women never had a mammogram or clinical breast examination, however they are willing to have a breast work-up when needed.

Prehospital Bio-event Detection: An Assessment of Syndromic Surveillance Systems in Australian Ambulance Services

Cameron Anderson
School of Medical and Health Sciences, Edith Cowan University, Joondalup/WA/Australia

Study/Objective: The objective of this research is to assess disease surveillance methods, used by Australian ambulance services, and provide a current picture of Australia's prehospital disease surveillance capability.

Background: The threat of bio-events, such as disease or bioterrorism, requires innovative surveillance methods to rapidly recognize novel and obscure threats, permitting early implementation of measures to limit the spread of disease. Ambulance call and dispatch data are enticing, due to their immediacy, geographic specificity, and reach into the community. However, implementing the data into functioning surveillance systems has proven problematic, due to the broad, non-specific nature of ambulance call categorization.

Methods: Each of the eight emergency ambulance services in Australia were invited to participate in an interview to establish the history, utility, and learnings from the use of call data for disease surveillance. Qualitative analysis sought to identify common issues and themes across the country.

Results: One Australian ambulance service, the Ambulance Service of New South Wales, uses its data for background surveillance within a surveillance system run by the New South Wales Ministry of Health, which encompasses several different data sources. All ambulance services participating in this research have identified the ability to undertake active surveillance during known emergencies. However, many inconsistencies were noted as to whether screening should be implemented, which callers should be screened, and what questions should be asked.

Conclusion: The potential for real-time, ambulance-based disease surveillance in Australia exists. However, at this point in time, none of the Australian ambulance services involved in this research currently conduct real-time surveillance. With one exception, no services routinely perform surveillance at all; nor were any plans identified to start doing so. All services have the ability to undertake disease screening during known emergencies; but how can these be made more consistent and reliable as an "all-hazards" early warning system?

The Burden of Matatu Bus Crashes in Kenya

Isaac M. Botchey Jr[1], Yuen W. Hung[1], Amber Mehmood[1], Abdulgafoor Bachani[1], Saidi Hassan[2], Adnan A. Hyder[1]
1. Johns Hopkins International Injury Research Unit, Johns Hopkins Bloomberg School of Public Health, Baltimore/MD/United States of America
2. Department Of Anatomy, School Of Medicine, University of Nairobi, Nairobi/Kenya

Study/Objective: To describe the burden of Matatu Crashes in Kenya using multi-site injury surveillance data.

Background: Road Traffic Crashes (RTCs) are estimated to cause 1.3 million deaths worldwide each year. In Kenya, this problem is particularly significant and matatus are thought to be frequently involved. Matatus are 14-seater mini-buses responsible for transporting 12 million commuters daily in Kenya.

Methods: Electronic-based trauma registries were established at five referral hospitals in Kenya: Kenyatta National, Thika Level 5, Naivasha District, Machakos Level 5 and Meru Level 5. Information on the mechanism of injury, injury severity, patient outcomes, and patterns of care (prehospital and hospital-based) was collected.

Results: The total number of presenting trauma patients was 24,014. Road traffic injuries accounted for 41.7% of all presenting trauma patients. Matatus accounted for 20.4% of all RTCs. Despite the high occurrence, the injury severity of matatu crash victims was significantly less than other road traffic injuries ($p < 0.001$). 68.7% of matatu crash victims were discharged directly from the Accident & Emergency Ward, which is significantly higher than the overall patient discharge rate ($p < 0.001$). Of admitted patients, 56.7% suffered from a lower extremity injury. Seat belt use was significantly lower among matatu crash victims, when compared to other RTCs where seatbelt use was possible ($p < 0.001$).

Conclusion: Matatus are already highly regulated and continue to be the focus of many road safety policies in Kenya. Accident & Emergency wards are burdened with minor injuries of matatu victims, predominantly involving lower extremities. Safe road practices among drivers and passengers can reduce this burden.

Influenza-Like Illness and Gastrointestinal Illness: Surveillance Using a Novel Online Bio Surveillance System in Child Care Centers

Sarah Ewing[1], Jim Cranford[2], Andrew N. Hashikawa[2]
1. University of Michigan Medical School, Ann Arbor/United States of America
2. Department Of Emergency Medicine, University of Michigan, Ann Arbor/MI/United States of America

Study/Objective: To describe the capability of a novel, online, child care center bio surveillance system (*sickchildcare.org*) to report pediatric Influenza-Like Illness (ILI) and Gastrointestinal (GI) illness outbreaks compared to the state surveillance system.

Background: Bio surveillance is critical for early detection of disease outbreaks and resource mobilization. Children in child care centers are frequently sick and first to become ill. We created a free, web-based surveillance system (*sickchildcare.org* – SCC) for child care centers to report sick children. In comparison, the state's surveillance system (Michigan Care Improvement Registry (MCIR)) uses traditional grade school and hospital system reports. Data from *sickchildcare.org* has not been compared to the state's surveillance system.