clinical impressions, glycemic issues (OR 4.8; 99.9% CI 3.9-5.7) and wellness checks (OR 6.5; 99.9% CI 5.7-7.3) are more likely to have a non-transport. Non-transports are more likely at a detention facility (OR 4.1; 99.9% CI 3.25.1) or a roadway (OR 2.4; 99.9% CI 2.1-2.8). 5.6% (n = 798/14094) of non-transport patients were classified as a potentially adverse non-transport. Conclusion: This study demonstrated that a significant portion of patients (18.9%) had a non-transport outcome, but only a small percentage (5.6%) were considered potentially adverse. The results of this study provide timely information to policy makers and healthcare practitioners on the scope of this issue, and suggest potential directions for future study and clinical decision making.

Keywords: non-transport, emergency medical services (EMS), transport

LO020
Obstacle course runs: review of acquired injuries and illnesses at a series of Canadian events (RACE)
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Introduction: The growing popularity of obstacle course runs (OCRs) has led to significant concerns regarding their safety. The influx of injuries and illnesses in rural areas where OCRs are often held can impose a large burden on first responders, Emergency Medical Services (EMS) and local Emergency Departments. Literature concerning these events is minimal and mostly consists of media reports. Recognizing the lack of epidemiologic data, we sought to accurately determine the patterns and frequency of injuries and illnesses that occur at OCRs, the treatments required, and what proportion require further medical care or transfer to hospital. Methods: Data were extracted from medical charts completed for all patients presenting to the on-site medical team at OCR events across Canada from May to August, 2015. Frequency and patterns of injuries and illnesses were determined as well as treatments and disposition. There were 45 285 OCR participants in 8 events. There were 572 total patient contacts and 557 patients were included in the study. 15 patients were excluded because they were not race participants. Results: Less than 2% of participants at any event required on-site medical care. 11 patients (1.97%) required transfer to hospital by EMS. The majority of injuries were musculoskeletal in nature (74.71%). 495 patients (88.87%) returned to the event with no need for further medical care. The majority of treatments could be provided with prehospital, sports medicine equipment. Of treatments could be provided with prehospital, sports medicine equipment. returned to the event with no need for further medical care. The majority of treatments could be provided with prehospital, sports medicine equipment. 495 patients (88.87%) returned to the event with no need for further medical care. The majority of treatments could be provided with prehospital, sports medicine equipment. Results: Less than 2% of participants at any event required on-site medical care. 11 patients (1.97%) required transfer to hospital by EMS. The majority of injuries were musculoskeletal in nature (74.71%). 495 patients (88.87%) returned to the event with no need for further medical care. The majority of treatments could be provided with prehospital, sports medicine equipment. returned to the event with no need for further medical care. The majority of treatments could be provided with prehospital, sports medicine equipment. Conclusion: This study demonstrated that a series of Canadian events (RACE) is a critical area for further study and clinical decision making.

Keywords: non-transport, emergency medical services (EMS), transport

LO022
Incidence and impact measurement of delirium induced by ED stay - INDEED
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Introduction: Delirium is a dreadful complication in seniors’ acute care. Many studies are available on the incidence of delirium, however ED-induced delirium is far less studied. We aim to evaluate the incidence and impact of ED-induced delirium among older non-delirious admitted ED patients who have prolonged ED stays (≥ 8 hours). Methods: This prospective INDEED study phase 1 included patients recruited from 4 Canadian EDs. Inclusion criteria: 1) Patients aged 65 and over; 2) ED stay ≥ 8 hours; 3) Patient is admitted to the hospital; 4) Patient is non-delirious upon arrival and at the end of the first 8 hours; 5) Independent or semi-independent patient. Eligible patients were assessed by a research assistant after an 8 hour exposure to the ED and evaluated twice a day up to 24h after ward admission. Patients’ functional and cognitive status were assessed using validated OARS and TICS-m tools. The Confusion Assessment Method was used to detect incident delirium. Hospital length of stays (LOS) were obtained. Univariate and multivariate analyses were conducted to evaluate outcomes. Results: Of the 380 patients prospectively followed, mean age was 76.5 (± 8.9), male represent 50% and 16.5% very old seniors (≥ 85 y.o.). The overall incidence of ED-induced delirium was 8.4%. Distribution by the 4 sites was: 0%, 13.8%, 5.5% & 13.8%. The mean ED LOS varied from 29 to 48 hours. The mean hospital LOS was increased by 6.1 days in the delirious patients compared to non-delirious patient (p < 0.05). Increase mean hospital LOS distribution by site was by: 6.9, 8.5, 4.3 and 5.2 days for the ED-induced delirium patients. Conclusion: ED-induced delirium was recorded in nearly one senior out of ten after a minimal 8 hour exposure in the ED environment.