Objectives: (1) To calculate rates for maxillofacial (MF) injury-related visits in emergency departments (EDs) and hospitals in Ontario; (2) To investigate socio-demographic distribution of MF injuries; (3) To identify common causes for MF injuries.

Methods: An 8-year retrospective study design was implemented. Two datasets were used: Discharge Abstract Database and National Ambulatory Care Reporting System. Color-coded maps were created using ArcGIS.

Results: From 2004 to 2012 in Ontario, 1,457,990 ED visits and 41,057 hospitalizations due to MF injuries were registered. MF injuries are most frequent in males and occur mainly in evenings (7:00 to 9:00 pm) and weekends. Higher rates of MF injury are seen in rural areas and low-income neighborhoods. The leading cause of MF injuries is falls.

Conclusion: 3 out of 100 ED visits and 1 out of 200 hospitalizations were caused by MF injury. Male youth and female older people suffered high rates of MF injury.