ASM 2025
23-27 November 2025 • Gold Coast
Riding the wave of change

The most common trauma presentation

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Playbook

- Why:
  - incidence and trends
- How:
  - Causes
  - Consequences
  - Context
  - Consent
  - Capacity….and maybe conversations!

Why every ED physician must be falls expert

- In Australia, **falls are the leading cause of injury hospitalisations and injury deaths**. In 2023–24 there were ~248,000 fall-related hospitalisations, about **43% of all injury admissions**.
- Transport injuries are way behind that: ~65,000 hospitalisations (11%).
- In people 65+, falls absolutely dominate: in 2019–20, **77% of all injury hospitalisations** and **71% of injury deaths** in this age group were due to falls. Older Australians were **8× more likely to be hospitalised** and **68× more likely to die** from a fall than people aged 15–64.

Global Trends

Falls increasing in incidence – hospitalisations and deaths

Low and middle income countries currently hardest hit – especially those with less developed health care systems

Rural areas globally harder impact

Projections match the population ageing trends in Australia

npj | aging

Article

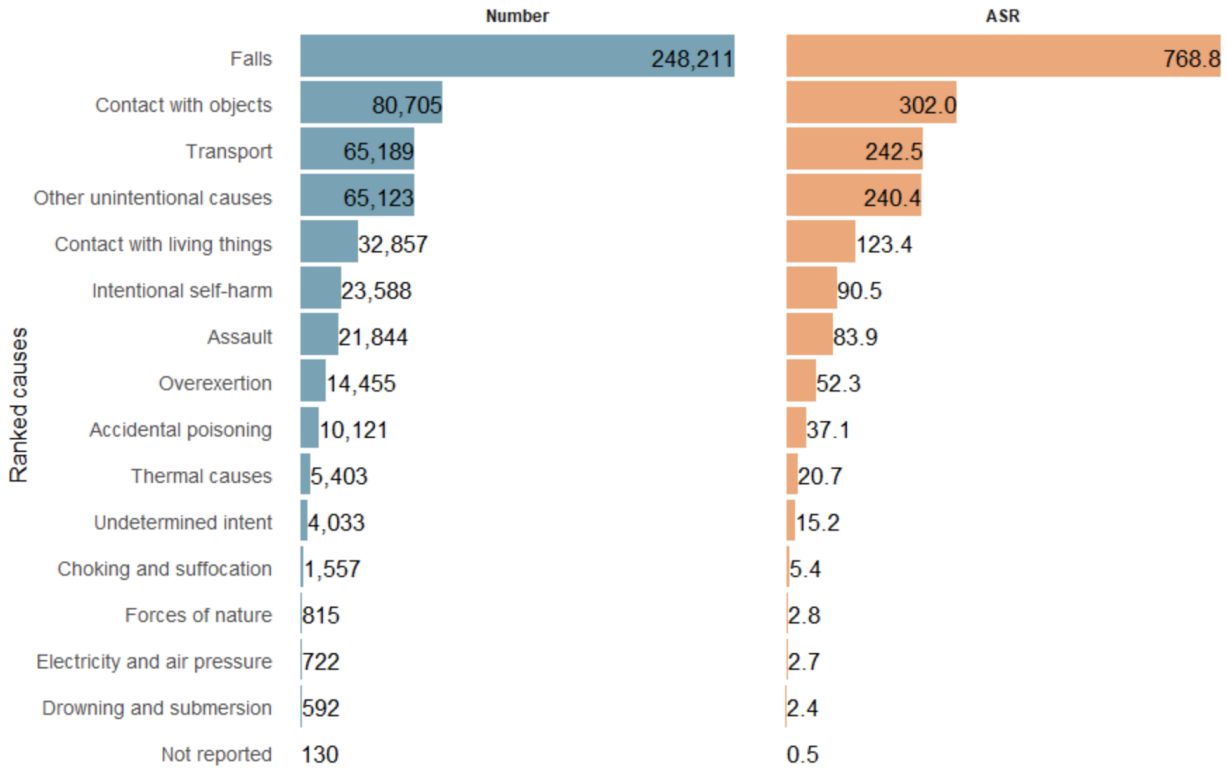
Published in partnership with the Japanese Society of Anti-Aging Medicine

https://doi.org/10.1038/s41514-025-00275-4

Global, regional, and national burden of falls among older adults: findings from the Global Burden of Disease Study 2021 and Projections to 2040

Yang Chen[1,4], Feifei Dai[2,4], Shulun Huang[1], Daoda Qi[1], Chengyi Peng[1], Aijia Zhang[1], Yuan Wang[3], Yan Gu[1] ✉ & Jingjing Guo[1] ✉

Figure 4: Number and age-standardised rate of hospitalisations by cause of injury, Australia, 2023–24

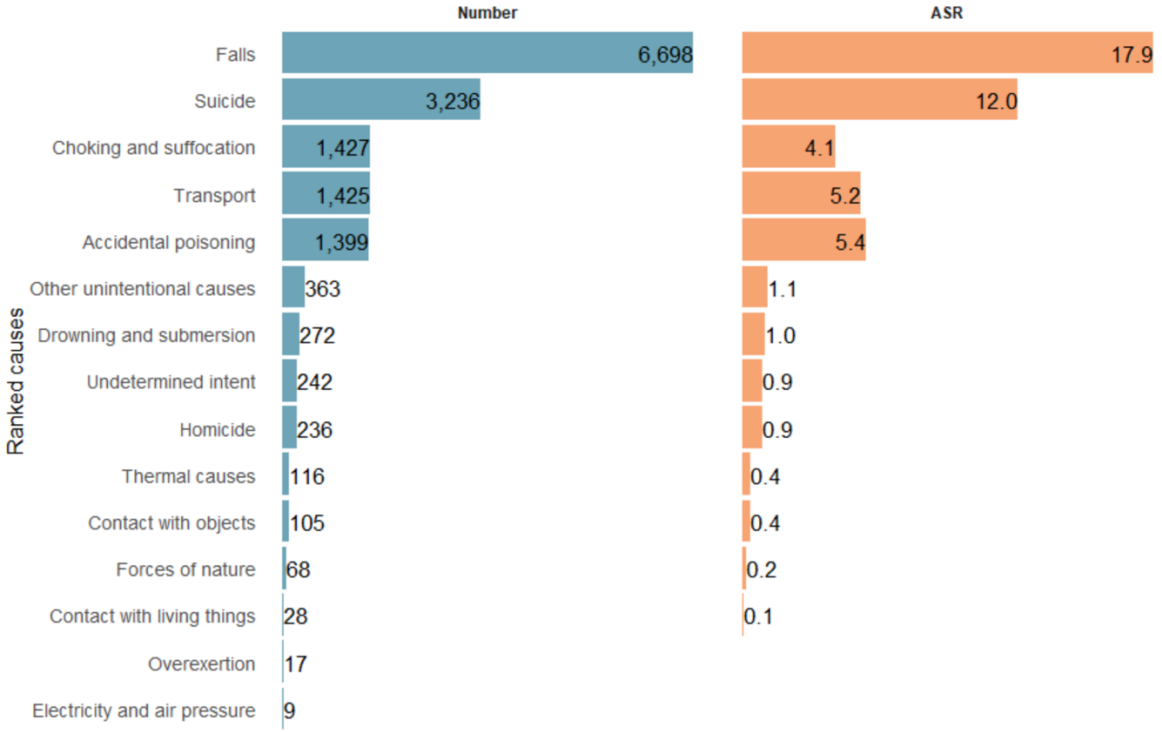


Notes:

1. Numbers and age-standardised rates of hospitalisations are represented by ranked rows.
2. Age-standardised rates are per 100,000 population.

Sources: AIHW National Hospital Morbidity Database and ABS National, state and territory population.

Figure 5: Number and age-standardised rate of injury deaths by cause of injury, Australia, 2022–23



Notes:

1. Numbers and age-standardised rates of deaths are represented by ranked rows.
2. Age-standardised rates are per 100,000 population.

Sources: AIHW National Mortality Database and ABS National, state and territory population.

For more detail, see Supplementary Data tables.

Mechanism of injury: not gunshots, not high-speed MVC

- From the Australia New Zealand Trauma Registry (ANZTR) 2022–23: among **severely injured** patients (ISS >12), mechanisms are mainly:
  - Australia: **44% transport-related, 39.2% falls, 95.6% blunt trauma, ~3% penetrating**.
  - New Zealand: **47.2% transport, 33.3% falls, 94.8% blunt trauma**.
- The ANZTR explicitly notes that **older people injured from low falls are now the predominant group experiencing major injury and death** in Australia and NZ.
- In Queensland, among people 65+, **same-level falls (trips, slips, stumbles) account for ~52% of fall-related hospitalisations** – i.e. mostly ground-level.

In our system: If you're not excellent at falls, you're not excellent at trauma!

The “5 Cs” framework

- **System 1 vs System 2** (Kahneman *Thinking, Fast and Slow*):
  - System 1: fast, automatic – “just a mechanical fall”.
  - System 2: slow, effortful – “what *exactly* caused this fall, and what does it mean in this person’s frailty trajectory?”
- Literature on “mechanical falls” shows:
  - The label is inconsistently used, not linked to a specific evaluation, and **does not predict outcomes or change work-up**.

The “5 Cs” framework

- **Cause** – active, hypothesis-driven search for all plausible causes
- **Consequence** – hands-on search for all injuries, new vs old
- **Context** – frailty, dementia, life trajectory, risk of terminal frailty event
- **Capacity** – decision- and context-specific, supported
- **Consent** – rights-based involvement in health decisions, even with dementia

***Cause**: moving beyond "mechanical fall"*

- What is the most likely *underlying* cause of this fall?
  - Have I considered integrative causes?
- Cause is not 'mechanical'. Cause is a series of small, explicit decisions: have I actively looked for syncope, stroke, infection, delirium, ACS, meds? If I can't say yes to each, I'm practising System 1 medicine.

***Consequence**: you won't find what you don't touch*

- Injury pattern should emerge from **three things together**:
  - **Get the story** – mechanism, point of impact, inability to mobilise, head strike, anticoagulation.
  - **Observe all parts of the body** – undress, inspect skin, swelling, deformity.
  - **Touch every part** – palpate spine, pelvis, ribs, long bones, hands/feet; compare bilaterally.

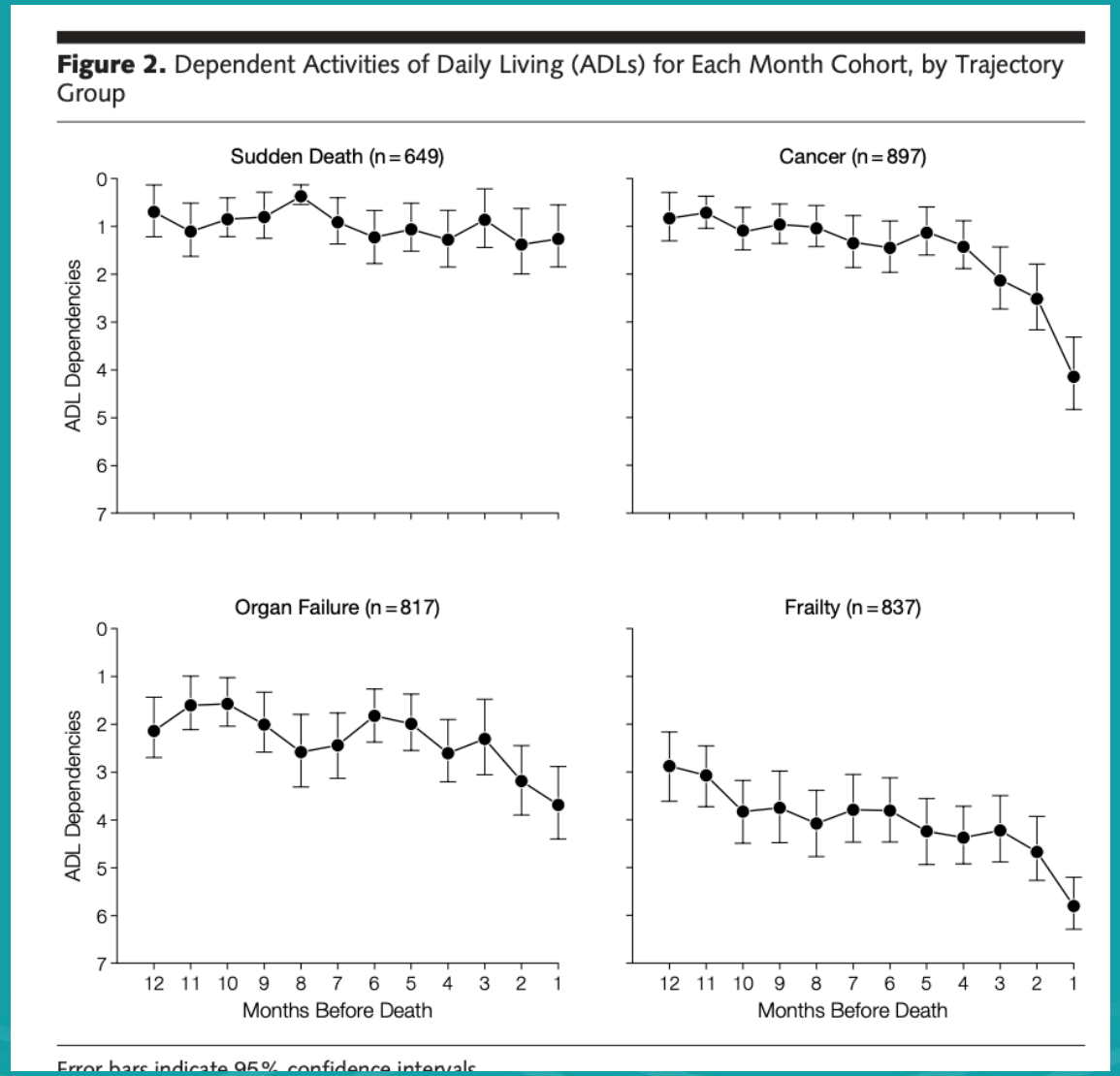
If you don't undress and palpate, you are guaranteeing a missed fracture. Consequence is the easy C conceptually, but it's hard because it takes time and touch

Context: Frailty as a continuum & trajectory

Has this person gone from **non-frail → frail abruptly** (e.g., after a stroke or illness)?

Or is this a **slow slide down the frailty slope**?

Does this fall signal we may be in the final year or two of life – a **terminal frailty event**?



Capacity: decision-specific, context-specific, presumed

- Presume capacity for *this* decision (e.g., CT head, admission vs home, surgery vs conservative).
- Ask: can the person **understand, retain, weigh and communicate** the relevant information with appropriate support?
- Use supporters (family, carers, registered supporters)

Consent: paired with capacity, rooted in rights

- *Consent: including the person, even with dementia, is a healthcare right*
  - Supported decision-making is backed by the UN Convention on the Rights of Persons with Disabilities and reflected in Australian law and policy.
  - Even when substitute decision-makers are involved, **it's still best practice to involve the person in conversations about their care** as far as practicable.

Falls as core trauma work: the 5 Cs in practice

- Falls (mostly ground-level) are the **leading cause of injury hospitalisation and death**, especially in older people; low falls now rival transport as causes of *major trauma* in AU/NZ.
- **How:** "Mechanical fall" is a **bias trap**; use the serial 5C framework instead.
  - **Cause:** Apply a **structured medical differential** every time – syncope, stroke, delirium, infection, meds, etc.
  - **Consequence:** You only find what you **look at and touch** – undress, observe, palpate, distinguish old vs new injuries.
  - **Context:** Think about the **frailty trajectory** – is this reversible frailty or a terminal frailty event? Use falls as a prompt for goals-of-care thinking.
  - **Capacity & Consent:** Capacity is **presumed, decision-specific, supportable**; consent is a **core right**, even in dementia.