

SAN FRANCISCO WHOLE PERSON CARE

# Homeless Mortality in San Francisco

Opportunities for Prevention

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Health Commission Feb 19 2019 – Background materials



## What this work tells us

- The number of people experiencing homelessness who died in San Francisco from 2016 to 2018 based on extensive case review of medical examiner reports.
- Who these people were, and what interactions they had with health and social services prior to their deaths.
- The most common causes and locations of death among people experiencing homelessness in San Francisco.

## What this work does not tell us

- What proportion of these deaths are attributable to homelessness itself
- The rate of deaths among people experiencing homelessness relative to the general population of San Francisco
- The number of homeless deaths in San Francisco that were not medical examiner cases

## Opportunities

- Inform clinical practice and ongoing SFDPH initiatives
- Generate ideas for system-level efforts to prevent homeless deaths
- Respond to deaths in real time and monitor trends over time
- In conjunction with other SFDPH data holdings, use this information to develop interagency prioritization process for individuals experiencing homelessness.

# Key Findings

- Homeless deaths steady during time period 2016-2018 and likely unchanged compared to 1990s.
- High prevalence of alcohol use and overlap with high service utilizer population.
- High prevalence of methamphetamine use and overlap with criminal justice-involved population, high users of medical and psychiatric emergency services.
- High prevalence of opioid overdose but less than would be expected considering national trends over same time period.
- High prevalence of violence and other trauma.
- Role of shelter: annual deaths relative to other cities

# Response

- Continue and enhance SFDPH response to opioid overdose epidemic
- Methamphetamine task force and other clinical and population health responses to methamphetamine use
- Evaluation and improvement of system of care for individuals with severe alcohol use disorder
- Incorporate homelessness as risk that may need specific preventive strategies into SFDPH efforts in violence and injury prevention
- Support intensive efforts to reduce unsheltered homeless

# Methodology

## Methodology

### HOW THIS WORK DIFFERS FROM PREVIOUS COUNTS OF HOMELESS DEATHS

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- Annuals counts of homeless deaths in San Francisco typically limited to “No Fixed Address” cases
- This study also includes cases where homelessness can be confirmed through other data sources
- Inclusion of additional cases provides a more complete picture of deaths among individuals experiencing homelessness in San Francisco.
- Does not indicate that there has been an increase in homeless deaths.

## Methodology

### DATA SOURCES

#### OFFICE OF THE CHIEF MEDICAL EXAMINER (OCME)

The OCME's responsibilities include deaths from:

- Accident or injury
- Potential homicides or suicides
- Solitary deaths (body found)
- Physician unsure of cause of death
- Poisoning (including drugs)
- Deaths related to suspected criminal activity
- Deaths of unidentified individuals
- Indigent (unclaimed) cases

Cases forwarded to Street Medicine include: No Fixed Address, Indigent, or other suspected homeless based on circumstances

#### COORDINATED CARE MANAGEMENT SYSTEM (CCMS)

San Francisco Department of Public Health data set

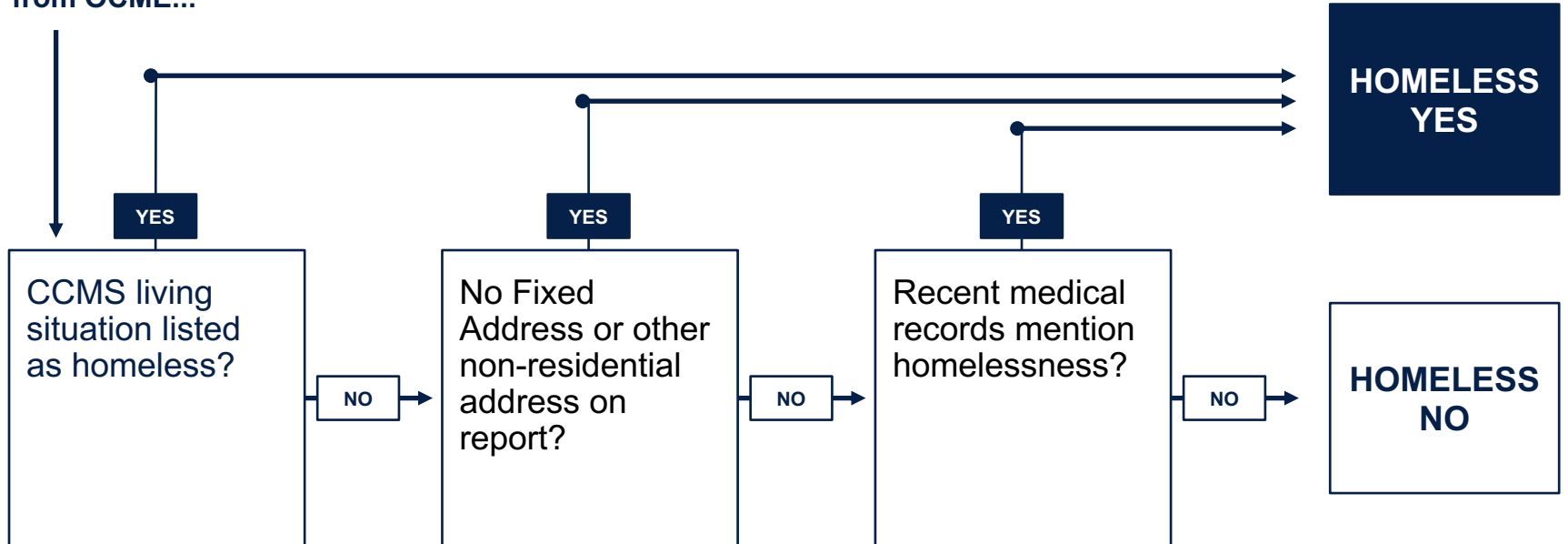
CCMS is made up of citywide health and social service data for homeless individuals cared for by the DPH and the Department of Homelessness and Supportive Housing.



# Methodology

## INCLUSION CRITERIA

Record received from OCME...



# Methodology

## CASE REVIEW PROCESS

**1.**

**Initial report  
from OCME**

Identifiers, date and location  
of death

Jan 1 2016 – Dec 31 2018  
n=390

**2.**

**Final report  
from OCME**

Cause and manner of death,  
autopsy and toxicology reports

Jan 1 2016 – ~Dec 1 2017  
n=215 (final reports)  
n=168 (toxicology reports)

**3.**

**Linked to  
CCMS**

Demographics, diagnostic  
codes and service utilization

Jan 1 2016 – July 31 2018  
n=340

# Demographics

## Demographics

### SAN FRANCISCO HOMELESS DEATHS 2016 – 2018

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#### ANNUAL TOTALS

2016: **128**

2017: **128**

2018: **135\***

*\*Deaths in the final days of 2018 may not be reported until early 2019*

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#### CCMS DATA

11% of cases had no CCMS records  
(had not used SF health or social services  
prior to death)

# Demographics

## GENDER, RACE/ETHNICITY, AND AGE

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### GENDER

**82%** of cases were **male**, **17%** female, **<1%** transgender

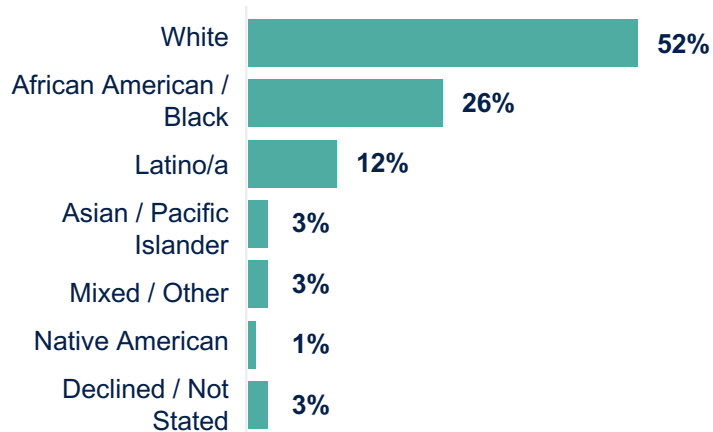
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### AGE

Average age of **51** (*min=21, max=86*)

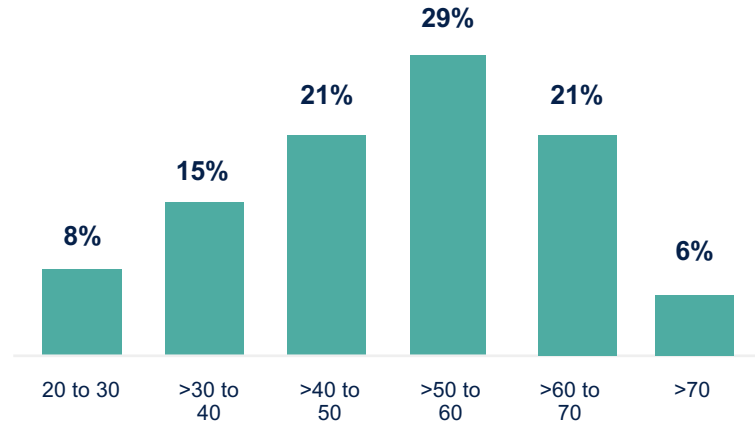
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### RACE AND ETHNICITY



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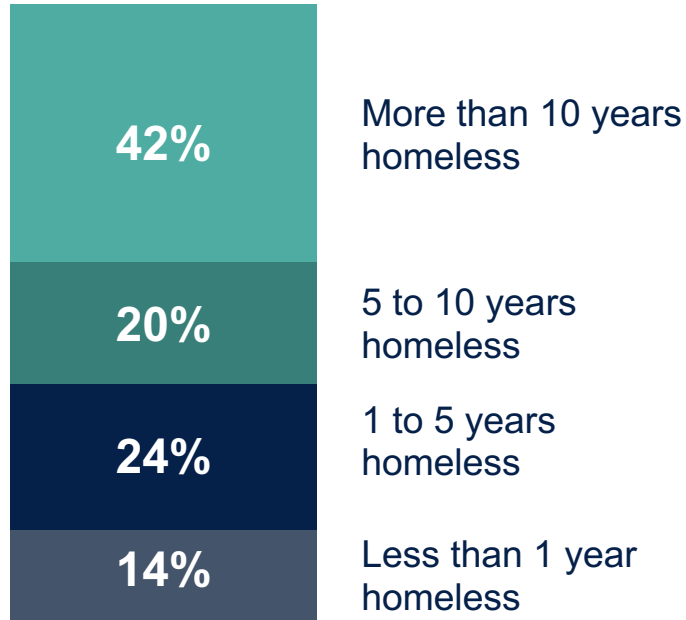
### AGE AT TIME OF DEATH



## Demographics

### LIVING SITUATION

#### HOUSING STATUS—YEARS HOMELESS IN SF\*



#### LAST SHELTER OR NAVIGATION CENTER STAY PRIOR TO DEATH

1 day–10 days before	10%
10–30 days before	5%
30–180 days before	11%
180 days–12 months before	6%
No stays in last 12 months	68%

*\*Excludes individuals with no CCMS living situation records  
Span of time includes continuous or intermittent homeless experience*

# Utilization History

## Utilization History

### URGENT/EMERGENT SERVICES AND HIGH USERS OF MULTIPLE SYSTEMS

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#### HUMS SCORE\* (TOTAL URGENT/EMERGENT UTILIZATION) IN FISCAL YEAR BEFORE DEATH

Zero urgent/emergent utilization or not in CCMS	46%
1–5 visits/stays	30%
6–10 visits/stays	9%
11–30 visits/stays	9%
More than 30 visits/stays (max=109)	5%

*\*Sum of ED visits, inpatient stays, urgent care visits, PES visits, psych inpatient stays, Dore Urgent Care Psych visits, sobering center visits, medical detox stays, social detox stays*

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#### U/E UTILIZATION IN FISCAL YEAR BEFORE DEATH

Top 1%	7%
2–5%	11%
6–100%	71%
No record in CCMS	11%

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#### U/E UTILIZATION IN THREE FISCAL YEARS BEFORE DEATH (ANY YEAR)

Top 1%	8%
2–5%	18%
6–100%	63%
No record in CCMS	11%



## Utilization History

### MEDICAL, MENTAL HEALTH AND SUBSTANCE USE DISORDER SERVICES

**69% used  
medical  
services** (non-  
outpatient) in  
the year prior to  
death

(includes emergency department, inpatient stays, sobering center, EMS ambulance, jail health or medical respite) \*Emergency department represents majority of all medical utilization

**28% used  
mental health  
services** in the  
year prior to  
death

(includes SFGH Psychiatric Emergency Services, inpatient psychiatric stays, outpatient appointments, urgent care/day crisis, residential treatment, case management)

**19% used  
substance use  
disorder  
services** in the  
year prior to  
death

(includes residential detox, residential treatment, methadone maintenance, outpatient counseling)

Utilization history  
JAIL HEALTH

**32% had a jail health day** in the year prior to death

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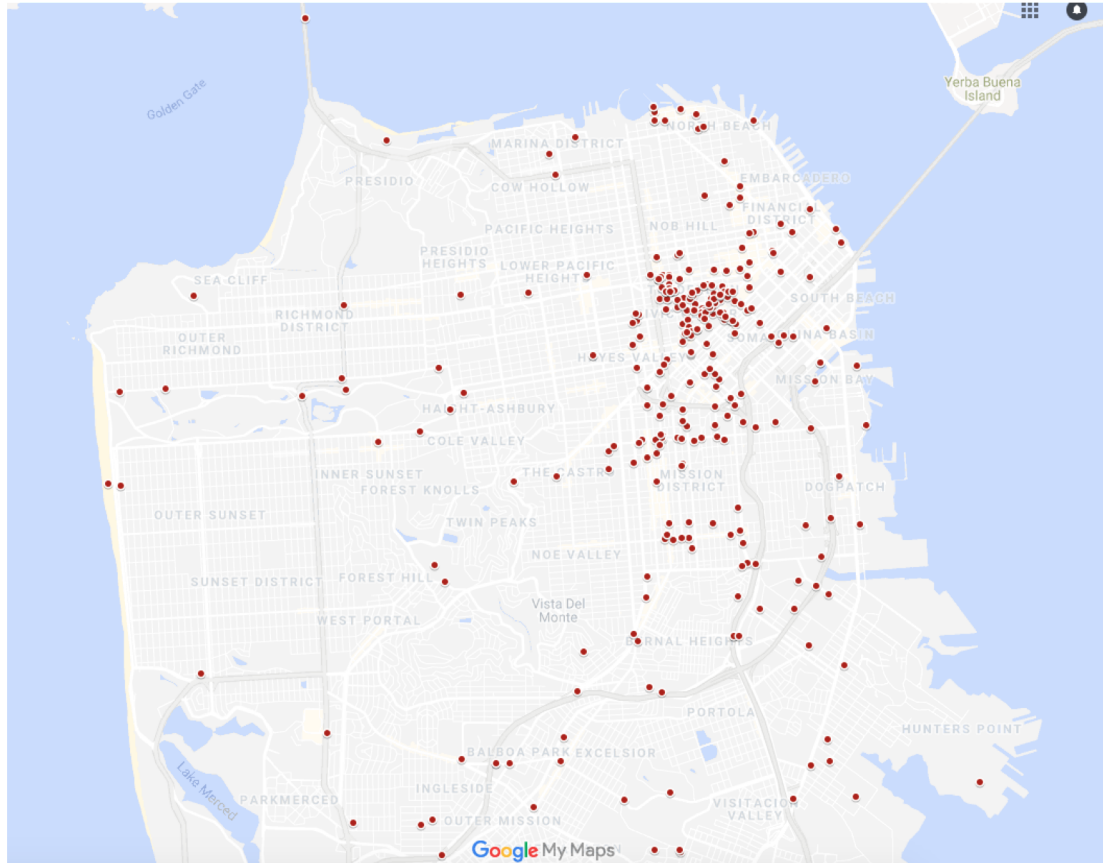
LAST JAIL HEALTH DAY PRIOR TO DEATH

1 day–10 days before	<1%
10–30 days before	4%
30–180 days before	17%
180 days–12 months before	11%
No stays in last 12 months	68%

# Circumstances of death

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## LOCATION OF INCIDENT (MAY DIFFER FROM LOCATION OF DEATH)

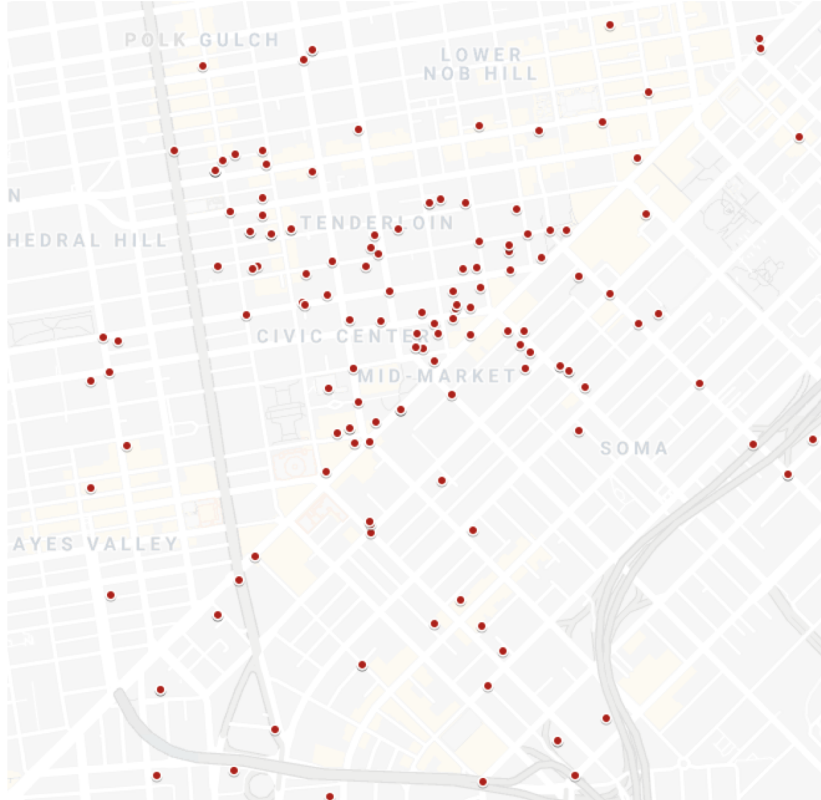


*Location of incident available for 308 cases*

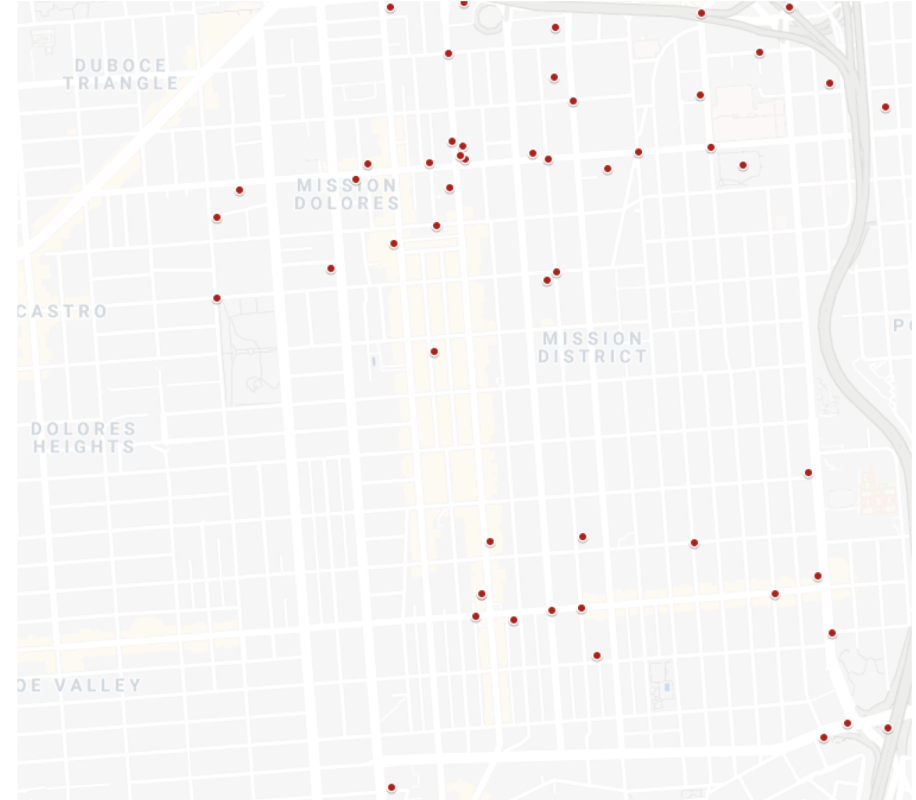
# Circumstances of death

## LOCATION OF INCIDENT (MAY DIFFER FROM LOCATION OF DEATH)

Tenderloin / Civic Center / SOMA



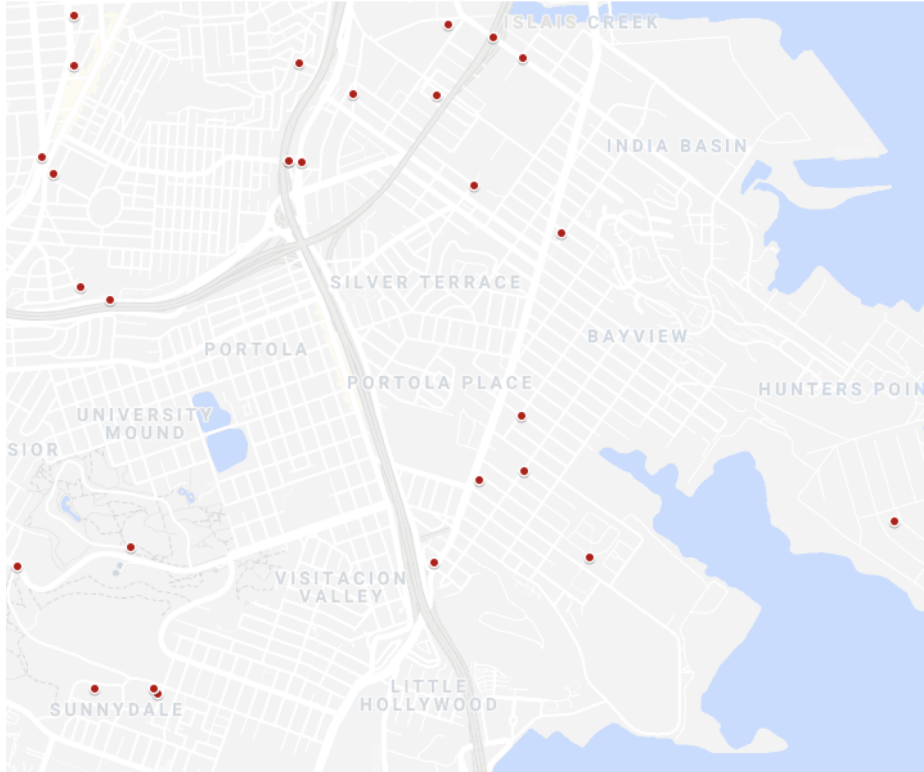
Mission



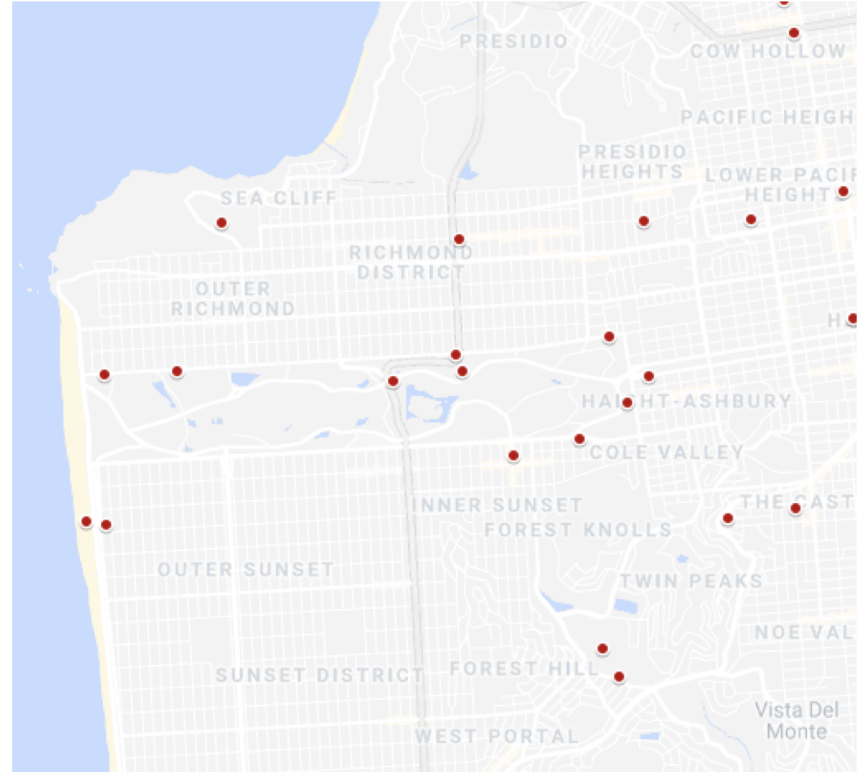
# Circumstances of death

## LOCATION OF INCIDENT (MAY DIFFER FROM LOCATION OF DEATH)

South East



North West



## Circumstances of death

### MANNER OF DEATH — CATEGORIES FROM THE OFFICE OF THE CHIEF MEDICAL EXAMINER

#### **53% Accidents**

Unintentional overdose, fall, drowning, pedestrian vs vehicle, inhalation, exposure, vehicle driver

#### **11% Homicide**

Firearm, sharp injury (i.e. stabbing), blunt injury, officer-involved shooting

#### **30% Natural**

Cancer, COPD, cardiovascular disease

#### **4% Suicide**

Hanging, asphyxia, jump from building

#### **2% Undetermined**

## Circumstances of death

### MOST COMMON CAUSES OF DEATH BASED ON AUTOPSY REPORTS

1. Acute Drug Toxicity (unintended overdose)	<b>35%</b>
2. Cardiovascular Disease	<b>16%</b>
3. Chronic alcohol use and associated conditions (e.g., liver failure)	<b>5.6%</b>
4. Gunshot wound	<b>5.2%</b>
5. Acute alcohol toxicity	<b>4.9%</b>
6. Sharp force injury (i.e., stabbing)	<b>4.1%</b>
7. Blunt force injury (e.g., pedestrian vs. vehicle)	<b>3.7%</b>
8. Cancer, Falls	<b>3.4%</b>



## Circumstances of death

### UNDERLYING CONDITIONS - HIV

In cases where medical history was available in CCMS,  
**8% had a HIV/AIDS**  
listed as an Elixhauser Comorbidity

## Circumstances of death

### CONTRIBUTING FACTORS — LISTED AS CAUSE OF DEATH, CONTRIBUTING CONDITION OR IN TOXICOLOGY

**52% Drugs**

**32% Alcohol**

**29% Natural history of chronic disease**

**27% Violence or traumatic injury**

*Percentages do not add up to 100, as there are often multiple contributing factors e.g., fall (violent or traumatic injury) while intoxicated (alcohol-related)*

## Circumstances of death

### TOXICOLOGY RESULTS — SUBSTANCES PRESENT IN REPORTS

N = CASES WITH TOXICOLOGY REPORTS AVAILABLE

**47% Methamphetamine**

**45% Opioids**

Fentanyl present in 4% of reports; Buprenorphine present in 0 cases

**36% Cocaine**

**30% Alcohol**

**27% Sedatives**

# Thank you!

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