

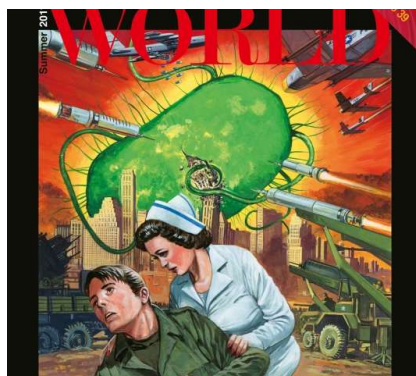


# **CBRN THREATS THERE'LL BE ANOTHER ONE ALONG IN A MINUTE**

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Editorial Director  
CBRNe World

# Who am I?

- Editorial Director at Falcon Communications
- 18 years experience of writing on CBRN matters + 4 years prior on defence matters
- Presented to Nato, American Academy of Forensic Science, EDA, EC etc
- Written for many broadsheets as well as TV and radio.
- Author



# CBRNe World

- CBRNe World – published six times a year
- Established in 2006 – first people to de-capitalise the 'E.' Came from same team that started NBC International in 2003.
- CBRNe World – The information exchange for the CBRNE community – military, civilian, scientific, academic and other government departments (Health, Environment etc).
- Covers every aspect of CBRNE for every type of individual – responder, scientist, military, academic, policy maker etc.
- Routinely Google ranked #1 for CBRNe (we fight it out with Wikipedia!) – [www.cbrneworld.com](http://www.cbrneworld.com) – and have the largest CBRN following on Twitter (#cbrneworld) and also Linked In.





of



And then what do we do??



# How do we classify a CBRN event?

- “An abbreviation used to describe the malicious use of CBRN materials or weapons with the intention to cause **significant** harm or disruption.” CPNI
- “A terrorist attack using CBRN materials... potentially as a means of dissemination or an additional method of attack, could inflict **large** number of casualties and would represent a **major** incident...” JESIP
- “CBRN is a low probability, **high risk** event...”  
Defence Procurement International



# What makes a CBRN attack... mass?

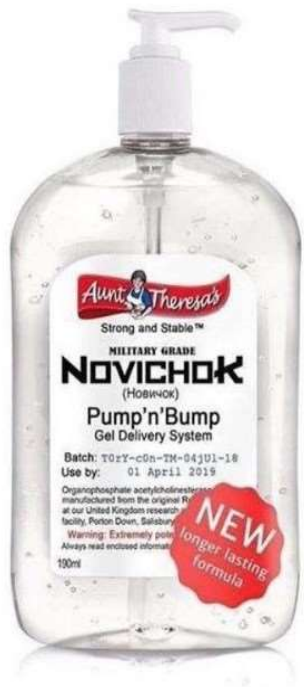


- November 2019
- Kaiyuan, China
- Depressed individual gets access to Kindergarten
- 51 Children and three teachers hurt, two seriously, with caustic soda.
- Those affected had chemical burns.
- Part of a long history of chemical attacks on schools.
- Acid attacks are a constant and can range from single individuals to groups



- September 2019
- San Jose, California
- Depressed individual commits chemical suicide
- One dead, six hospitalised a larger number with minor symptoms.
- Smell of 'rotten eggs' means it was most likely hydrogen sulphide
- Chemical suicides started in Japan and worked their way from the US to Europe.
- Dozens of deaths every year. (April 19 23, hospitalised in China)

# What makes a CBRN attack... toxicity?



- March – June 2018
- Salisbury-Amesbury, UK
- Four hospitalised, one killed.
- State assassination of dissident spy.
- Fourth generation agent used.
- Created international incident, far higher than other murders of Russian dissidents.



- October – November 2013
- Gunma Prefecture, Japan
- 22 different kinds of food sprayed with Malathion
- Thousands affected – true number still unknown, hundreds sick.
- Toshiki Abe, disgruntled employee, never expected people to eat the food.
- Factory shut down.
- Adulteration of food is an enormous, ongoing, problem.



# What makes a CBRN attack... ideology?



- 2015-2017
- Syria/Northern Iraq
- 76 chemical attacks from ISIS in three years (IHS Markit)
- 100s affected by combination of chlorine and sulphur mustard attacks. Unknown number killed
- Suleiman al-Afari, captured middle manager in ISIS CW machine, claims no ideological involvement, only financial.
- Also claims education/ competency level very low.



- Indonesia (Apr 19), Serbia (Oct 19), Sri Lanka (Nov 19).
- Individuals counting ballots have become sick or died
- Over 300 died in Indonesia, 20 in Serbia, 50 in Sri Lanka
- No obvious agent used, includes bio and chem.
- No group has come and claimed responsibility for the attack.

# What makes a CBRN attack... type of actor



- December 2017
- Vermont, USA
- Betty Miller, depressed 70 yr old in old people's home
- Made ricin and started poisoning other residents.
- Wanted to kill herself, but had to be sure it was toxic enough.



- July 2019
- Durham, UK
- 16 year old white supremacist
- Researching and stockpiling explosive precursors and ricin
- Wanted to start race war in the UK.
- Ricin is the 'poster child' of the extreme right would be terrorist.



- September 2017
- Berlin, Germany
- Baby food spiked with ethylene glycol
- Wanted supermarket to pay him £12m so he would tell them where they were.
- Arrested and charged. 12.5 year sentence.

# What makes a CBRN attack... fear

## M<sub>ean</sub>

- Jan 2019
- Pennsylvania
- Chemistry major decided to poison roommate with Thallium
- Poisoned him over a number of months



## S<sub>tupid</sub>



- April 2019
- Tokyo, Japan
- Arrested for selling 99.9% pure Uranium online.
- Also synthesised erythritol tetranitrate (ETN)
- Manufactured from ore and then refined it into yellow cake
- Science student pushing art of possible

## C<sub>razy</sub>

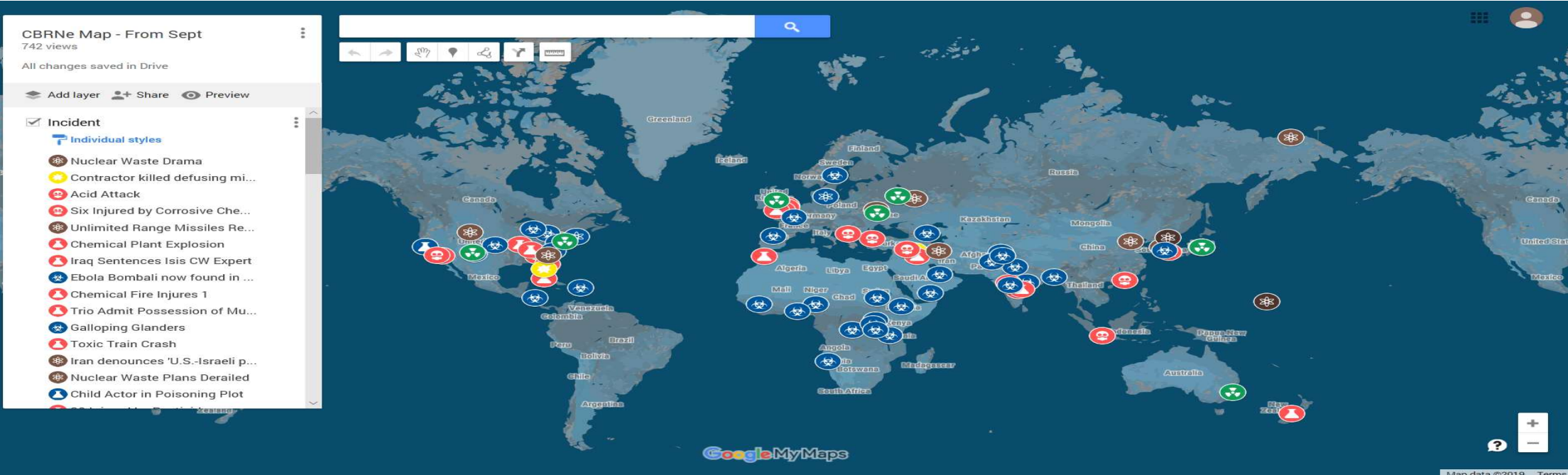


- April 2013
- Tupelo, US
- Framed individual for sending Ricin to Obama etc
- Feud between rival Elvis impersonators
- Everett Dutschke then tried to bride cell mate into poisoning trial Judge

# What makes a CBRN attack... type of agent



- Type of agent is the only kind of linking factor in all of these incidents.
- CBRN does not need to be 'super-toxic' to be considered. Individuals will use what is at hand to try and achieve their effect
- Even major events will start off small (with the exception of nuclear!), recognising this will stop them growing
- Public confidence is key. If you are able to deal with white powder/ricin/Fentanyl calls efficiently then they are more likely to believe that you can deal with a serious one.



- Every other month we produce a map of CBRN incidents.
- Sign up via [www.cbrneworld.com](http://www.cbrneworld.com) This map can be found on [https://www.google.com/maps/d/u/o/edit?utm\\_source=newsletter\\_54&utm\\_medium=email&utm\\_campaign=threat-brief-october&mid=16tW41y6SpGG8u2iA56zQdsJlfjiCpwtl&ll=50.38698068583956%2C30.526647580395547&z=15](https://www.google.com/maps/d/u/o/edit?utm_source=newsletter_54&utm_medium=email&utm_campaign=threat-brief-october&mid=16tW41y6SpGG8u2iA56zQdsJlfjiCpwtl&ll=50.38698068583956%2C30.526647580395547&z=15)
- This map has: 14 nuclear stories, 8 radiological, 35 biological, 19 chemical incidents, 8 attacks (failed and successful)
- CBRN incidents happen all the time, and if you aren't seeing them it is because your 'aim point' is too high.
- Most of the cases above require training, detection, identification and monitoring devices and PPE.

# Food for thought...

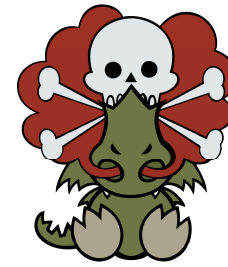


- Brent Berlin and Paul Kay claimed in 'Basic Color Terms' that colour terms are predictable by the number of colour terms each culture has. If you don't have that term then it is a shade of another colour. Stage 1 - dark/cool and light/warm, Stage 2 – red, Stage 3 - Green or yellow, Stage 4 – green and yellow, Stage 5, Blue, Stage 6 – Brown, Stage 7 – purple, pink, orange or grey.
- CBRN faces the same evolution: poisons, chemical weapons, ABC, NBC, CBRN, CBRNE. These name threats but not modalities. At some point there has to be a new process – we don't name murders by the weapon used.
- More reading - <https://warontherocks.com/2018/12/the-new-u-s-strategy-to-tackle-wmd-terrorism-is-new-wine-in-old-wineskins/>



Questions??

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CBRNe World Jakarta  
4-6 March, JCC, Indonesia  
<https://cbrneworld.com/events/cbrne-world-jakarta>