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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

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- **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

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"COLLEGE OF EMERGENCY NURSES NEW ZEALAND"
NGA RINGA RINGA AROHA

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

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2004 **INDONESIA**
Estimated
227,898 killed

[redacted]

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LONDON 2005
52 killed and
over **700 injured**

2004 **INDONESIA**
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227,898 killed

READY TO RESPOND
KIA MATAARA

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2005 **LONDON**
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227,898 killed

2011 **CHRISTCHURCH**
185 killed and
hundreds injured

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Approximately
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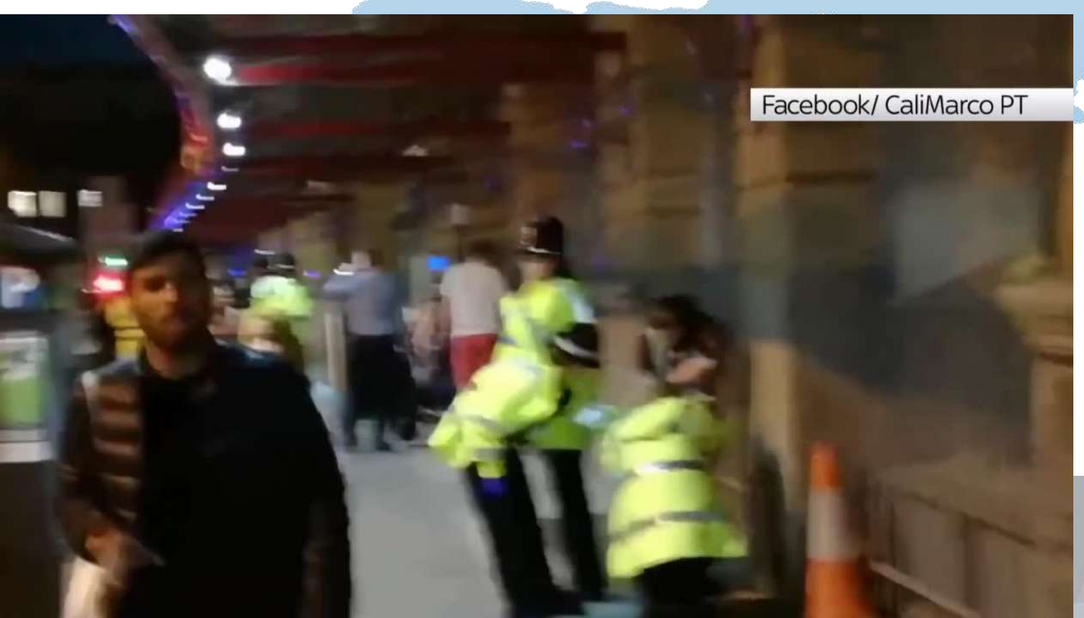
MANCHESTER 2017
23 killed and
1017 injured



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LONDON 2017
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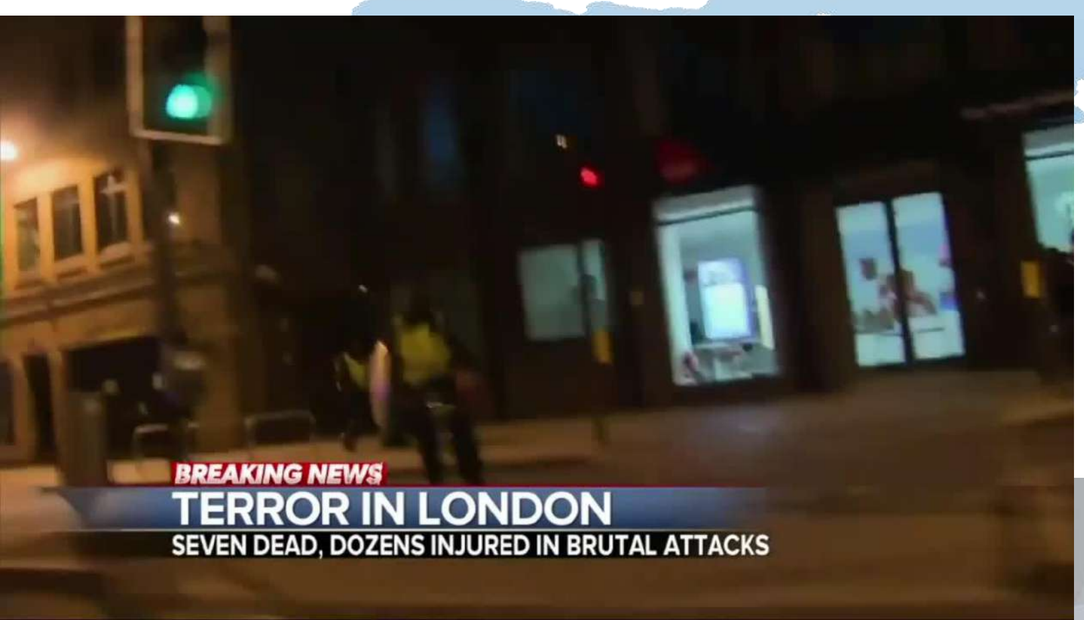

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2019 **CHRISTCHURCH**
51 killed and
48 injured

2019 **WHAKAARI**
WHITE ISLAND
22 killed and
25 injured

THE GLOBAL STATISTICS

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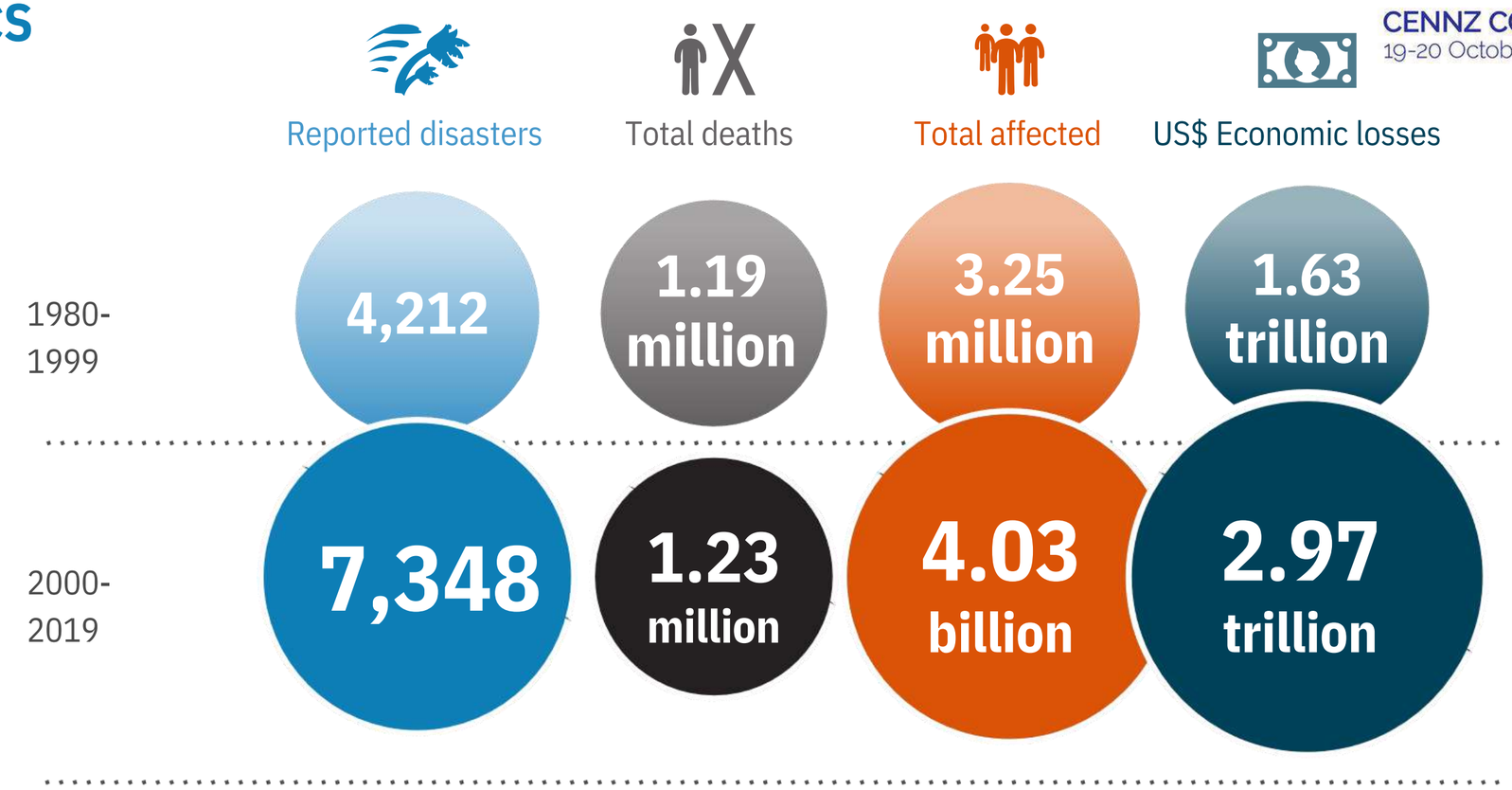

"The human cost of disasters: an overview of the last 20 years (2000-2019) UNDRR"

The Initial Triage

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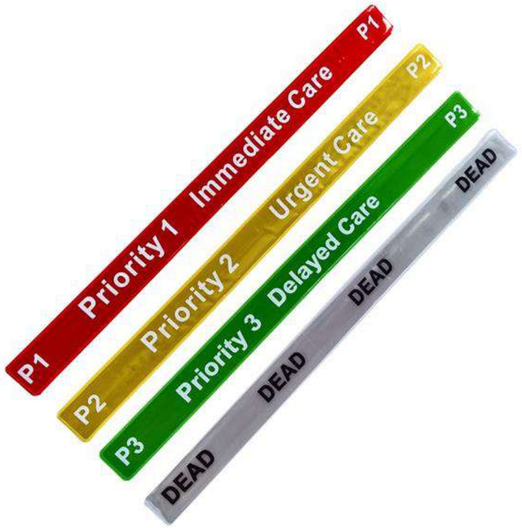

What Are The Problems

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THE PROBLEMS:

HOW MANY?

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THE PROBLEMS:

HOW MANY?

HOW SICK?

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THE PROBLEMS:

HOW MANY?

HOW SOON?

HOW SICK?

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THE PROBLEMS:

HOW MANY?

HOW SOON?

HOW SICK?

WHERE ARE THEY?

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THE PROBLEMS:

HOW MANY?

HOW SOON?

HOW SICK?

WHEN ARE THEY ARRIVING?

WHERE ARE THEY?

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THE PROBLEMS:

HOW MANY?

HOW SOON?

WHERE ARE THEY GOING?

HOW SICK?

WHEN ARE THEY ARRIVING?

WHERE ARE THEY?

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THE PROBLEMS:

- HOW MANY?
- HOW SOON?
- WHERE ARE THEY GOING?
- HOW SICK?
- WHEN ARE THEY ARRIVING?
- WHERE ARE THEY?
- INCREASED COGNITIVE LOAD

READY TO RESPOND
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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

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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

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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

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THE PROBLEMS:

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THE PROBLEMS:

The Problems Confirmed

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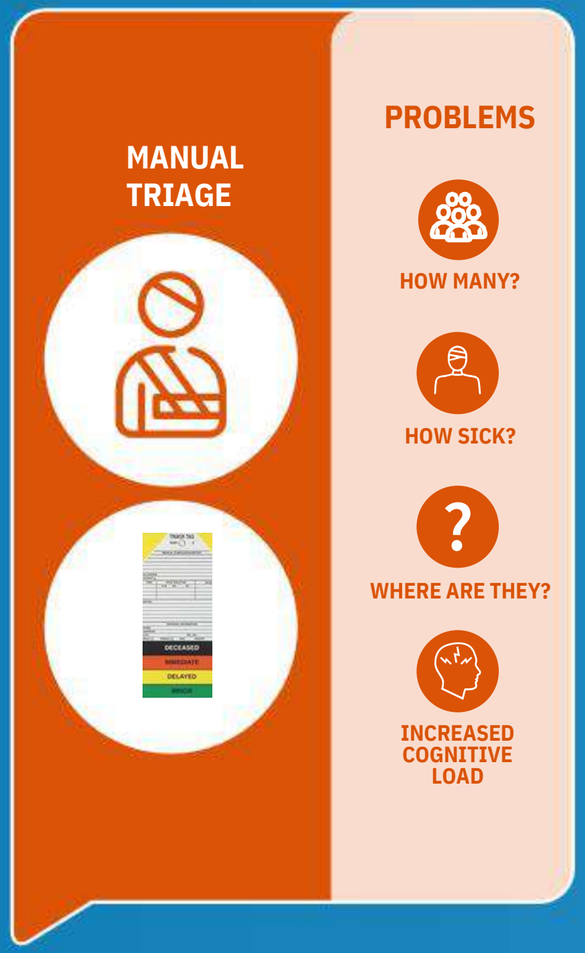
Professor Karim Brohi,
Head of London Trauma Network - 2019

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

“We get our information from the TV news”

THE CURRENT PROCESS:



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NGA RINGA RINGA AROHA

MANUAL TRIAGE

PROBLEMS

HOW MANY?

HOW SICK?

WHERE ARE THEY?

INCREASED COGNITIVE LOAD

REACTIVE TREATMENT AND TRANSPORT

PROBLEMS

TRANSPORT BY AMBULANCE, TAXI, PUBLIC, HELICOPTER OR SELF PRESENT

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MANUAL TRIAGE

PROBLEMS

- HOW MANY?
- HOW SICK?
- WHERE ARE THEY?
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REACTIVE TREATMENT AND TRANSPORT

PROBLEMS

TRANSPORT BY AMBULANCE, TAXI, PUBLIC, HELICOPTER OR SELF PRESENT

OTHER MEDICAL FACILITIES

OTHER MEDICAL FACILITIES

MULTI-AGENCY

OTHER SCENE OFFICERS

EMS

HOSPITALS

FIRE

POLICE

GOVERNMENT

PROBLEMS

HOW SOON ARE THEY ARRIVING?

WHERE ARE THEY GOING?

DIFFICULTY TRACKING

INACCURATE OR NO CRITICAL PATIENT DATA

WHAT SPECIALIST RESOURCES ARE NEEDED?

COMPLEX INTER-AGENCY COMMUNICATION

Chemical, Biological, Radiological, Nuclear Attacks

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Industrial Accidents

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Terrorist Attacks

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Cyber Attacks

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Crowd & Mass Gathering Incidents

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Natural Disasters

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AF8®

ALPINE FAULT MAGNITUDE 8

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Dr Jan. Bone

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