

Managing MCI's - Real Life Experiences



**Canterbury
Earthquakes - 2011**



**Kaikoura
Earthquake - 2016**



**Christchurch Terror
Attacks - 2019**



**Whakaari White
Island Eruption - 2019**

DEAN BROWN: Critical Care Paramedic & Co-Founder of Triage-Plus

Personal Experience



**Canterbury
Earthquakes - 2011**



**Christchurch Terror
Attacks - 2019**



- **Currently Critical Care & Flight Paramedic with Heli Otago - Queenstown NZ**
- **27+ Years frontline prehospital emergency medicine with St John Ambulance including road-based ambulance & HEMS**
- **A decade plus as a single crewed ICP/CCP working in a rapid response unit**
- **Offshore in various locations**

DISCLAIMER:

Information contained in this presentation are a matter of public record and my own views and opinions and **do not** represent those of St John or my current employer



The 51 Murdered and 40 Injured on March 15th, 2019

In Memory of all those lost and injured by Mass Casualty Incidents across the globe, to their family & whanau and especially to all those that respond and give everything of themselves to look after these victims



2004

INDONESIA

Estimated
227,898 killed



READY TO RESPOND
KIA MATAARA

CENNZ CONFERENCE 2023
19-20 October 2023 | Christchurch



LONDON
52 killed and
over 700 injured

2005

2004

INDONESIA
Estimated
227,898 killed



LONDON
52 killed and
over 700 injured

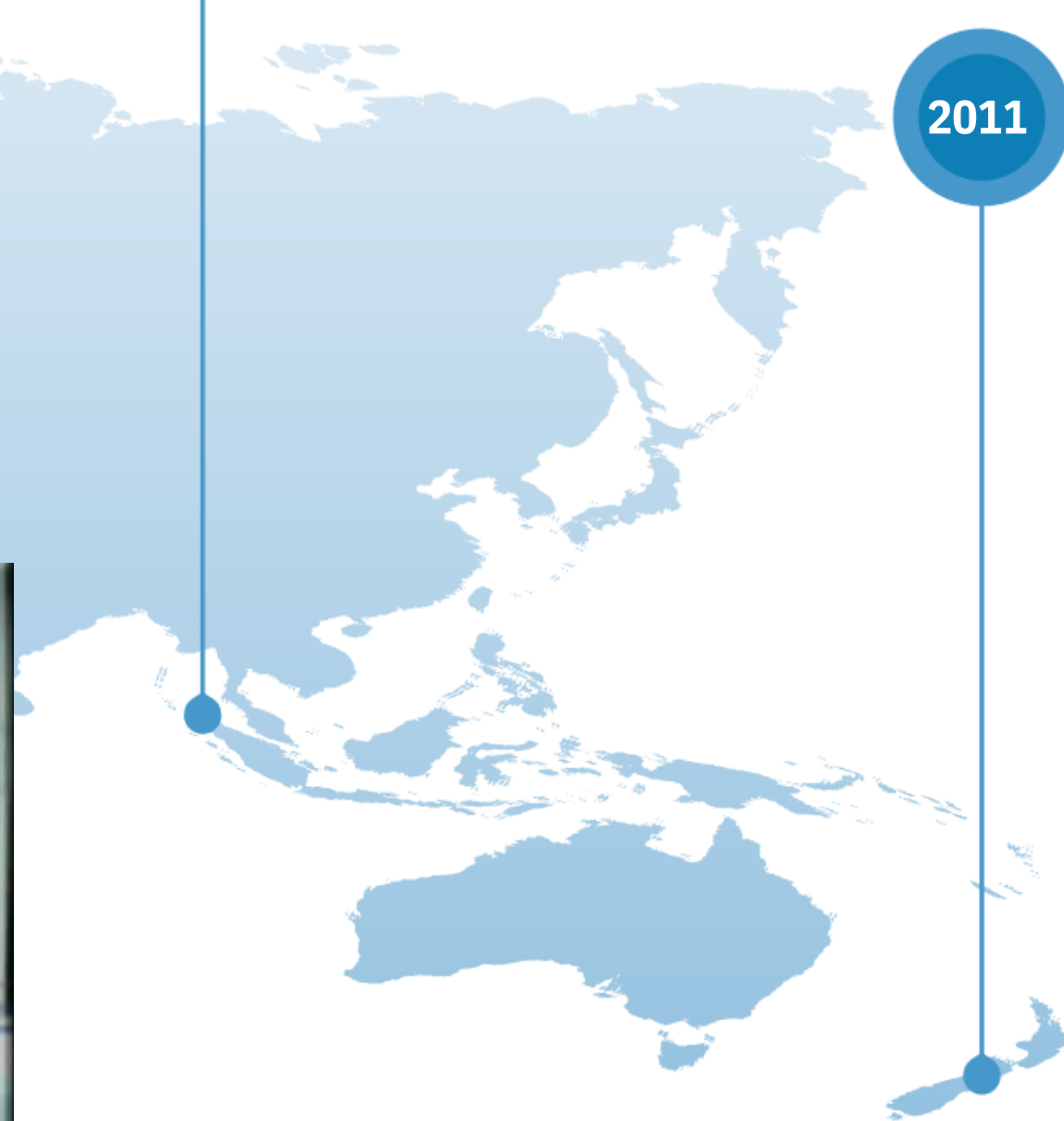
2005

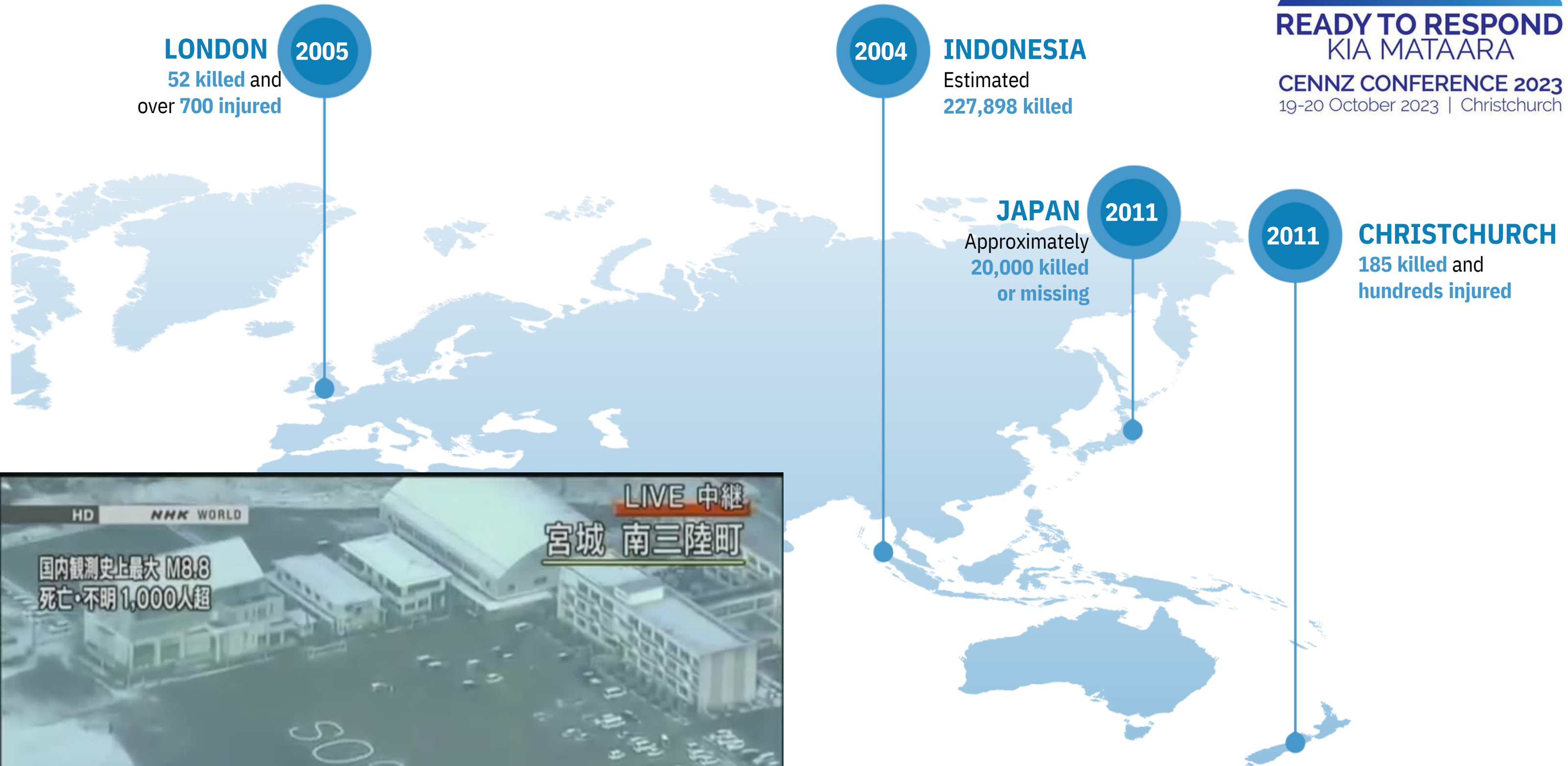
2004

INDONESIA
Estimated
227,898 killed

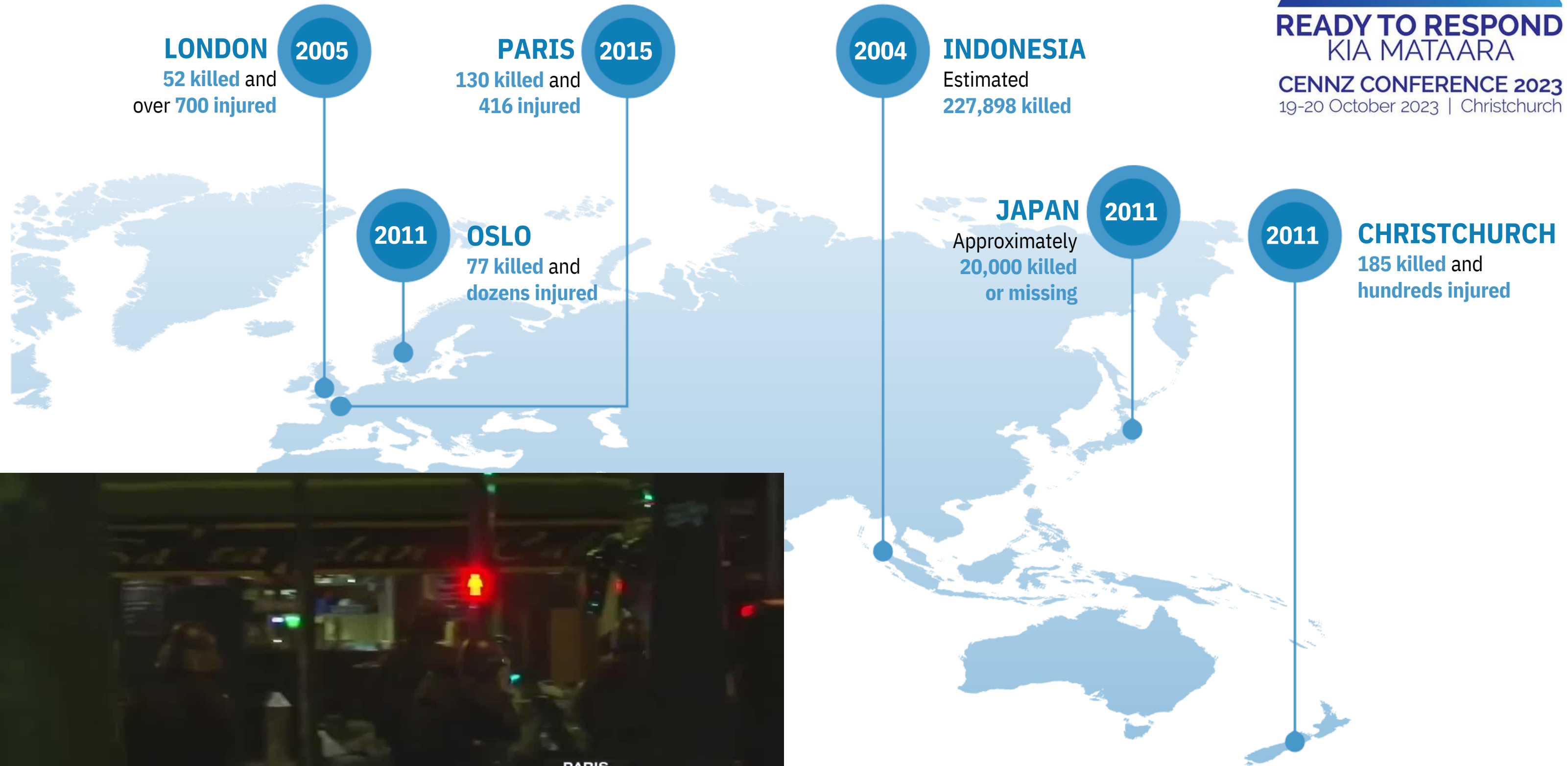
2011

CHRISTCHURCH
185 killed and
hundreds injured



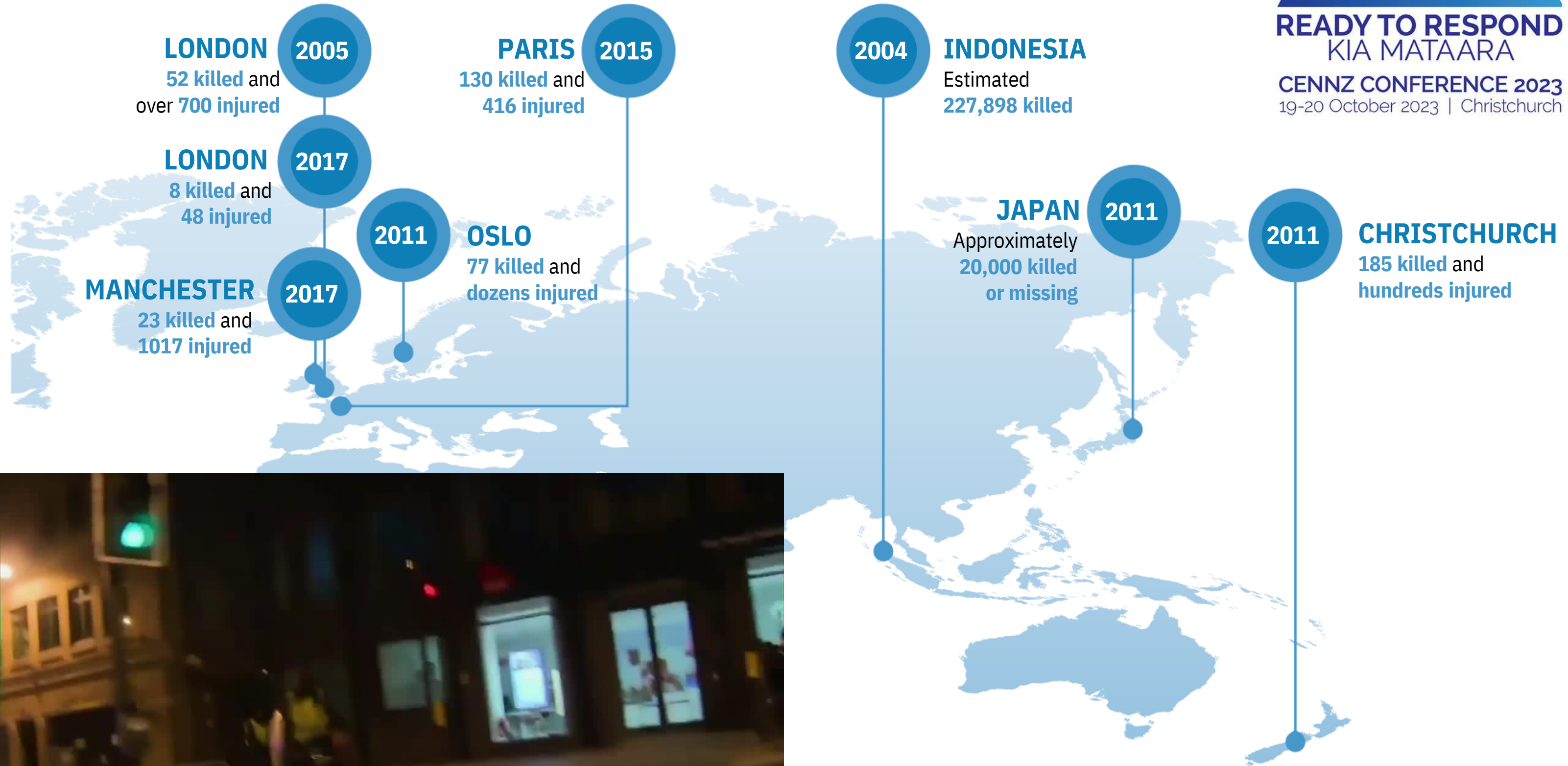


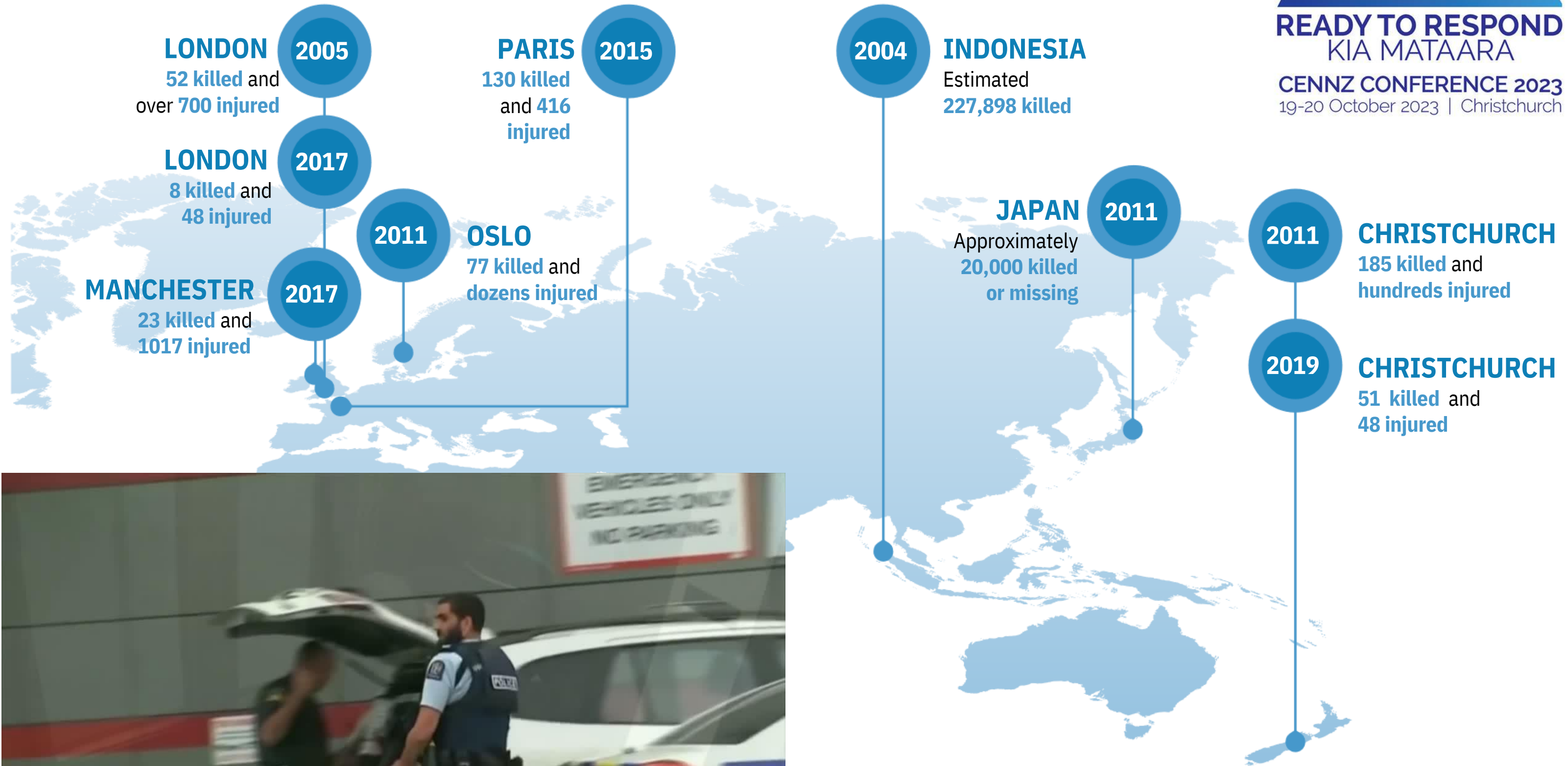


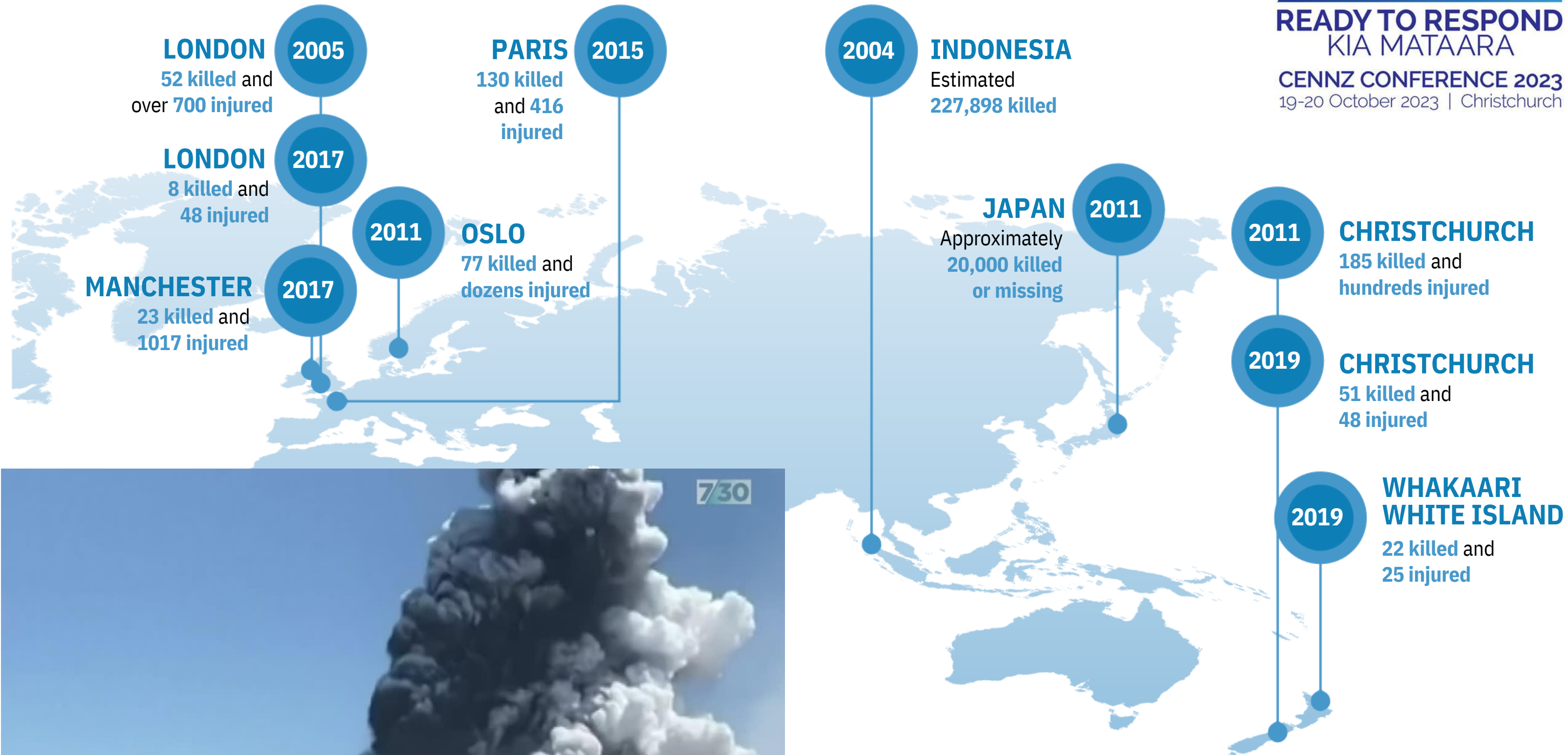




Facebook/ CaliMarco PT

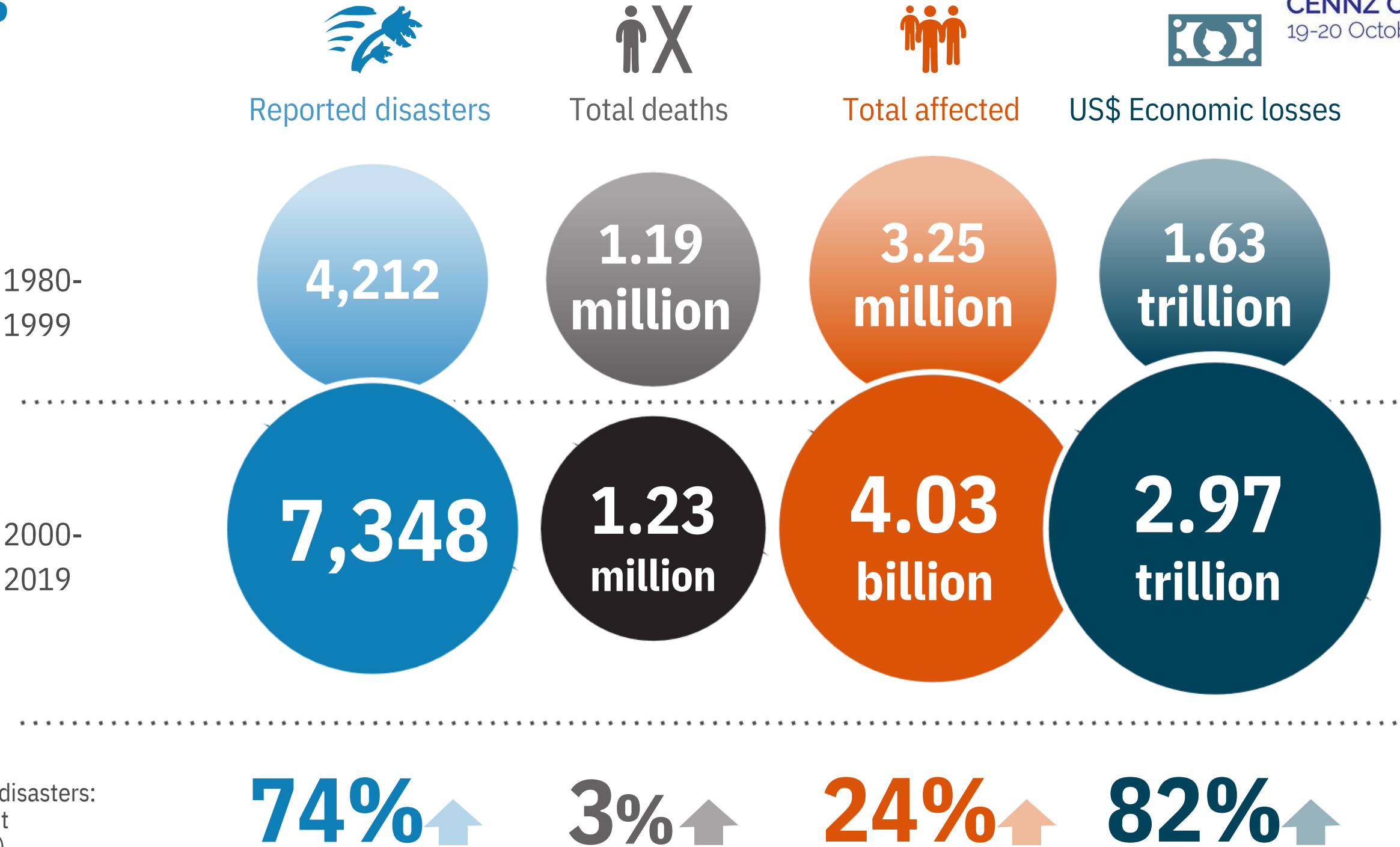






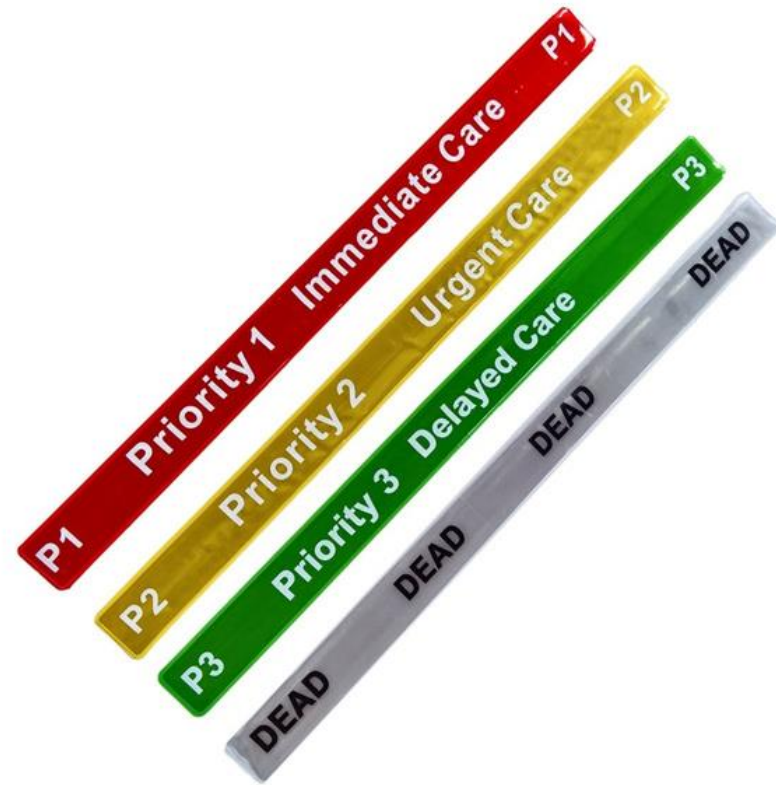
THE GLOBAL STATISTICS


**READY TO RESPOND
KIA MATAARA**
CENNZ CONFERENCE 2023
19-20 October 2023 | Christchurch



“The human cost of disasters:
an overview of the last
20 years (2000-2019)
UNDRR”

The Initial Triage



What Are The Problems




READY TO RESPOND
KIA MATAARA
CENNZ CONFERENCE 2023
19-20 October 2023 | Christchurch



THE PROBLEMS:



HOW
MANY?

THE PROBLEMS:



HOW
MANY?



HOW
SICK?

THE PROBLEMS:



HOW
MANY?



HOW
SOON?



HOW
SICK?

THE PROBLEMS:



HOW
MANY?



HOW
SOON?



HOW
SICK?



WHERE
ARE THEY?

THE PROBLEMS:



HOW
MANY?



HOW
SOON?



HOW
SICK?



WHEN
ARE THEY
ARRIVING?



WHERE
ARE THEY?

THE PROBLEMS:



HOW
MANY?



HOW
SOON?



WHERE ARE
THEY GOING?



HOW
SICK?



WHEN
ARE THEY
ARRIVING?



WHERE
ARE THEY?

THE PROBLEMS:



HOW
MANY?



HOW
SOON?



WHERE ARE
THEY GOING?



HOW
SICK?



WHEN
ARE THEY
ARRIVING?



WHERE
ARE THEY?



INCREASED
COGNITIVE
LOAD

THE PROBLEMS:



HOW
MANY?



HOW
SOON?



WHERE ARE
THEY GOING?



HOW
SICK?



INACCURATE
OR NO CRITICAL
PATIENT DATA



WHEN
ARE THEY
ARRIVING?



WHERE
ARE THEY?



INCREASED
COGNITIVE
LOAD

THE PROBLEMS:



HOW
MANY?



HOW
SOON?



WHERE ARE
THEY GOING?



DIFFICULTY
TRACKING



HOW
SICK?



INACCURATE
OR NO CRITICAL
PATIENT DATA



WHEN
ARE THEY
ARRIVING?



WHERE
ARE THEY?



INCREASED
COGNITIVE
LOAD

THE PROBLEMS:



HOW
MANY?



HOW
SOON?



WHERE ARE
THEY GOING?



DIFFICULTY
TRACKING



HOW
SICK?



INACCURATE
OR NO CRITICAL
PATIENT DATA



WHEN
ARE THEY
ARRIVING?



WHERE
ARE THEY?



INCREASED
COGNITIVE
LOAD



INCONSISTENT
TRIAGE

THE PROBLEMS:



HOW
MANY?



HOW
SOON?



WHERE ARE
THEY GOING?



DIFFICULTY
TRACKING



HOW
SICK?



INACCURATE
OR NO CRITICAL
PATIENT DATA



COMPLEX INTER-
AGENCY
COMMUNICATION



WHEN
ARE THEY
ARRIVING?



WHERE
ARE THEY?



INCREASED
COGNITIVE
LOAD



INCONSISTENT
TRIAGE

THE PROBLEMS:



HOW
MANY?



HOW
SOON?



WHERE ARE
THEY GOING?



DIFFICULTY
TRACKING



HOW
SICK?



WHAT
RESOURCES
ARE NEEDED
AND WHERE?



INACCURATE
OR NO CRITICAL
PATIENT DATA



COMPLEX INTER-
AGENCY
COMMUNICATION



WHEN
ARE THEY
ARRIVING?



WHERE
ARE THEY?



INCREASED
COGNITIVE
LOAD



INCONSISTENT
TRIAGE

The Problems Confirmed



"There is currently nothing in technology to fix some of the problems in mass casualty events..."

"We get our information from the TV news"

Professor Karim Brohi,
Head of London Trauma Network - 2019

THE CURRENT PROCESS:

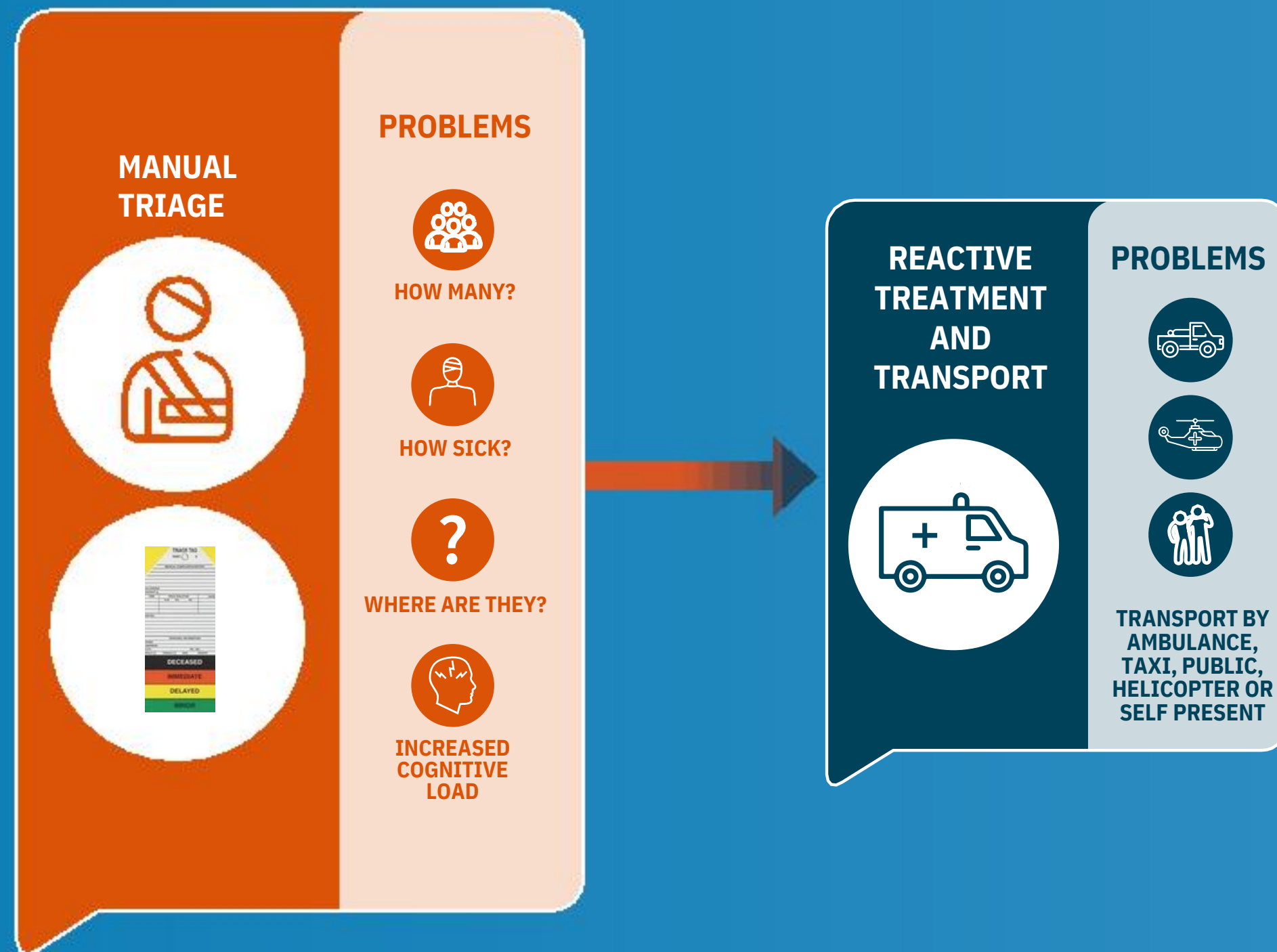




READY TO RESPOND
KIA MATAARA

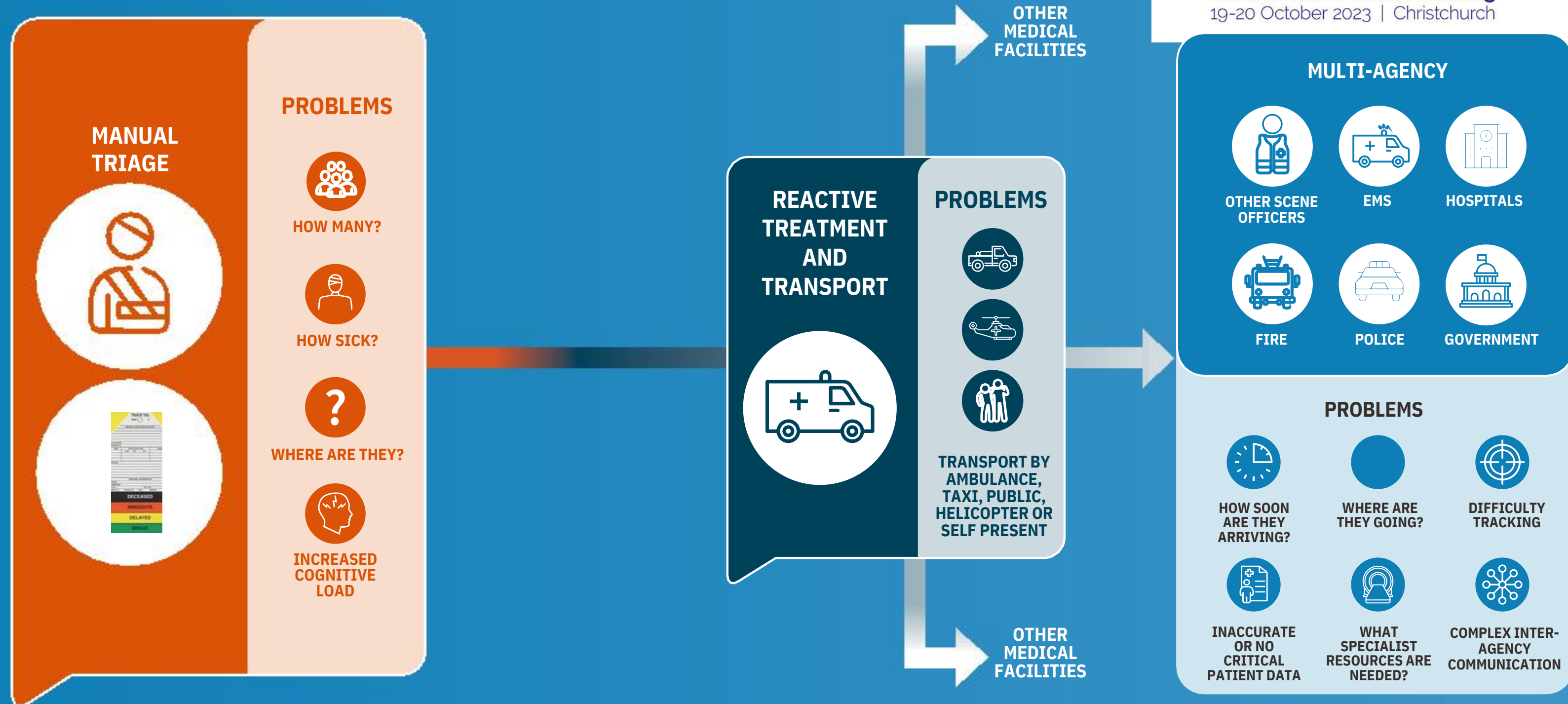
CENNZ CONFERENCE 2023
19-20 October 2023 | Christchurch






READY TO RESPOND
KIA MATAARA
CENNZ CONFERENCE 2023
19-20 October 2023 | Christchurch





Chemical, Biological, Radiological, Nuclear Attacks


READY TO RESPOND
KIA MATAARA
CENNZ CONFERENCE 2023
19-20 October 2023 | Christchurch



Industrial Accidents




READY TO RESPOND
KIA MATAARA
CENNZ CONFERENCE 2023
19-20 October 2023 | Christchurch



Terrorist Attacks




READY TO RESPOND
KIA MATAARA
CENNZ CONFERENCE 2023
19-20 October 2023 | Christchurch



Cyber Attacks



Crowd & Mass Gathering Incidents


READY TO RESPOND
KIA MATAARA
CENNZ CONFERENCE 2023
19-20 October 2023 | Christchurch



Natural Disasters





**ARE YOU
PREPARED?**

Thank You



References

Dr Dominic Fleischer

<https://www.croakey.org/reflections-and-lessons-from-christchurch-hospital-and-the-frontlines-of-an-emergency-response-to-violent-trauma/>

Open Forum With Professor Karim Brohi - 2019

<https://www.youtube.com/watch?v=yXxduZs1KrY>

Karim Brohi, Rosel Tallach,
Mass casualty medicine: time for a 21st century refresh,
British Journal of Anaesthesia, Volume 128, Issue 2

<https://www.sciencedirect.com/science/article/pii/S0007091221007960>

Dr Jan. Bone

https://youtu.be/3UBgEe_Z--w?feature=shared