1F – Emergency Services, March 22, 2021

1F.001 BEHAVIOURAL SCIENCE – IMPROVING FIREFIGHTER PARTICIPATION IN SAFETY VISITS

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Context Fire and Rescue New South Wales (FRNSW) mission is to be 'prepared for anything – to protect the irreplaceable'. Prevention and Education has been identified as a key organisational capability. FRNSW provides services across Prevention and Education, Fire, Rescue, Hazmat, Environmental Protection, Natural Disaster and Humanitarian Relief, Medical Response and Counter Terrorism to New South Wales 7.5 Million population.

Process Partnering with The Behavioural Architects, FRNSW embarked on a three-month project to understand the causes of low participation rates in its Home Fire Safety Checks program and what could be done to change behaviour. The Behavioural Architects travelled around NSW, visiting stations, attending home fire safety checks, observing the behaviour of firefighters and interviewing commanders to better understand what was preventing engagement at all levels of the workforce.

Analysis Using the insights and recommendations from the project, FRNSW completely relaunched the program at the start of the 2019/20 FY under the new name – Safety Visits. The relaunch of the program saw a total transformation in the way the program was delivered.

Outcomes Since its relaunch, an almost 60% increase in the monthly rate of delivery of the program has occurred from an average of 830 visits per month under the HFSC program, to a monthly delivery rate of over 1400 visits per month under the Safety Visits Program (despite the significant impact of the 2019/20 bushfires).

Learning Outcomes The use of a behavioural science lense can have a significant impact on understanding and overcoming the barriers to implementation of injury prevention programs.

1F.002 PRE-HOSPITAL CARE KNOWLEDGE AMONG FIRST RESPONDERS IN DELHI NATIONAL CAPITAL REGION, INDIA

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Background Despite many improvements, pre-hospital care is known to be inconsistent, unreliable or deficient in India that causes high mortality and morbidity in accident victims. Bystanders hesitate to provide first-aid due to multiple reasons. Bystanders and first aiders are not adequately trained to handle all aspects of trauma including extrication, evacuation, transfer, cardiopulmonary resuscitation, management of bleeding, and protection of the spine. Evidence says that improper pre-hospital care is the leading cause of Spinal Cord injury in developing countries as compared to the developed ones. The current study was conducted to gauge the knowledge of first-aid among first responders in Delhi NCR.

Materials and Methods Two separate surveys with closed ended questions were formulated for the general public and first aiders in English and Hindi. A sample of 511 general public respondents with no medical training, and first aiders (108 ambulance and 201 police personnel) completed the survey between February 2019-April 2019. Data were analyzed descriptively and comparisons were made across demographic variables for the general public. For first aiders, comparisons were made between ambulance and police personnel across all sub-domains.

Results The average scores for all general public respondents were below 40% in all domains. Differences across age and educational qualification were small, yet significant. Ambulance personnel scored better than police personnel. But overall, the scores are poor for all first aiders.

Conclusion Pre-hospital trauma care needs to be strengthened through improving knowledge and providing training to both the groups for essential life saving skills within the 'golden hour'.

1F.003 INNOVATIVE FIRE SAFETY PARTNERSHIPS

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Background In April, 2018, one of the UL Xplorlabs modules, Fire Forensics was adopted as a key resource in Cobb County, Georgia middle schools. UL Education and Outreach led a one-day workshop for middle-school teachers and fire fighters. Since then, we've led five workshops including teachers from twenty-five middle schools and seventy-five fire fighters and investigators. After the workshops, teachers lead the module with their students and the trained fire service personnel come into the classroom on lab days when students have open flames and on the days that the students solve the fire case in the module.

Methods We are currently conducting a mixed-methods research to understand the program outcomes for the students, teachers, and fire service. Data collection includes surveys and long narrative interviews of a random sample of participants. The goal of this study is to understand the outcomes for teachers, students, and the fire service after the workshops as this is becoming a model for working in fire safety education.

Results/Conclusions As of the submission deadline, the results and conclusions are not yet defined.

1F.004 COMMUNITY PARAMEDICINE: A NOVEL APPROACH TO PREVENTING EARLY LIFE VIOLENCE EXPOSURES

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Context Community paramedicine programs (i.e., non-emergency preventive care by emergency medical services personnel under the direction of a physician) offer a novel approach to improve the wellbeing of families with a heightened risk of adverse childhood experiences (ACEs). Community paramedics