Results The PAHO website includes all age group fatal drowning data for 45/53 countries and territories. Drowning is a top 5 cause of all deaths in 42/45 countries and territories, in at least one age group. Drowning is the lead cause of death in 15/45 nations, in at least one age group. The greatest burden of fatal drowning is children and youth. Fatal drowning rates are greatest in LMICs.

Conclusions Fatal Drowning is a significant public health issue in the WHO Region of the Americas/Pan American Health Organization. Drowning Prevention strategies should become priority public health interventions in all countries and territories, with a focus on children and youth.

Learning The WHO Region of the Americas/PAHO should develop a program for drowning prevention focused on proven interventions for high burden countries.

2B.002 SERIOUSLY GUYS? YOUNG MALES AND COASTAL DROWNING DEATHS IN AUSTRALIA

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10.1136/injuryprev-2021-safety.38

Males are consistently overrepresented in fatal coastal drowning incidents, with young males representing a significant proportion of these. This is often attributed to their greater participation and increased confidence levels which do not necessarily reflect abilities.

Using annual coastal safety surveys and the national coastal fatality database, this study examined characteristics of drowning deaths and current perceptions of coastal safety within this high-risk demographic. Inflated confidence levels of young males to engage in risk-taking behaviour was confirmed with survey respondents consistently considering themselves to be experienced enough to take risks during activities in comparison to the total adult population.

Since 2004, males aged between 16–39 account for 36% of all drowning deaths. In 2018–19, 44 drowning deaths were young males. Average fatality rate ratios revealed young males are twice as likely (2.05:1) to drown on our coast, particularly at rock/cliff and beach locations. Young males were more likely to drown while jumping, snorkelling, swimming and wading, with 58% of young male drowning victims reported to have little to no experience in the activity being undertaken at the time of death. Analyses revealed young males were twice as likely to drown on a public holiday and significantly more likely to have consumed alcohol or drugs (RR=1.3; CI:1.1–1.5) than other demographics.

These results highlight that the adventurous nature and overconfidence exhibited by young males puts them at significant risk of drowning and should be a target for future drowning prevention strategies on the Australian coast.

2B.003 WHAT MAKES A POPULATION 'HIGH-RISK' FOR DROWNING IN AUSTRALIA?

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10.1136/injuryprev-2021-safety.39

Background In Australia, people born overseas are considered at higher-risk of drowning. Common perceptions is that being from overseas (including tourists), with English as another language makes someone more vulnerable to drowning. The aims were to analyse drowning deaths of people born overseas, and to identify specific risk factors to better inform prevention strategies targeted to migrant populations.

Methods A total population analysis of all unintentional, drowning deaths over 10 years (2008/09–2017/18) of people born outside of Australia were included. Cases were extracted from the Royal Life Saving National Fatal Drowning Database, collated from the National Coronal Information System. Descriptive statistics, relative risk and crude drowning rates were calculated.

Results 794 people drowned, who were born overseas, accounting for 27% of total drowning deaths. 77% were men, 24% were aged 25–34 years. Three groups were identified: Australian residents (83%), overseas visitors (14%) and international students (4%). Differences in drowning rates were found when analysed by country of birth, and time in Australia e.g. new arrivals 0–5 years versus resident for 5–10 years, 10–20 years and 20 years+.

Conclusion These results identified that distinct sub-groups exist within the 'high-risk' population category, each with differing risk factors for drowning. These findings offer practical insights when devising effective drowning prevention policy and programs for specific groups. This study informed the Australian Water Safety Strategy 2030 area pertaining to 'high-risk' populations.

Learning Outcomes 'High-risk' populations for drowning are not homogenous and this should be taken into account when developing drowning prevention policies and strategies

2B.004 ANOTHER GENDER DATA GAP: WOMENS DROWNING IN NEW ZEALAND

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10.1136/injuryprev-2021-safety.40

Background There is currently a paucity of literature regarding female drowning worldwide. The majority of research on drowning discusses female drowning as a secondary topic to male drowning. Drowning fatalities are predominantly males in New Zealand which has potentially led to a lack of focus on female drowning. This research is the first of its kind in New Zealand.

Method This research first outlines the breadth and consequences of the gender data gap. Analysis of DrownBase (New Zealand's drowning data base) data from the last 40 years has been undertaken. This data analysis focused on trends in female drowning data over the last 40 years to identify the risk factors relating to female drowning and how they have changed.

Results Results show that the issue of female fatal and non-fatal drowning is a growing problem. Female drownings are rising in New Zealand, with 20% more fatalities and a 30% increase in non-fatal drownings in 2018 compared to the 2013–2017 five-year average. Female drowning differs to male drowning, in 2018 61% of female fatalities were a result of accidental immersions (in contrast to 35% of male fatalities).

Conclusion This research identifies key risk factors pertaining to female drowning and contributes to SDGs 3 good health and wellbeing and 5 gender equality. It has the potential to inform future drowning prevention interventions for females and the development of future research into the drivers of female drowning, both within New Zealand and globally.

2B.005 DYING TO HELP: FATAL BYSTANDER RESCUES IN AUSTRALIAN COASTAL ENVIRONMENTS

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Bystanders who drown attempting a rescue are becoming an increasingly important issue within drowning prevention. In Australia, most of these incidents occur in coastal waterways. This study characterises coastal bystander rescuer fatalities collated in the national coastal fatality database (2004–2019) to guide future public safety interventions involving bystander rescuers. Sixty-seven bystander rescuer fatalities in coastal waterways were reported during the 15-year period, an average of 4.5 per year, which is a significant proportion of the five fatalities previously reported across all Australian waterways.

Most coastal bystander rescuer fatality incidents occurred in New South Wales (49%), at beaches (64%), in regional or remote areas (71%), more than 1 km from the nearest lifesaving service (78%), during summer (45%), in the afternoon (72%), in the presence of rip currents (73%), and did not involve the use of flotation devices to assist rescue (97%). The majority of coastal bystander rescuer victims were Australian residents (88%) born in Australia/Oceania (68%), males (81%), aged between 30–44 years old (36%), were visitors to the location (55%), either family (69%) or friends (15%) of the rescuee(s), and were attempting to rescue someone younger than 18 years old (64%).

Our results suggest safety intervention approaches should target males, parents and carers visiting beach locations in regional locations and should focus on the importance of flotation devices when enacting a rescue and further educating visitors about the rip current hazard. Future research should examine the psychology of bystander rescue situations and evaluate the effectiveness of different safety intervention approaches.

2C – Falls, March 23, 2021

2C.001 TRENDS IN FALLS-RELATED INJURY HOSPITALISATIONS AND DEATHS AMONG ADULTS IN VICTORIA, AUSTRALIA

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Background In the Australian state of Victoria, rates of unintentional falls-related deaths and hospitalisations among community-dwelling older people living in their own homes are increasing. Despite the availability of evidence-based falls prevention interventions the rates are projected to keep rising with the ageing of the population.

Methods Retrospective quantitative data analysis was conducted of falls-related injury hospitalisations and deaths among community-dwelling older people in Victoria, for the period 2006 to 2018, captured by key datasets on deaths and hospitalisations available in Victoria from the Australian Bureau of Statistics (ABS), National Coronial Information System (NCIS) and the Victorian Agency for Health Information (VAHI). Data analysis includes temporal trends and descriptive statistics.

Results This presentation will share results of the data analysis. Highlights will include temporal trends in fall-related deaths and hospitalisations, stratified by age and sex, fall type, injury type and activity prior to fall-related injury.

Conclusions The burden of high and low falls across the adult life-course warrants increased government policy and investment in primary prevention of falls, and for efforts to begin earlier than at 65+ years of age.

Learning outcomes This presentation of the latest surveillance of the Victorian population falls-related injury will inform future government policy effort in the primary prevention of falls in the community. Information about the Victorian population may have relevance to other international ageing populations.

2C.002 GRAVITY CAN BE A REAL KILLJOY. FALL ACCIDENTS INVOLVING 0–4-YEAR OLD'S IN RESIDENCES

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10.1136/injuryprev-2021-safety.43

Background Fall accidents are responsible for about a quarter of all injuries and hospital treatments in Austria. Children in the age group of 0–4-year-olds undergo hospital medical examinations even more frequently due to accidents resulting from falls.

Methods An analysis was conducted of fall accidents suffered by 0–4-year-olds in residences, who were treated at the Department for Paediatric and Youth Surgery, by using the injury data base.

Results 4,709 accidents were identified as ‘falls at home’. In this group of 0–4-year-olds a peak could be observed during the first year of life, during which 28% of the falls occurred.

In the case of injuries, 18% were categorized as being medically serious injuries.

Thirty-nine percent of the falls could be categorized as falls from height. The couch in the living room was the most common piece of furniture from which falls occurred.

Conclusion In Austria, safety standards and laws are central components of human protection, which is why technical prevention will no longer be the central starting point for accident prevention work. In many cases, the behaviour of a child who is subject to psychomotor developmental conditions and/or the behaviour of an adult/parent is the effective starting point for safety work.