

## ***San Francisco's Transportation-related Injury Surveillance System***

### **A Centralized, Comprehensive Citywide Injury Data Resource for Vision Zero**

The San Francisco Department of Public Health with the Zuckerberg San Francisco General Hospital and Trauma Center (ZSFG) is working with multiple city agencies to develop a comprehensive Transportation-related Injury Surveillance System to conduct accurate, coordinated and timely monitoring of transportation-related injuries and deaths in support of safety project prioritization, evaluation, and monitoring for the City's Vision Zero policy.<sup>1</sup> This system will gather and link existing transportation-related injury and fatality data collected by City and County of San Francisco agencies (including police reports, hospitalization, emergency medical service, and Medical Examiner's Office data) into a comprehensive database to provide a more complete picture of transportation-related injuries occurring in the city. The creation of this data system will vastly expand the City's capacity to understand the geographic distribution, causes, costs, and consequences of transportation-related injuries in San Francisco. The system will provide data to City agencies and the public to inform Vision Zero's coordinated efforts to reduce preventable injuries and eliminate deaths on our City's streets.



### **The Need for more Complete and Timely Data**

Collisions resulting in human injury or death in our transportation system –to people walking, biking, driving or taking transit - require responses from many City agencies including the SF Police Department, ZSFG, SF Fire Department, SF Municipal Transportation Agency, and SF Department of Emergency Management. To date, the City has largely relied on police-recorded collision reports as the primary data source of injury and death data. These reports are submitted to the state and data entered into the Statewide Integrated Traffic Records System (SWITRS) managed by the California Highway Patrol, which has recently had up to a two-year lag in providing data back to California's cities and counties. Research comparing police data reported in SWITRS and ZSFG data found that police records did not include approximately 20% of pedestrian injuries<sup>2</sup> and 25% of cyclist injuries<sup>3</sup> seen at ZSFG. Rich data is being collected by multiple City agencies regarding the circumstances, causes and consequences of transportation-related injury in San Francisco, but to date there has not been a system routinely linking and analyzing this data and making the findings available to responsible agencies to inform targeted injury prevention efforts. These data lags and gaps highlight the need for a formal coordinated surveillance system that integrates data from all relevant transportation-related injury data sources in San Francisco to allow for timely and accurate analysis of injuries to inform monitoring, evaluation and targeted initiatives in support of Vision Zero.



<sup>1</sup> Vision Zero is San Francisco's policy and commitment to eliminate traffic deaths on our streets by 2024; for more information visit [VisionZeroSF.org](http://VisionZeroSF.org).

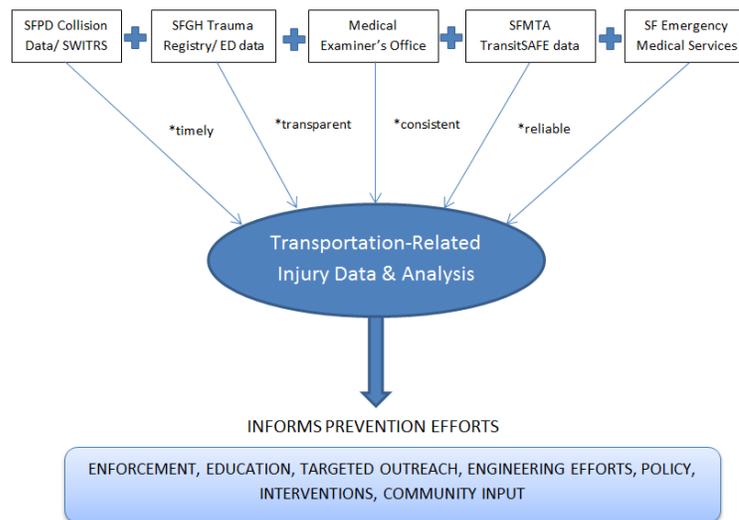
<sup>2</sup> Sciortino et al. 2005. San Francisco pedestrian injury surveillance: Mapping, under-reporting, and injury severity in police and hospital records. *Accident Analysis and Prevention*. 37: 1102–1113.

<sup>3</sup> Lopez et al. 2012. Using trauma center data to identify missed bicycle injuries and their associated costs. *J Trauma Acute Care Surg*. 73(6): 1602–1606.

### Benefits of a Comprehensive and Coordinated System

The development of a comprehensive, inter-agency data system of transportation-related injuries and deaths has multiple potential benefits to inform monitoring, evaluation and analysis for Vision Zero initiatives, including:

- More **timely and comprehensive data** - including injuries not included in police-reported data - to inform targeted safety projects
- More **consistent data from year to year and across agencies** with improved consistency in data management, definitions and analysis over time
- Increased **transparency and accessibility** of data to city agencies and community stakeholders – including through datasharing of injury and death data in TransBASESF.org, an open data resource for transportation safety data created by SFDPH



### Progress and Next Steps

Inter-agency data sharing and collaboration is at the core of this system. SFDPH has a full-time epidemiologist dedicated to developing this system, funded through a work order with the SF Municipal Transportation Agency. SFDPH has established multiple data-sharing agreements with city agencies to obtain injury and death data for this system on a routine basis and will continue to integrate relevant injury data streams to the surveillance system. In monitoring progress of Vision Zero, a key component of the Transportation-related injury surveillance system is accurate and timely reporting of traffic fatalities, which has been successfully implemented and institutionalized in 2015 as outlined in San Francisco Vision Zero [Traffic Fatality Protocol](#). As indicated in the protocol, on a monthly basis, representatives from SFPD, SFMTA, and SFDPH, meet to reconcile the previous month’s traffic deaths utilizing Medical Examiner’s and SFPD data. This coordinated method was recently expanded to track severe traffic injuries. The SFDPH Epidemiologist is also working to develop universal data validation and completeness evaluation standards for each unique dataset to ensure maximized linkage between datasets and thorough de-duplication of records. A pilot of the system was completed in Winter 2016 and is now being analyzed and summarized for use for Vision Zero prioritization and analyses as well as publication and presentation.

### CONTACT

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