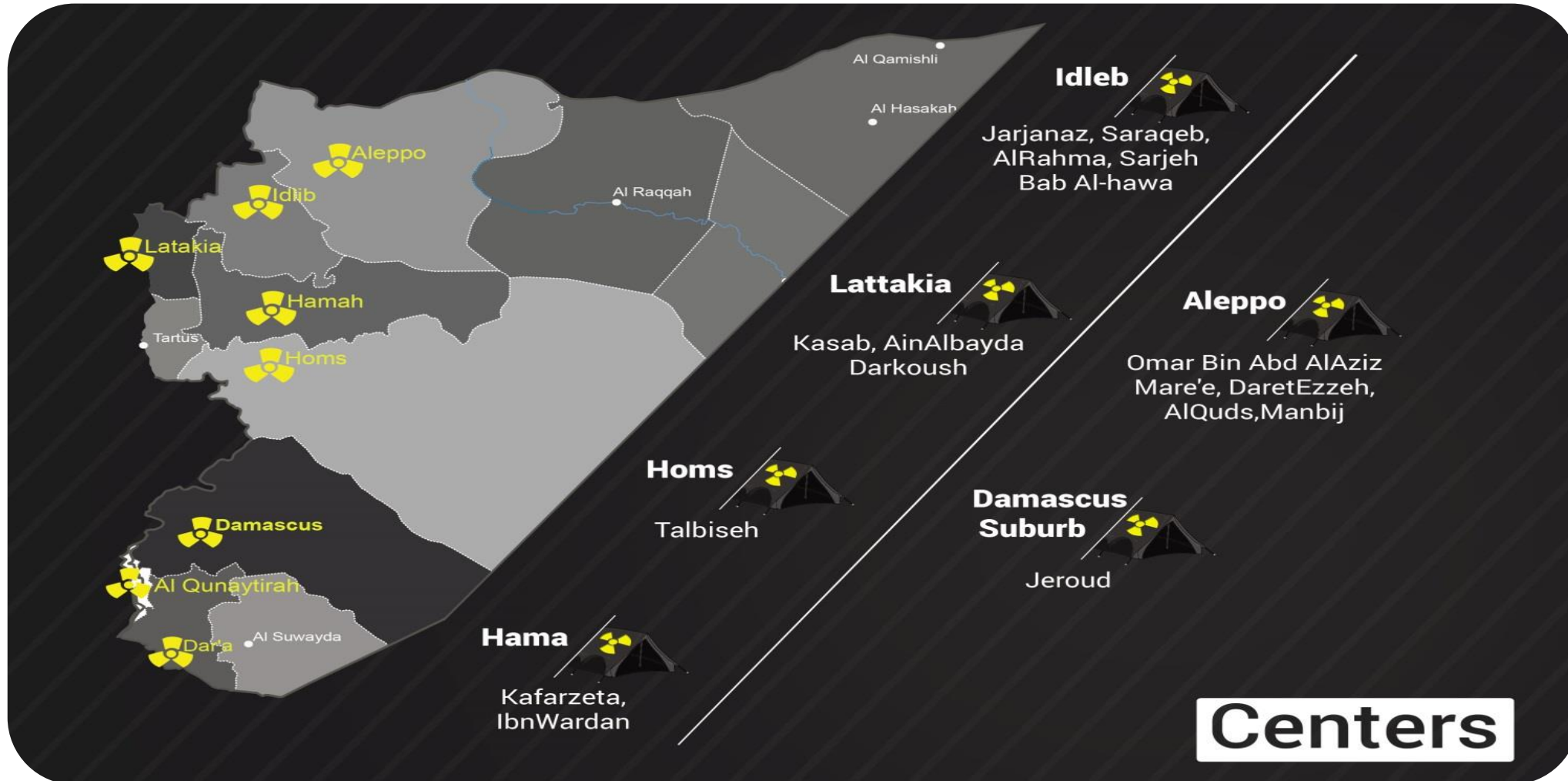


# National Response

- **(2013 – 2014):** 526 trainees in 22 training courses and provide 100 PPEs level C, and 5.000 Pralidoxime (Vials)
- **(April 2014):** Systematic documentation process  
*“After the chemical attacks that targeted Hama countryside (KAfir zita) and Idleb countryside (Telmenes)”*



# National Response



# Criminal Documentation

***"Independently of the individuals from the three villages who were interviewed, the FFM interviewed and received information from members of the "CBRN1 Task Force", who had performed a systematic collection of data in the field following reported attacks in Talmenes and Kafr Zita."***

*September 2014*

*" NOTE BY THE TECHNICAL SECRETARIAT  
SECOND REPORT OF THE OPCW FACT-FINDING MISSION IN SYRIA"*

<https://goo.gl/C5boll>

# Current Situation

- Expired equipment and medications
- Overwhelmed health facilities and health personnel
- Facilities will be supported by Life saving equipment and medications without specific antidotes.
- Depending more on public education rather than advanced and specialized trainings.
- Accepting the fact that dealing with Chlorine can be done without Level C PPE
- Save And rescue teams are expected to work without PPE

# What are the needs?

- First immediate and absolute need is:

**Stop all types of violations against HUMANITY  
INCLUDING “The USE OF CHEMICAL AGENTS”.**

*UNSC Resolution 2209*

# What are the needs?

## Otherwise:

- Standardizing and updating protocols and training plans
- Providing medical facilities with proper equipment needed to minimize the risk of secondary contamination among staff
- Open an official channels with OPCW to coordinate and cooperate regarding documentation.

# Conclusion

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**Thank You**