



**THE FUTURE OF
GLOBAL
DISASTER
RISK REDUCTION**

**Reducing the
Indirect Disaster-Related Deaths:
Evacuation Plans and Scientific Evidence**

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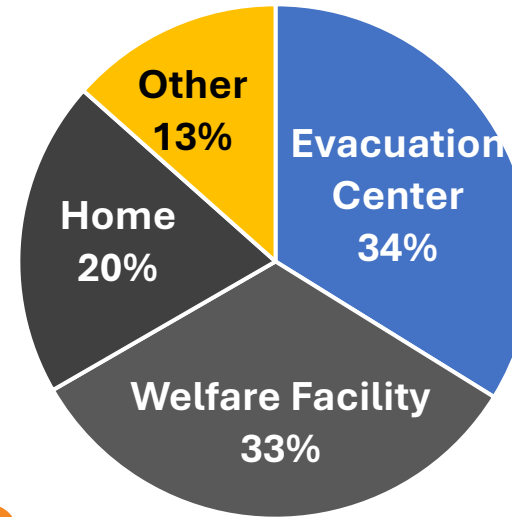
STRENGTHENING THE RESILIENCE of MEGACITIES THROUGH SCIENCE, TECHNOLOGY & INNOVATION

Indirect Disaster-Related Deaths (DRDs)

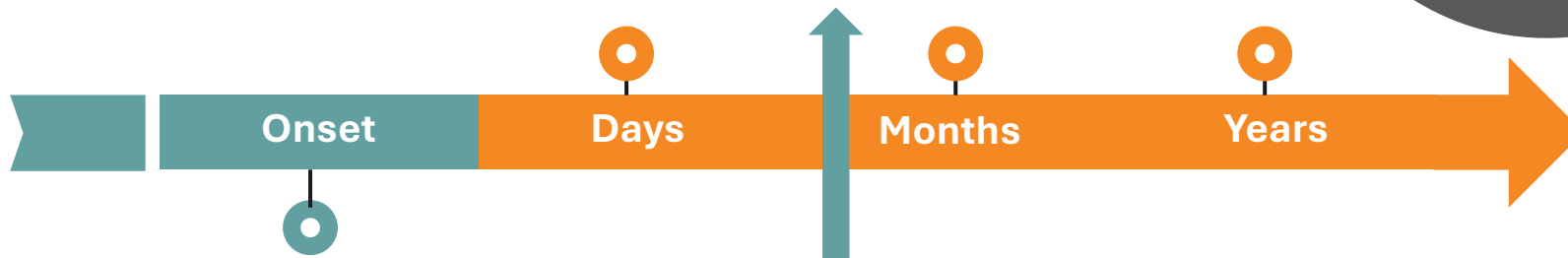
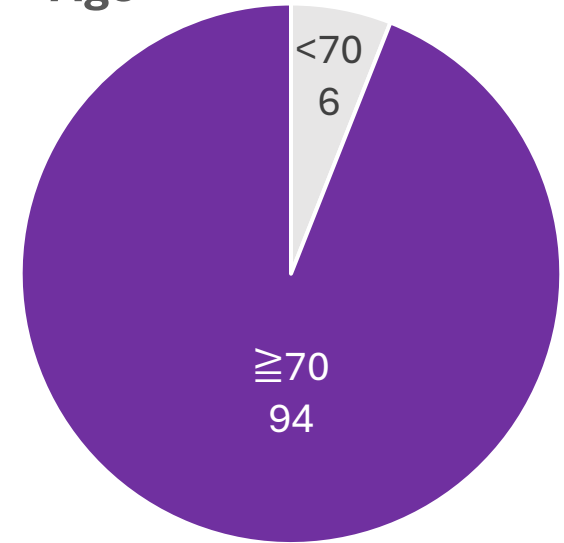
Indirect DRDs

Deaths by physical and mental exhaustion, **after surviving** the direct effect of hazards, including suicides or worsening of health conditions due to the **evacuation, relocation, disruption of healthcare service, and loss of property, livelihood, and the community.**

Place of Occurrence



Age



After Noto Eq. as of May 30, 2025
**Reviews and lawsuits are ongoing,
and new indirect DRDs are possible**

Direct DRDs

The national government will send a
Condolence Grant to support the bereaved
family when it is certified as “disaster-related”.

Deaths due to the physical exposure to
the hazards

Diverse Evacuation Plans for Dignity to Prevent Indirect DRD

Disaster medicine in a wide-area disaster

Resource <<< **Needs**

It is critical to promote

- **Proactive individual evacuation plan with diverse stakeholders**

Harmonize medical, public health, and welfare decision-making, considering the individual's will and dignity.
Formulate data-driven social understanding and consensus.

- **Strengthening and coordinating the alternative capabilities**

Ensure the food, lifelines, and their logistics to allow staying at the current residence, including evacuation at home and welfare facilities.

- **Supporting the caregivers, local health workforce, and relief aids**

Avoid long-term or secondary, tertiary evacuation that disrupts the families and human resources necessary for recovery, rehabilitation, and reconstruction

Scientific Evidence of Indirect DRDs

You cannot improve what you cannot measure

(Edward Deming)

Japan is the only country that measures the indirect DRDs.

- **Current statistics are limited by constraints.**
- **Scientific investigation is necessary to establish the standard description and risk of indirect DRD.**

There are no standard medical and scientific definitions. House damage does not correlate with the occurrence. Qualitative and quantitative analysis is needed to understand the risks. **After surviving** the direct effect of hazards, including suicides or worsening of health conditions due to the **evacuation, relocation, disruption of healthcare service, and loss of property, livelihood, and the community.**

- **Realization of data-driven comprehensive strategies**

A comprehensive strategy involving multi-sectoral stakeholders is necessary that takes the dignity of affected people into account to reverse the above-mentioned adverse effects.

Constraints

- > Application by the bereaved family
- > Required Documents
- > Reviewing Committee in local gov.
- > Budget

