Purpose To review the outcomes of communities who have achieved designation as an international safe community over the 32-year period from 1986 to 2018.

Method An audit of the ISCCC database and website was undertaken. Any inconsistencies were checked for accuracy against the original designation application.

Results Since the safe community movement began in 1998 four hundred and three International Safe Communities have been designated. Data was available regarding 361 communities. The program has a high reach, 86 million people have been served by a safe community program that has achieved International Safe Community Designation. Forty-nine million of these are served by safe community programs whose certification remains active.

In 2018 there were 39 certifications (13 designations and 26 re-designations), covering a population of 7.1 million people.

Conclusion The International Safe Community movement has accomplished remarkable growth in the 30 years since it began in Sweden in the late 1980s. The program has achieved high reach. Four hundred and three International Safe Communities have been designated. Data was available regarding 361 communities. The program has a high reach, 86 million people have been designated by the end of 2018 with a population footprint of 86 million people.

EXPLORING POST-DISASTER HEALTH PRACTICE AMONG DISASTER-PRONE COMMUNITY IN SOUTHERN PART OF BANGLADESH

Background Aquatic disasters frequently affect Bangladesh. Most of these disasters occur in southern part of the country. A little is known about the post-disaster health seeking behaviors, management’s role regarding disaster resilience in disaster prone communities. This study explored health-seeking behaviors, disaster resilience mechanism associated with drowning events in coastal region of Bangladesh.

Methodology A qualitative study was conducted in Barishal division from October-November 2016 to collect the required information. 12 IDIs and 4 FGDs were conducted with disaster experienced men and women, community leaders and community level disaster support volunteers. NVIVO-11 was used to organize the data. Content and thematic analysis was performed.

Results Respondents mentioned distance between their households and emergency shelters as well as poor road infrastructure obstructed them going to emergency shelters during adverse weather. Shelters were potentially unsafe for women with poor infrastructure and remain overcrowded following any natural disasters. Community people had less faith in government and government systems for their unequal post-disaster relief distribution including their bribery and nepotism. Government and NGOs’ post-disaster relief was available for short-periods, even sporadically. In post-disaster health-seeking behavior related to drowning, people tried to apply their perception and knowledge they obtained from neighbors, elderly people. They followed traditional methods, advice from religious leader. People usually didn’t go health centers for long distance from their locality.

Conclusion and Learning Outcomes Findings of this study could be an information base to develop multi-sectoral drowning prevention plan in synchronization with the existing disaster preparedness action and ensuring post-disaster health care services.

2G – Poisoning/Chemical, March 23, 2021

SHOULD I REALLY SPRAY THAT! SAFETY CONCERNS OF HERBICIDES AND PESTICIDES
Helen Truscott*, 2Carol Wylie, 3John Pears, 4Richard Franklin, 5James Cook University, Townsville, Australia; 2Queensland Poisons Information Centre, South Brisbane, Australia; 3University of Queensland, South Brisbane, Australia

Abstract Herbicides and pesticides are commonly used in Queensland, with concentrates being severely toxic if ingested. Toxicity can be aggregate with the addition of surfactants (detergents).

Methods A systematic search of peer reviewed literature and retrospective review of the Queensland Poisons Information Centre (QPIC) data from 2015 to 2019 was conducted. Patient demographics, extent and type of exposure: accidental or non-accidental, route, initial symptoms, circumstances around exposure and subsequent treatment in hospital were analysed.

Results Each year, there are on average 35,000 calls to the QPIC, of which 1% involve herbicides and 3.4% pesticides. Common herbicides encountered in 2018 and 2019 include glyphosate (50%), bromoxynil and paraquat, with common pesticides including pyrethrins/pyrethroids (29%) and rodenticides (16%). Where gender was known, there were more males (52%) than females (40%) with the most common age group being 0 – 4 years, reflecting the unintentional nature of many exposures. On average, 30% of victims were already in a medical facility or advised to seek medical attention.

Conclusions Herbicides and pesticides, while intended for control of plants and pests, can also cause harm to humans, with many exposures resulting in medical intervention. Additional toxicity may result from products with multiple ingredients, affecting the advice given and medical treatment required.

SCOPEING REVIEW OF ACUTE POISONING OBSERVATIONAL STUDIES TO UNDERSTAND TOXICOEPIDEMIOLOGY IN AUSTRALIA
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Abstracts

Background We reviewed Australian observational studies on acute poisoning, using an epidemiological framework, to characterise epidemiological data reported on the host, exposure and environment over time. To identify opportunities for
methods and data source development for poisoning prevention.

**Methods**  Scoping review of peer-reviewed observational studies published between 1960 and 2019 reporting acute drug and chemical poisonings in a defined cohort within Australia using Embase, MEDLINE and Informit.

**Results**  We identified 11,038 articles and 394 were included. Almost half the studies had a population from a single city/region. Most studies focused on opioids (25%), paracetamol (9%) and amphetamines (8%). Age and sex (≥80%) were well reported. Ethnicity, geographical remoteness and setting of exposure were rarely reported (<5%). Individual substance was reported in two-thirds of studies but product, dose and route was rarely reported (<10%). No improvements in reporting were seen over time and few studies used linked data. Data sources included: coronial (29%), hospital medical records (23%), poisons centres (20%), toxicology units (20%), administrative mortality data (14%).

**Conclusions**  We found gaps in understanding of who was affected by poisoning and environmental information on where the exposure occurred. A comprehensive understanding of the agent responsible for poisoning is poorly understood due to code set limitations in datasets, except for a few substances. Even for those, limited information is available on the product, dose and route which has implications for control.

**Learning Outcomes**  Policymakers, data custodians and researchers in poisoning epidemiology should prioritise improvements in known deficiencies such as creating a national minimum dataset.

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**Abstracts**

**2G.003 FEND (FULL ENERGY, NO DRUGS), AN INNOVATIVE APPROACH TO YOUTH DRUG PREVENTION**

Jacqueline Burgess*, Tom Codere*. Preventum Initiative, Inc., Black Mountain, USA

**Context**  The recreational use of prescription medications (such as opioids and benzodiazepines) and illicit drugs (methamphetamine and illegally made fentanyl) amongst adolescents is increasing, so too are accidental teen overdose statistics. To address this issue we developed FEND (Full Energy, No Drugs), a targeted primary prevention tool for youth delivered via a smartphone app.

**Process**  Between August–November 2019, in Rhode Island, USA, we undertook a FEND pilot, targeting teens aged 14 to 19. The campaign sought to increase participants’ knowledge, attitudes and beliefs (KAB) around substance misuse, addiction and overdose, using pre and post-test surveys to determine effectiveness.

**Results**  A total of 1027 adolescents completed the baseline (pre-test) survey; 599 (58%) completed the post-test survey. Pre and post-test analysis showed increase KAB around perceived risks of substance use (P<0.001); recognizing overdose symptoms (P<0.001); overdose response (P<0.001); counterfeiit drugs and medication/alcohol mixing risks (P<0.001); awareness of drug dependence and addiction (P<0.001); and participants were more likely to talk with friends/family about drug risks (P<0.001). The percentage of correct answers between pre and post surveys increased significantly (P<0.001).

**Learning Outcomes**  These results and the information gathered demonstrates the efficacy of a gamified app to engage and inform youth about commonly misused prescription medications and illicit drugs. Given the high ownership of smartphones by young people globally, and the low cost and extensive reach of smartphone apps in delivering content to, and engaging with targeted populations, results from this pilot highlight potential for technology-driven drug prevention and public health campaigns in the future.

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**2G.004 P2/N95 V’S MASKS AS PROTECTION AGAINST PUBLIC HEALTH ISSUES: TIME FOR ACTION**

1Jane Whiteleaves*, 2Kate Cole, 3Peter Knott. 1University of Wollongong, Australia; 2Cole Health, Sydney, Australia; 3GCG, Australia

**Context**  There has been a surge in public demand over the 2019/2020 Australian summer to use respiratory protection against poor air quality from the extensive bushfires and more recently against the transmission of SARS-CoV-2.

**Analysis**  This demand has created several issues including:

1. Uncertified and non-fit-for-purpose products flooding the international marketplace via direct advertising;  
2. Insufficient information being available to support members of the public in how to use face masks correctly, further underpinned by frequent images of incorrect usage of face masks across popular media;  
3. Use of respiratory protection by sections of the general population for which respirators were not designed for i.e. children and those with pre-existing respiratory disorders. In the general population, the use of respirators designed for healthy adults may result in adverse effects on susceptible populations.  
4. Concerns that use of face masks are not appropriate for certain public health hazards, and that their use can actually increase the risk of exposure (Bin-Reza et al 2012, Huang and Morawska, 2019); and  
5. A severe shortage of approved products (P2/N95) for those at high risk such as firefighters and health care workers.

**Outcomes**  This presentation explores the different types of Respiratory Protection Devices and systematically reviews the scientific evidence of their efficacy against these Public Health respiratory hazards. Evidence-based recommendations are made and a novel infographic will be presented for use as a community engagement and education tool.

A call is also made for a publically available online register of approved products.

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**3A.001 PATTERN OF FATAL AND NON-FATAL ROAD TRAFFIC INJURIES (RTIS) IN BANGLADESH**


**Backgrounds**  WHO estimated that yearly RTIs cause 1.35 million deaths globally. Almost 90% of all RTI deaths occur in