

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/district. 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 codeset 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.

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

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

10.1136/injuryprev-2021-safety.60

**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 ( $P<0.001$ ); counterfeit 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.

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

<sup>1</sup>Jane Whitelaw\*, <sup>2</sup>Kate Cole, <sup>3</sup>Peter Knott. <sup>1</sup>*University of Wollongong, Australia*; <sup>2</sup>*Cole Health, Sydney, Australia*; <sup>3</sup>*GCG, Australia*

10.1136/injuryprev-2021-safety.61

**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.

## 3A – Road – Data, March 23, 2021

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

Abu Talab\*, Salim Mahmood Chowdhury, Aminur Rahman, Shafkat Hossain, Al-Amin Bhuiyan, Saidur Rahman Mashreky, Fazlur Rahman. *Centre For Injury Prevention and Research, Bangladesh, Dhaka, Bangladesh*

10.1136/injuryprev-2021-safety.62

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