SAN FRANCISCO'S VISION ZERO HIGH INJURY NETWORK: 2017 UPDATE

IDENTIFYING THE 13% OF STREETS THAT ACCOUNT FOR 75% OF ALL SEVERE AND FATAL INJURIES

San Francisco adopted Vision Zero as City policy in 2014, with the goal of zero traffic deaths for all modes, including people in motor vehicles, walking, and cycling. In support of Vision Zero, the Department of Public Health (SFDPH) has updated the Vision Zero High Injury Network, a corridor-level analysis that informs transportation injury prevention initiatives and investments to save lives and reduce injury severity.

Initially released in 2015, the 2017 Network update includes key data enhancements that provide the most comprehensive analysis San Francisco has had to date with respect to the location of severe and fatal injuries, which will help the City be more targeted in Vision Zero investments and identifies some locations previously not on the Network. San Francisco is the first city in the country to use mapped hospital data along with police injury data to analyze spatial patterns of severe and fatal injuries in support of Vision Zero.

2017 VISION ZERO HIGH INJURY NETWORK (2013-2015 SFPD/ZSFG)

13% of the city's street miles

75% of all severe and fatal injuries

77% of pedestrian severe and fatal injuries

71% of cyclist severe and fatal injuries

75% of vehicle severe and fatal injuries

61% of all transportation-related injuries

N = 1,494 severe and fatal transportation-related injuries.
SFPD = San Francisco Police Department collision reports, 2013-2015.
ZSFG = Zuckerberg San Francisco General Hospital data linked to Emergency Medical Services data, 2013-2015.

VISION ZERO SF

POPULATION HEALTH DIVISION
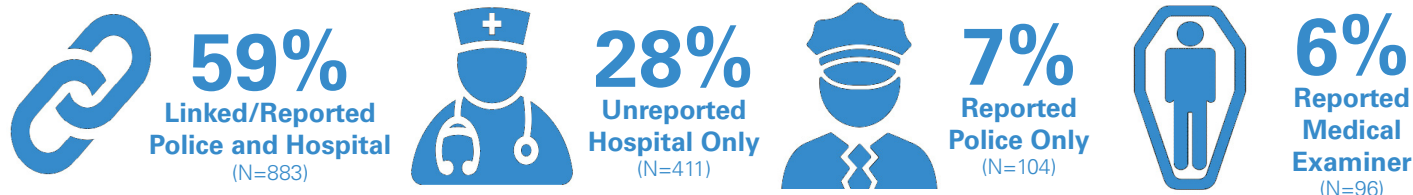SAN FRANCISCO DEPARTMENT OF PUBLIC HEALTH

MORE TIMELY POLICE DATA + NEW HOSPITAL AND AMBULANCE DATA

In 2016, SFDPH in conjunction with the Zuckerberg San Francisco General Hospital and Trauma Center (ZSFG), the only level-one trauma center in San Francisco, completed a comprehensive Transportation-related Injury Surveillance System (TISS) to conduct more accurate, coordinated and timely monitoring of transportation-related injuries and deaths. TISS probabilistically links existing transportation-related injury and fatality data collected by City and County of San Francisco agencies into one comprehensive database. This includes ZSFG, ambulance, Medical Examiner, and police data from SFPD's Crossroads Software Traffic Collision Database System, a software program for collision report data input and management that supports more timely collision reporting. This network update utilized the new TISS data.

OVER 400 PEOPLE WITH SEVERE INJURIES TREATED AT ZSFG BUT NOT IN SFPD COLLISION REPORTS FOR 2013-2015 ARE NOW INCLUDED IN THE NETWORK ANALYSIS

Utilizing data from TISS means capturing more traffic injuries. TISS includes Emergency Medical Service (EMS) data from King-American Ambulance Company, American Medical Response, and San Francisco Fire Department Emergency Medical Services Agency, to identify locations of unreported traffic injuries – people treated at the hospital with injuries not reported to SFPD. From 2013-2015, TISS identified 411 severe injuries that were transported by ambulance to the hospital that were not in SFPD records[1]. The new TISS data helps ensure that these severe injuries identified in the hospital dataset are included in analyses to inform injury prevention efforts in support of Vision Zero.

SEVERE AND FATAL INJURY DATA BY SOURCE (2013-2015)

59%
Linked/Reported
Police and Hospital
(N=883)

28%
Unreported
Hospital Only
(N=411)

7%
Reported
Police Only
(N=104)

6%
Reported
Medical
Examiner
(N=96)

INJURY SEVERITY IS NOW BASED ON MEDICAL ASSESSMENT WHEN POSSIBLE

A benefit of utilizing TISS linked data is that injury severity can be updated to reflect a more accurate injury outcome as determined by ZSFG medical staff. Police assessment of injury severity is based on an officer's primarily visual assessment of a victim at the scene of the collision while hospital data provides a clinical assessment of collision victim's injury severity. When possible, the Network update determined injury severity using hospital injury data informed by previously established guidelines including those used by the American College of Surgeons, the National Trauma Data Bank, the California Department of Public Health, and the World Health Organization. A total of 1,494 severe and fatal injuries occuring between 2013-2015 were identified and mapped for the analysis using the TISS dataset.

FOCUS ON THE MOST SEVERE OUTCOMES TO SAVE LIVES, REDUCE INJURY, AND ELIMINATE TRAFFIC DEATHS

SFDPH utilized the new TISS dataset to update the network to better align with the goal of Vision Zero: eliminating all traffic fatalities and reducing severe injuries. The updated network has been refocused exclusively on severe and fatal traffic-related injuries from 2013 to 2015 using the new comprehensive TISS data.

FOR MORE INFORMATION:

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For more information about Vision Zero efforts in San Francisco, please visit www.visionzerosf.org

[1]Potential reasons injuries not being reported in SFPD records include individuals choosing not to contact the police, police not responding to the scene, or police reporting by another agency.