

NATIONAL
HEALTH CARE
for the
HOMELESS
COUNCIL

Homeless Mortality Data Toolkit

Understanding and Tracking Deaths of
People Experiencing Homelessness



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*Homeless Mortality Data Workgroup
of the National Health Care for the Homeless Council*

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Introduction

The experience of homelessness has well-documented long-term consequences on health and well-being. However, due to a lack of national review or standardized data collection for homeless mortality, it is difficult to calculate the extent that homelessness is killing people. Over the past several decades, many communities have developed their own local reviews of homeless mortality to understand how many people without homes are lost each year, what caused these deaths, and what specific interventions can prevent additional deaths in the future.

In 2019, the National Health Care for the Homeless Council initiated the Homeless Mortality Data Workgroup to unite expertise on homeless mortality reviews across the country. The workgroup includes researchers, advocates, public health department officials, health center leaders, clinicians, government officials, and communities involved in homeless mortality reviews. The group is charged with sharing best practices on how localities carry out homeless mortality work, discussing how to best organize mortality data reports, and planning advocacy work that can be carried out with, and on behalf of, homeless mortality data.

The group achieves this work by bringing communities across the country together to develop skills and partnerships needed to carry out accurate homeless mortality counts and systematic reviews of homeless deaths. The workgroup began sharing lessons from localities like Seattle, New York City, and Sacramento who have been carrying out mortality reviews for years, and has grown to include over 15 cities that continue to share best practices and learn from each other.

This toolkit will share the findings and implications from the communities who conduct homeless mortality reviews, as well as provides guidance on developing or improving a homeless mortality review. Lessons will include how to create partnerships, methods of data collection and analysis, and examples of how communities have used this information to address homeless mortality.

No one should die for lack of housing, but as they are, it is our responsibility to end this epidemic.

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I. National Homeless Mortality Overview

The Scale of Homeless Deaths in the U.S.

The U.S. government does not conduct an official count of the number of people who die while experiencing homelessness. When a person experiencing homelessness (PEH) dies, their housing status is rarely recorded. However, the National Health Care for the Homeless Council identified 68 cities and counties who recorded the deaths of people experiencing homelessness in 2018. These 68 jurisdictions found at least 5,807 people without homes who passed away that year. Homeless death counts for each city or county are collected from a combination of local news reports, medical examiner office and coroner findings, through a public records request, and direct correspondence with local organizers of Homeless Persons' Memorial Day. News reports of death counts conducted by local community advocates, shelters, homeless service providers, and religious organizations are by far the most common group that contribute data to this count.

An under-estimate: For many reasons, the estimate of 5,800 homeless deaths in 2018 underestimates the total number of homeless deaths that occur in the U.S. each year. First, it represents death counts from only 2% of all U.S. counties. Second, each death count reported by a city or county likely misses many deaths each year because a decedent's housing status is unrecorded, is incorrectly recorded as housed, the death is not investigated by a medical examiner or coroner, or the death is unknown by community members compiling the annual homeless death count.

The estimate of 5,800-46,500 deaths among people experiencing homelessness per year highlights the vast, and largely hidden, scale of homeless deaths in the U.S.

A rough estimate of the proportion of PEH who die each year can be determined using data from jurisdictions that conduct both a death count and a homeless "point in time" (PIT) count.ⁱ Based on the 27 jurisdictions with this data for 2018, a range of mortality between 3% and 8% can be determined (calculated by dividing the mortality count number deemed homeless through the PIT count). By applying these proportions from 27 cities to the national PIT count (where the [PIT report](#) counted nearly 553,000 individuals), it is estimated that between 17,500 and 46,500 homeless deaths occurred in 2018.

These figures should not be interpreted as firm estimates of total annual homeless deaths. [Research indicates](#) PIT count data significantly underestimate homelessness prevalence, homeless death rates likely vary considerably across cities and counties, and most death count reporting among PEH are not comprehensive. However, 5,800 deaths are known and upwards of 46,500 deaths among PEH are estimated, which highlights the vast, and largely hidden, scale of homeless deaths in the U.S.

Homeless Death Reports

Some cities and counties, mostly those with large homeless populations, conduct annual or biannual reviews or reports of homeless deaths. These reviews are often conducted by medical examiner offices with the intent to provide information on the number of homeless deaths, the causes and manner of death, and further demographics.

Across most examined communities, homeless deaths have substantially increased over the past five to ten years.

The following summary is based on [homeless deaths](#) reviewed in:

- Los Angeles County, CA
- Sacramento County, CA
- San Francisco, CA
- Santa Barbara County, CA
- Santa Clara, CA
- Denver, CO
- O’ahu, HI
- State of Maryland
- New York City, NY
- Multnomah County, OR
- Philadelphia, PA
- Nashville, TN
- Austin, TX
- King County, WA

In most cases, findings from 2018 reports were used (reports in Appendix B).

Across most of the included cities and counties, homeless deaths have substantially increased over the past 10 years. For example, homeless deaths have increased in New York City from 177 in 2008 to 290 in 2018, an increase of more than 50%. Similarly, in Los Angeles County, homeless deaths have doubled from 518 in 2014 to 1,038 in 2019. It is difficult to determine the impact of increased reporting of homeless deaths in recent years, however, as more jurisdictions focus on these deaths and report this data, stronger evidence will emerge of the number of people dying while experiencing homelessness in the U.S.

Demographics of Those Who Died

Gender

Men account for approximately three in four of homeless decedents. In Austin, Texas, 87% of people who died while experiencing homelessness were male, compared to 13% female. The proportion is lower in some places, such as Multnomah County, Oregon, where 76% of homeless decedents are male and 24% are female. Only San Francisco, California, reported homeless deaths for transgender individuals (<1%) and no city or county recorded homeless deaths for non-binary individuals.

Age

Few cities or counties consistently report the age of people who died while homeless, but the data from a few jurisdictions suggests more than half of deaths occurred among people aged 45 or over. In **Philadelphia**, people aged 45+ accounted for 55% of all homeless deaths. In **Denver**, the average age was 47, and in **Seattle/King County** it was 54. **Multnomah County, Oregon**, women died on average at age 44 and men at age 48, while in **Sacramento County, California**, women died on average at age 43 and men at age 52.

[Sacramento County calculates](#) that “using a national life expectancy average of 75 years old, homeless lives in Sacramento are cut short by an average of 33% or about 30 years for homeless women and 23 years for homeless men.”

Race and Ethnicity

Homelessness is caused by [historical and structural oppression](#). White people account for the bulk of homeless deaths in most places that report data, accounting for 48% of deaths in **Philadelphia** and 83% in **Multnomah County, Oregon**. Black people (who, along with Indigenous

Advocacy Spotlight: City of Philadelphia

1. Philadelphia dedicated over \$40 million in new funding for programs to expand work started by the Philadelphia Resilience Project, which includes about \$30 million to the Office of Homeless Services.
2. Philadelphia also increased funding and public awareness to address the opioid crisis (a leading cause of death), taking the following action steps:
 - a. Increased low barrier shelter beds in areas hardest hit by the opioid crisis
 - b. Increased the number of treatment beds
 - c. Increased the availability of treatment on demand
 - d. Distributed Naloxone (the overdose-reversing drug) to organizations serving people experiencing homelessness) including faith-based organizations
 - e. Empaneled the Mayor's Task Force to Combat the Opioid Epidemic
 - f. Launched the Philadelphia Resilience Project, the City's unified response to America's nationwide opioid crisis; and
 - g. Increased public awareness and education through community meetings and citywide public service announcement campaigns about opioids and treatment.
3. Recognizing that providing homes ends homelessness, the city's permanent supportive housing supply has increased by about 400 units since 2016, ensuring more people with serious challenges like chronic homelessness and opioid use disorder can access the stability of a home.

Advocacy Spotlight: Colorado

2020 resulted in three advances in substance use disorder (SUD) treatment after a mortality review found that nearly 70% died from an overdose of methamphetamine [alone or in combination with other substances]:

1. Increased funding for SUD treatment resources in the criminal justice system and requiring people in custody to have access to medication-assisted treatment.
2. Legislative requirements for harm reduction measures such as requiring insurance carriers to cover medications for opioid use disorder, allowing pharmacists to sell needles/syringes, establishing immunity to anyone attempting to administer an opioid antagonist (i.e. Naloxone) in good faith, etc., and expanded treatment coverage and coordination of care for people using substances
3. A successful Denver ballot initiative established a 0.25% sales tax on non-essential items which will create 1,800 units of housing over 10 years, increased access to services including SUD treatment, and increased resources for service providers.

people, are most impacted by homelessness in the U.S.) constituted the next largest group in many places, from 6% in **Santa Clara County, California**, to 38% in Philadelphia. In **Santa Clara County**, Latinx people made up 31% of homeless decedents.

Asian, Indigenous, and mixed-race people accounted for smaller proportions of homeless decedents, likely reflecting the racial make-up of the community, but perhaps also more likely to be undercounted. In most cities and counties, People of Color were overrepresented among homeless decedents compared to the general population, but underrepresented within the homeless population.

Cause of Death

Many homeless death reports include a breakdown of the causes of death (contributing factors) and manner of death (direct way someone passed away). Causes of death were inconsistently reported, making it difficult to compare across cities and counties, but various jurisdictions noted significant findings:

- **Natural and accidental deaths:** In **Denver**, 33% of deaths were due to natural causes and 47% due to accidents.
- **Substance use disorder:** New York City, 32% of deaths were due to substance abuse
- **Trauma and violence:** **Multnomah County** found 11% of deaths were due to homicide and 10% due to suicide. **Los Angeles County** found 24% of deaths were due to trauma or violence.
- **Cardiovascular disease:** In **New York City**, 28% of homeless deaths were attributed to cardiovascular issues

Housing status: Several jurisdictions report the housing status of homeless decedents and seasons in which homeless deaths occur. In King County, Washington, 55% of homeless deaths are among the unsheltered population, whereas 53-63% of deaths in Multnomah County, Oregon, are among the sheltered population.

Seasonal deaths: Reported homeless deaths are also relatively evenly distributed across seasons. In **Maryland**, deaths were most likely to occur in winter (29%), whereas in **Denver** and **Santa Clara County, California**, summer deaths were more common.

Estimating a National Count

The greatest limitation to establishing a national count is the small number of communities currently counting homeless deaths. Collaborations with state records systems also complicate a national count because larger states (e.g., those best-poised to do a count) have more decentralized public health systems, making it more difficult to coordinate data collection across multiple local medical examiner systems.

Achieving a universal national count of homeless deaths will require more standardized data than currently exists. Medical examiners' documentation is relatively consistent, but data systems with the information are often owned by local jurisdictions, resulting in data inconsistencies.

Advocacy Spotlight: Los Angeles

Based on the mortality review, the Center for Health Impact Evaluation created these advocacy recommendations to prevent homeless deaths.

1. Expand and improve substance use disorder services for people experiencing homelessness
2. Expand reach of street medicine teams and allow Medi-Cal (California's Medicaid program) reimbursement for street medicine treatment in non-clinical settings
3. Expand housing options with the priority for people experiencing homelessness completing substance use disorder treatment and those fleeing violence and abuse
4. Improve supports for justice-system-involved people experiencing homelessness, including treatment diversion for those with substance use disorder and treatment for those incarcerated
5. Establish safe use sites with needle exchange and increase distribution of Naloxone to people experiencing homelessness to prevent overdoses
6. Conduct annual updates of LA County's Homeless Deaths Report
7. Conduct longitudinal analyses of deceased homeless clients County service records
8. Protect people experiencing homelessness from COVID-19

Similarly, death records are stored at the state level, but some data elements are reported in [nationally standardized formats](#). Fortunately, [HUD requires standardized universal data elements](#) in Homeless Management Information Systems (HMIS).

COVID-19 Homeless Deaths

The experience of homelessness itself (structural oppression and discrimination, irregular access to quality health care, living in areas not meant for human habitation, etc.) places people without homes at [greater risk of symptomatic infection and mortality from COVID-19](#). As of December 2020, at least 226 people experiencing homelessness have died from health problems attributable to COVID-19. These death counts have been collected from a combination of local news reports and public record requests of public health departments in 18 cities and counties. Most of these deaths occurred in places with larger homeless populations, especially **New York City** (104) and **Los Angeles** (44).

Similar to the discussion of homeless deaths for any cause, these estimates substantially undercount the true impact of COVID-19 on homeless mortality. While the lack of data means the true number of homeless deaths due to COVID-19 may never be known, research shows there is a clear connection between evictions and increased COVID-19 incidence and mortalityⁱⁱ.

In addition, several large cities are reporting significant increases in homeless deaths in pandemic months compared to the same month in prior years (full reports should be out in early 2021). Most of these deaths are not attributable to COVID-19. They may be related to disruptions in health care and social service provision to people experiencing homelessness, reduced informal support for people living unsheltered, and the closure of emergency shelters.

Impact of COVID-19 on Mortality and Awareness

As the novel coronavirus reached the United States, experts anticipated that people without homes would suffer higher rates of mortality from COVID-19. Individuals experiencing homelessness experience multiple, compounding risks for exposure to viral transmission, chiefly due to the difficulty of isolation or quarantine given their precarious housing status. Once infected, COVID-19 is more dangerous for people without homes due to their higher rates of chronic illnesses. They are also more likely to require targeted surveillance testing to accurately

New York City reported 104 deaths of homeless individuals from COVID as of October 14, 2020 (95 of which were identified in emergency shelters). In shelters from March-August 2020, the City estimated the age-adjusted COVID-19 mortality rate to be approximately 4 deaths per 1,000 individuals, or 78% higher than the city-wide age-adjusted mortality rate.¹ The age-adjusted mortality rate increased 19% from May to August of 2020, but increased 46% among homeless single adults, driving the disparate mortality rates further apart.¹

This also suggests that the surge in cases in the unhoused population lagged behind the rest of the city, instead of facilitating transmission rates early in the disease curve.

detect and isolate cases, as some studies confirm an underutilization of health care services even when infected. One CDC-led study in **King County, Washington**, showed that just 2% of individuals in their sample received diagnoses from independent health care sources.ⁱⁱⁱ

Overall, scarcely any information exists about the impact of the SARS-CoV-2 pandemic and fatal cases on individuals experiencing homelessness across the United States. Housing status is absent from more popular national [dashboards from the CDC](#), state health departments, or the [Johns Hopkins Coronavirus Resource Center](#). Just a handful of urban centers with dedicated surveillance efforts via their congregate and non-congregate shelter agencies provide the most reliable data. While these efforts tended to be supported by federal agencies like the CDC early on,^{iv} ongoing and sustainable efforts are likely to rely on local public health agency resources.^v

[Cases--and therefore deaths--from COVID-19 among those experiencing homelessness](#) are unlikely to end in the near future. Sustained transmission will be difficult to contain due to undetected asymptomatic or mild cases in both the homeless population and among the general public.^{vi}

Dedicated, reliable, and standardized surveillance systems will improve the understanding of the impact of COVID-19 on the mortality rate for PEH. Since most jurisdictions fail to collect information about housing status, communities will require dedicated coordination across public health systems, namely with the COVID-19 case tracking systems and the Medical Examiner's office. Likewise, while public health tracking systems for COVID-19 may attempt to identify fatal cases, they are also unlikely to capture housing status and provide the full cause-of-death information that Medical Examiners' records contain.

References:

ⁱ The U.S. Department of Housing and Urban Development (HUD) requires local jurisdictions to [count the number](#) of people experiencing homelessness each year on a given night in January. While this report uses data from the 2018 PIT count, the [2019 PIT count data](#) found even more people experiencing homelessness on a given night—increasing to 568,000.

ⁱⁱ Leifheit, Kathryn M. and Linton, Sabriya L. and Raifman, Julia and Schwartz, Gabriel and Benfer, Emily and Zimmerman, Frederick J and Pollack, Craig, Expiring Eviction Moratoriums and COVID-19 Incidence and Mortality (November 30, 2020). Available at SSRN: <https://ssrn.com/abstract=3739576> or <http://dx.doi.org/10.2139/ssrn.3739576>

ⁱⁱⁱ Tobolowsky et al., 2020.

^{iv} Mosites et al., 2020; Tobolowsky et al., 2020.

^v Coalition for the Homelessness, 2020.

^{vi} Baggett et al., 2020; Mosites et al., 2020.

II. How to Start a Local Homeless Mortality Data Report

The feasibility of a local homeless mortality count depends on factors including the availability of data, data analysis/programming expertise, and political/institutional support in each jurisdiction. This section describes a variety of methodologies, noting that the best-fit may depend on the resources, systems available, and the ease of access in each locality. Ultimately, the goals are to record deaths of people experiencing homelessness (PEH) and homeless status as comprehensively as possible, which may involve a combination of the following methods.

This section will provide a high-level overview of the most common mechanisms used for collecting and reporting on homeless mortality. We hope that health and housing advocates can learn from this information to inform their efforts to create and carry out ongoing homeless mortality data reporting efforts on a local, state, and national level.

Homeless Mortality Review Task Force/Working Groups

It is scarcely possible to initiate a homeless mortality report independently. Successful reports, rather, emerge from a collaborative task force or work group that focuses on accountability, brings in multiple points of view, provides partnerships and data-sharing, reviews results, and carries out recommendations. Such work groups must partner with health department leads.

Why Conduct a Homeless Mortality Count?

Each Homeless Persons' Memorial Day, community members ask who died in homelessness, how many, how did they die, and how can these deaths be prevented. Many are surprised to learn that in most cities, counties, states, and indeed the federal government, there is no standardized reporting of people without homes who pass away. Homeless mortality reporting efforts on a local and state level vary greatly jurisdiction by jurisdiction, based on local circumstances. However, the most effective efforts have emerged from concerted organizing by advocates, health workers, researchers, health departments and local government officials who know that tracking and evaluating homeless mortality data is essential to develop health and housing strategies to save lives.

Health department and community partners appropriate for a task force/working group can include:

1. Medical Examiner/Coroner leaders
2. Health department, epidemiology, and public health leaders
3. City/County Homeless Department leaders
4. Health Care for the Homeless (HCH) programs or other health centers
5. Homeless Management Information System (HMIS) Continuum of Care leaders
6. Homeless services providers
7. Hospitals, health plans
8. People experiencing homelessness (PEH)
9. Community providers and advocates

Sources of Data that Capture Deaths and Their Causes

The first step is determining who keeps or owns data on homeless deaths. Mortality data in most jurisdictions reside with the Medical Examiner/Coroner (MEC), at the state level death certificate records systems, and – importantly – by community members themselves. Consider these sources of mortality data that tell us who died and how:

1. **Coroner's Office**
2. **Office of Medical Investigator**
3. **State Death Records**
4. **Community-Based Primary Data**

Coroner's Office/Coroner's Report

Coroners are elected or appointed county or state officials who are often situated in law enforcement without medical training. Each jurisdiction varies in the types of deaths their coroner's office investigates and reports.

A coroner's office typically only investigates deaths due to unusual or suspicious circumstances, violence (accident, suicide, or homicide), deaths that are sudden and without warning, or deaths that are unattended. This means that many "natural" deaths (such as those occurring in hospitals or care facilities) go unreviewed by a coroner. The political nature of the coroner's office will impact relationship-building when conducting homeless mortality data research.

Office of Medical Investigator/Medical Examiner Report

A Medical Examiner is a board-certificated doctor in a medical specialty that works for a health department or district. Some states have a centralized state-wide medical investigator, while others have a county/district-based system (see the CDC's resource on Death Investigations Systems for a state-by-state look^{vii}).

Similar to coroners, each state varies in the exact jurisdiction of deaths their medical examiner investigates; however, most investigate deaths "due to unusual or suspicious circumstances, violence (accident, suicide, or homicide), those due to natural disease processes when the death

occurred suddenly and without warning, when the decedent was not being treated by a physician, or the death was unattended.”^{viii}

Neither the coroner nor medical examiner have records on all deaths in their jurisdiction. For example, in **Cook County, Illinois**, the medical examiner captures approximately 40% of deaths.

95% of medical examiner and/or coroner (MEC) systems nationwide are not accredited, and therefore have varied professional standards. Some localities, in fact, combine a coroner’s and medical examiner’s office functions.

State Death Records

In the U.S., each death generates a certificate. The death certificate is filled out by doctors and medical staff of hospitals and facilities, or by the coroner or medical examiner for accidental, suspicious, or unaccompanied deaths. Each state maintains death certificate records, which are public records and can be requested as such under the Freedom of Information Act (FOIA). Local public health departments enjoy unrestricted access to those records for surveillance purposes – for example, reviewing state death records to determine local homeless mortality. Most state death certificates lack searchable fields for homeless status, however, and ease of review and the amount and quality of death certificate information vary widely by state.^{ix}

Community-Based Primary Data

In addition to these strategies, some pursue a community-based approach to mortality surveillance among people experiencing homelessness (PEH). This approach depends on a collection of reports of PEH by community reporters, informants such as people experiencing homelessness themselves, services providers, advocates, families, and through a review of news and social media for reports of homeless deaths. These community-based records of deaths are often used to honor the deceased in annual Homeless Persons’ Memorial Day events.

This approach is being utilized in **Nashville, Tennessee**, by a local homeless agency advocating for a systematic homeless mortality surveillance system managed by the city. One staff member notes:

“ It is important to identify key stakeholders who are respected and trusted among the homeless community at hand. Identifying and communicating both a goal and dissemination plan for collecting this information is key in order to get buy-in from other nonprofits, organizations, and individuals with lived experience who may be weary of providing information about PEH that they knew. It is important to express and practice mindfulness regarding the information collected, such as cause of death, and to ensure that this data collection is not causing undue harm to PEH. Creating and consulting a community advisory board can promote community buy-in and prevent undue harm. The advisory board should consist of key stakeholders and, most importantly, those with lived experience. ”

Community-based approaches bear their own limitations. For example, they likely miss many PEH who are not connected or well-known among service providers, shelters, or community members. Communities should thus continue to advocate for other systematic reviews outlined in this report that captures all deaths, including in hard-to-reach subgroups, regardless of deceased individuals' involvement with service providers.^x

Advocacy Spotlight: Sacramento

1. After Sacramento Regional Coalition to End Homelessness (SRCEH) Executive Director, Bob Erlenbusch, gave a report to the Sacramento Board of Supervisors in 2014 that identified the locations of the deaths of people experiencing homelessness, the Board of Supervisors voted to allocate \$260,000 for additional nurse outreach to homeless encampments.
2. The Sacramento Continuum of Care (CoC) used the same report to focus street outreach efforts on the encampments along transportation corridors.
3. Through their homeless deaths report, SRCEH was able to show that the mortality rate for people experiencing homelessness was approximately 25% for each of the four seasons. In 2017, the city used this information to fund 24/7 low-barrier shelters year-round after years of shelters with limited hours only opening in the winter.
4. SRCEH's homeless deaths reports inspired Joshua's House, a hospice house for terminally ill homeless men and women transferred from local health care partners. It is set to open in Spring 2021.
5. The SRCEH annual homeless deaths report has proved an invaluable public education tool, shattering the myths about homelessness and the causes of homeless deaths. For example, "don't they all die in the winter?" No, 75% of homeless deaths are in the three other seasons. "Don't a lot die of drowning in the American River." No, only about 1% die of drowning. "Don't most die of drug overdose?" No, about one-third die of substance use. Additionally, the community is shocked at the average age of death for homeless men and women is only 50 years of age. Finally, the annual report has helped the community understand how violent it is to live on the streets – about 35% of the deaths are violent deaths – gun shots, stabbings, and hangings.
6. The annual report is also cited by city and county staff in their briefings to the City Council and Board of Supervisors on the rationale for creating more shelter beds and affordable housing. The report is often cited in editorials in the Sacramento Bee to support the need for increased expenditures on issues pertaining to homelessness.

Sources of Data that Capture Homeless Status

The previous section described sources of death data, but many of these sources fail to specify if a decedent was experiencing homelessness. Local communities can also work with local partners who maintain data on people experiencing homelessness. The following sources of data and the development of info sharing relationships with these providers can create important ways to capture and verify homeless death reports.

Homeless Management Information System (HMIS)

Each jurisdiction belongs to a U.S. Housing and Urban Development (HUD)^{xi} Continuum of Care (CoC),^{xii} headed by a lead or coordinating agency. This agency often maintains a database of shelter/housing/outreach-based homeless service encounters for all HUD-funded agencies in their area, known as the Homeless Management Information System (HMIS).^{xiii} The CoC coordinates with community stakeholders and approves certain reports or data-sharing agreements that often help identify deaths and confirm homelessness status in the community.

CoC committees govern HMIS standard operating procedures, review local and federal reports, and create reports on demographics and utilization, including bi-annual Point-in-Time (PIT) Counts.^{xiv} These committees often consist of the service providers that enter data into the HMIS.

Each CoC uses a unique release-of-information (ROI) form with specific terms stipulating how data are collected and utilized. Clients may decline the ROI and still use agency services, in which case their encounter is still captured but not fully characterized. For the purposes of a homelessness mortality count, check with the agency that governs the HMIS to see if their ROI includes consent to share information for public health, program evaluation, and/or research purposes. If it does not, advocate to change the policy accordingly.

Building relationships with the CoC lead and member agencies will improve engagement with agencies that work with clients most consistently, which may create more informal channels for reporting deaths for the count.

Partnering with HMIS systems for the homelessness mortality count provides two opportunities. First, death data may be already captured by programs in HMIS, and if not, it is possible to add a category of mortality as a program exit for HMIS services. Then, HMIS records can be reviewed to detect if death took place before (or after) housing placement. Secondly, it is possible to match HMIS records to coroner/medical examiner/state death records to improve the sensitivity of the surveillance effort overall. HMIS can clarify the housing/homelessness status of individuals who are identified through death records if there is no such status already noted.

Furthermore, building relationships with the CoC lead and member agencies will improve engagement with agencies that work with clients most consistently, which may create more informal channels for reporting deaths for the count. It will also improve the ability to disseminate and develop interventions in response to the results of a homelessness mortality count.

Local Health Care and Social Services Providers

Developing partnerships with service providers improves the ability to share data, expand opportunities to confirm homelessness of the people HMIS may miss, and increase access of community reporting.

Health care and social services providers that may not enter data in the HMIS system are also helpful partners. Examples include: hospital systems; health centers, such as Health Care for the Homeless programs or other Federally Qualified Health Centers (FQHCs); health department-operated programs such as behavioral health, crisis response, street medicine teams, or emergency medical response providers; and shelter and service providers such as faith-based organizations and community groups that lack HUD funding.

Developing partnerships with service providers will improve the ability to share data in both directions, expand opportunities to confirm homelessness of people the HMIS may miss, and increase the access for community reporting. With health care and mental health providers, Due to restrictions from the Health Insurance Portability and Accountability Act (HIPAA) that affect health care agencies, it is generally best to partner with public health departments, which are better equipped to collect, store, and process sensitive protected health information.^{xv}

The longer and more precise the list of people experiencing homelessness, the more useful it is to compare to lists of people who have passed away in the same jurisdiction and thereby produce a more accurate homelessness mortality count.

Methods for Measuring Deaths Among People Experiencing Homelessness

Once the appropriate relationships are established, the next steps are to identify homeless deaths and access important information about these deceased individuals (e.g., circumstances of their deaths). These include the Medical Examiner/Coroner (MEC) Report, compiling HMIS Indicators of Death, search and review of MEC and State Death Records and data matching.

Medical Examiner/Coroner Report

Some MECs can provide either data or a compiled report on the decedents they have investigated or collected data on who were experiencing homelessness. While many homeless deaths are likely to be investigated by a MEC, not all homeless deaths will be captured (e.g. some deaths in hospitals), and while much MEC data is quantifiable (e.g. demographic characteristics, mode/manner of death) much of the data consists of descriptive/narrative notes such as scene investigation, toxicology, and/or contributory causes of death that may not be entered into an electronic database. Furthermore, MECs may not assess or document homeless status systematically.

If the local MEC does assess and document homeless status systematically, creating a homeless fatality count is easier. Many communities have established a relationship with the MEC to

provide data that community members analyze and publish.^{xvi} Some MECs carry out their own homeless mortality reports.^{xvii} Organizations that formed strong relationships with their MECs at the beginning of their homeless mortality data work have greater access to information.^{xviii}

Data Requests from MEC or State Death Certificate Data

Enabling ongoing access to data may be possible through a public records FOIA request, which can be expedited through a media/press request. A memorandum of understanding (MOU) or data use agreement (DUA) with the MEC allows access to their individual level data. Partnerships with the health department or a university for data requests consistently prove more effective.

Ideally, the data should include demographic characteristics and information about the mode and manner of death. Whether or not the MEC or state has an indicator for homelessness in their case data, case notes and descriptive fields are easier to search through using keywords. If individual level data from the local MEC are unavailable, aggregated data on the number of deaths they have investigated in the past year that have been flagged as homeless should be available (assuming they record homelessness in their investigation data).

Advocate at the local level for MECs to capture housing status. After years of statewide advocacy, for example, **California** recently developed new guidelines for determining and recording homelessness status in its Electronic Death Registration System, which should be fully operational in 2021 and will have a ripple effect through local communities that will help homeless mortality reporting.

Data Searching to Identify and Detail Homeless Deaths

While time-consuming, it can be fruitful to search through death records (by field or column-by-column) to search for data that can establish that a particular record is a homeless decedent. There is an art to these inquiries, which can include searches for common words connected with homelessness such as:

- indigent
- shopping cart
- homeless
- transient
- overpass
- freeway
- camp
- encampment
- tent
- body not claimed
- no next of kin
- camp
- dumpster
- unknown address
- exposure
- vagrant
- shelter
- car, van, trailer
- hypothermia
- hyperthermia
- dehydration
- bus bench/stop
- train tracks
- unsheltered

Evaluating the address can indicate that the decedent was homeless at time of death. Some states provide instructions to local death registrars regarding what to put in the address field if the decedent was homeless, such as looking at where GPS coordinates are entered instead of an address.

In searching MEC or state data, it is also helpful to become familiar with cemeteries or funeral homes where unclaimed persons are taken to, and search closely among this list. When reviewing these lists, differentiate “definitely homeless” and “maybe homeless” to help identify more information to validate for the latter category.

Matching Datasets to Identify and Detail Homeless Deaths

With access to death records and lists of people known to be homeless, it is powerful to use data-set-matching to identify homeless persons that have died, which can deduplicate multiple records for the same people and gain more data on decedents. This process is about “bumping” a list of known homeless persons (from HMIS or local health care or services providers) and/or PEH known to have passed away (from community reporters or media), or dates or locations where an unidentified person was known to have died, against a list of death certificate records, to find matches using common identifiers like first/last name, sex, date of birth, and date of death.

One can match lists of homeless-related addresses (e.g., shelters, mailing addresses, programs, etc.) to the death certificate records. **Los Angeles County** did this work illustratively in 2019.^{xix} While a full discussion of matching techniques is beyond the scope of this toolkit, the Homeless Mortality Data Work Group can provide contact information for work group members that have expertise in this area.

Determining Cause of Death

Methods to categorize cause of death depend on the type of homeless mortality reporting effort. While the Medical Examiner/Coroner (MEC) collects data on causes of death for the deaths they investigate, they usually do not code deaths using ICD-10 codes. However, they often collect detailed data on causes of death not deemed to be “natural” causes. These include drug overdoses, homicides and suicides, and other accidental deaths such as motor vehicle crashes. MECs may only have cursory data on sub-categories of natural-cause deaths (e.g., heart disease, diabetes).

If individual-level data from the MEC is available, it can be helpful to obtain a code book that explains the ways they classify, then stratify the mode, manner, and cause of death. If the MEC will not share individual-level data, seek aggregate data on numbers of homeless deaths by the top five causes of death.

Local data that quantify these mortality rate differences can be a powerful tool for advocating policy and programmatic action to reduce this disparity and support prevention efforts.

State death files typically include International Classification of Diseases (ICD-10) cause of death codes entered into death certificates by doctors or medical professionals. This is the gold standard for classifying causes of death. Local health departments should produce regular reports of mortality rates by cause of death for the general population. These reports use groupings of ICD-10 codes to report on common causes of death like coronary heart disease,

diabetes, cancers, motor vehicle crash, homicide, and drug overdose. Use these same groupings when analyzing ICD-10 codes on the death records of homeless decedents.^{xx} The ideal way to determine ICD-10 cause of death is “bumping” MEC or community-reported data against state death records.

Creating a Homeless Mortality Report

Each jurisdiction’s homeless mortality report will differ. The NHCHC recommends a close review of the reports referenced in this toolkit (Appendix B) to find a format and method that works best based on the type of data available and the amount of work that can be put into the project. Key elements include:

1. Definitions
2. Categorizing causes of death by type and demographics
3. Locations of death
4. Focus on special issues (overdose, substance use, homicide, suicide, accidents)
5. Homeless mortality rates vs general population
6. Recommendations

Calculating Homeless Mortality Rates Among People Experiencing Homelessness

Evidence shows that people experiencing homelessness (PEH) have higher mortality rates than the general population. Local data that quantify these mortality rate differences can be a powerful tool for advocating policy and programmatic action to reduce this disparity and support prevention efforts.

To compare mortality rates across different populations, it is critical to adjust for differences in the age structures of the populations. This is because age is the single most important predictor of mortality.^{xxi} Furthermore, when one of your comparison groups is PEH it is also critical to adjust for gender distribution since men have higher mortality rates than women and they often make up a much higher proportion of the homeless population.

In order to compare age and gender adjusted mortality rates, you must have valid estimates of the age and gender distribution of your community’s homeless population. Continuum of Cares (CoCs) conduct quantitative and qualitative surveys to arrive at estimates of the percent of age, gender, and racial/ethnic groups. Some surveys also include additional items about living and health conditions and experiences of violence.

A comprehensive approach of calculating and comparing age and gender adjusted mortality rates is beyond the scope of this toolkit, however, below is a brief summary of the direct and indirect methods:

Direct Method

For this method you will need a “standard” population to which you apply age/gender specific mortality rates for your PEH population and your community population. It is common to use the 2000 US census population as your standard population.^{xxii} When you set up your calculations, you will need to base them on whatever age groupings your local homeless demographic survey uses to report its estimates.

For example, in **Los Angeles County, California**, the PEH demographic survey uses the following age groupings in its reporting: <18, 18-24, 25-54, 55-61, and 62+. Thus, to calculate age/gender adjusted rates in Los Angeles County it was necessary to create those same age groupings from the U.S. census (standard population) and Los Angeles County (comparison population).

Once you calculate adjusted mortality rates for each of your comparison populations, you can calculate a Mortality Rate Ratio (MRR), which is the mortality rate in the PEH population divided by the rate in the general community population. The ratio represents the number of times greater the rate is in the PEH population compared to the community population. Adjusted mortality rates and MRRs can be calculated for all causes of death combined and for specific causes of death. Cause-specific MRRs can only be calculated if you can determine causes of PEH deaths using the methods described in the section above.

Indirect Method

The indirect method is often used when numbers of deaths for each age-specific stratum are not available. In the context of homeless mortality, you would take the age/gender-specific mortality rates in the community-wide population and apply to each of those age/gender groupings in the homeless population.

This yields the number of deaths expected in each age/gender grouping of people experiencing homelessness if PEH had the same mortality rates as the general population. The total number of deaths observed among PEH divided by the number expected is called the Standardized Mortality Ratio (SMR). The SMR approximates the MRR described above.

Long-term Needs

The methodologies described in this toolkit represent some best practices at this time. However, communities across the country are relying on myriad local sources to estimate homeless mortality, including news media and other local reports gathered in conjunction with National Homeless Persons’ Memorial Day. Each community is also likely to have a range of options for progress at their disposal, which is why this toolkit lays out several ways to proceed. Even those communities that have been able to link MEC data with state death records can continue to expand and strengthen their homeless mortality surveillance systems.

The use of multiple linked sources of information is a tested method for improving the accuracy of surveillance systems. Accurate linkage and deduplication across data sources requires high-

quality data sources, standardized data labels, and variable formatting. While analytical options like imputation exist, the quality of available data ultimately depends on the way those data elements are collected in the first place.

The ability to obtain and link data on homeless deaths requires engagement with and commitment from the communities that produce the data, in addition to the organizations that manage the data. Through: 1) improved data standardization; 2) improved data quality; and 3) political will, these systems will continue to improve.

Standardization

To improve the accuracy of homeless mortality counts and help communities compare mortality rates, it is important to:

1. **Establish standard definitions and criteria for determining the size of a homeless population (i.e. the denominator) and the homelessness status of decedents (i.e., the numerators), and**
2. **Work with all stakeholders to adopt those definitions and criteria.**^{xxiii}

Homeless Status (Numerator): The process by which identified decedents are labeled as homeless needs to be considered carefully. This applies equally to how MEC and state death records assign a label of homelessness, and how HMIS, hospitals, clinics, services providers, and community reporters assign that same label. In MEC records, the label of homelessness is typically applied to individuals that are either unsheltered or living in a homeless shelter (i.e., living in places not meant for human habitation, in emergency shelters, or have no regular residential address). This third category of no regular address may include individuals living doubled up with friends or family, residing in an institutional setting, or in temporary residences such as a hotel/motel, yet it may miss a number of individuals without homes. And while Transitional Housing is less common, these programs contribute to HUD definitions of homelessness in HMIS but would likely not count in some MEC criteria.

Additional data sources for identifying deaths among PEH (see “Data-Sharing” below and elsewhere) should also be evaluated for their definition of homelessness since health care organizations and housing agencies employ different definitions.

Homelessness Data (Denominator): This toolkit recommends the mid-year average of a community’s Point-in-Time Homeless Counts (PIT), which occur in January of each year. This effort relies on a particular application of the HUD definition of homelessness, which is somewhat unique to that count strategy. The PIT is widely recognized to be an undercount of the actual number of people experiencing unsheltered homelessness on a given night or over a year, but for now it offers the most standardized (i.e. generalizable) and reliable (i.e. consistent) opportunity to characterize homelessness in a jurisdiction. Ideally the criteria for assigning a label of homelessness status to a death record (numerator) should match the definition used in the denominator (number of PEH). This includes the geographic area for which deaths are identified and the area covered by the PIT.

Causes of Death

The process for coding and classification of cause of death currently relies on the International Classification of Diseases, 10th revision (ICD-10). This means that the terminology and associated codes for organizing causes of death should be consistent between local medical examiner records, state death records, and other clinical information sources. They should also provide consistency across different communities for comparison.

Not all sources for counting deaths will have a corresponding clinical classification. Of course, this standardized classification system is critical to establishing actionable and generalizable mortality counts. This is one important reason for linking additional community reports or housing agency data (HMIS) with death records whenever possible.

Data Quality

Missing or inaccurately recorded data reduces the successful ability to link or to use mortality surveillance data. Data cleaning procedures are a critically important part of data management. Inaccurate data is much harder to identify than absent data, particularly when errors in recorded data fall within the correct range. These types of errors cannot typically be corrected by data cleaning.

Improving data quality typically requires a continuous improvement that must move upstream from the data source to where the data is collected and captured. This often involves working with the messy, human elements of data collection.

Issues with missing data can also be corrected by the analyst once the full dataset is ready, using various analytical techniques such as single or multiple imputation procedures. These lie beyond the scope of this toolkit but are common practice in the statistical field.

Data Sharing

Limitations of a homeless mortality count commonly result in undercounting deaths. This is especially true when cases are thoroughly adjudicated by expert review of notes in a MEC record. One can be relatively sure that the final set of cases should be included, but it is harder to evaluate the number of cases that are missing from the list. Looking outside of standard systems for cases captured elsewhere improves the sensitivity of the system (i.e., the capacity for detecting deaths among PEH).

Sources of death data exist across sectors and across information platforms: housing and service agencies, health care organizations, academic researchers, and community-based advocacy groups. Each of these sectors may potentially contain unique contributions to the count. In turn, they may also present unique complications to partnership, which are beyond the scope of this toolkit.

In the most reductive sense, linking of records across systems requires a key that allows records to be matched. The simplest process requires a unique identifier that is applied in more than one

database (such as the MEC record number being stored in the state death record archive). In lieu of a shared identifier, names, dates of birth, social security numbers, and other personally identifiable data can be used to match records – when available. Whichever identifier(s) is used to support this process requires sufficient data quality and completeness. Otherwise, quality issues will directly impact the proportion of records that can be combined.

Once linkage is performed, records must be “deduplicated” by checking carefully for multiple entries referring to the same individual. Mismatches in data linkage can potentially result in two records for the same case. Therefore, the new combined dataset must be carefully reviewed for any records that match on multiple criteria (e.g. date and cause of death) but mismatched on the identifiers used to link the records.

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^{viii} U.S. Department of Health and Human Services, Centers for Disease Control and Prevention (CDC), National Center for Health Statistics, Medical Examiners’ and Coroners’ Handbook on Death Registration and Fetal Death Reporting, 2003, https://www.cdc.gov/nchs/data/misc/hb_me.pdf.

^{ix} Alameda County Health Care for the Homeless (ACHCH) is a good example of this.

^x Metraux S, Manjelievskaia J, Treglia D, Hoffman R, Culhane DP, Ku BS., Posthumously Assessing a Homeless Population: Services Use and Characteristics, Psychiatric Services, December 2016, 1;67(12):1334-1339, doi: 10.1176/appi.ps.201500388, Epub Jul 15, 2016, <https://pubmed.ncbi.nlm.nih.gov/27417894/>.

^{xi} U.S. Department of Housing and Urban Development (HUD), HUD Exchange, <https://www.hudexchange.info/programs/hmis/>.

^{xii} HUD, HUD Exchange, CoC, <https://www.hudexchange.info/programs/coc/>.

^{xiii} HUD, HUD Exchange, HIMIS, <https://www.hudexchange.info/programs/hmis/>.

^{xiv} HUD, HUD Exchange, Point-in-Time Count, <https://www.hudexchange.info/programs/hdx/pit-hic/>

^{xv} Alameda County Health Care for the Homeless (ACHCH) is an example of this.

^{xvi} Sacramento, California is an example.

^{xvii} Santa Clara County, California is an example of this.

^{xviii} In Albuquerque, New Mexico, Albuquerque Health Care for the Homeless began its work as a collaborative process with the state of New Mexico Office of the Medical Investigator, which has allowed Albuquerque to develop a shared process of homeless mortality data reporting.

^{xix} County of Los Angeles Public Health, Center for Health Impact Evaluation, Recent Trends in Mortality Rates and Causes of Death Among People Experiencing Homelessness in Los Angeles County, October 2019, http://publichealth.lacounty.gov/chie/reports/HomelessMortality_CHIEBrief_Final.pdf.

^{xx} U.S. Centers for Disease Control and Prevention (CDC), A Guide to State Implementation of ICD-10 for Mortality, National Center for Health Statistics Centers for Disease Control and Prevention December 4, 2000, <https://www.cdc.gov/nchs/icd/icd10.htm>.

^{xxi} Coalition for the Homeless, Age-Adjusted Mortality Rate for Sheltered Homeless New Yorkers, October, 2020, <https://www.coalitionforthehomeless.org/age-adjusted-mortality-rate-for-sheltered-homeless-new-yorkers/>.

^{xxii} Richard J. Klein, M.P.H., and Charlotte A. Schoenborn, M.P.H., U.S. Centers for Disease Control and Prevention (CDC), Age Adjustment Using the 2000 Projected U.S. Population., January 2001, <https://www.cdc.gov/nchs/data/statnt/statnt20.pdf>.

^{xxiii} U.S. Centers for Disease Control and Prevention (CDC), Enumerating Deaths Among Homeless Persons: Comparison of Medical Examiner Data and Shelter-Based Reports – Fulton County, Georgia, 1991, *Morbidity and Mortality Weekly Report (MMWR)*, 1993; 42(37):725-726.

III. Homeless Mortality Literature Review

Peer-reviewed literature points to the following suggestions on addressing homeless mortality and strategies for developing partnerships between clinical and academic entities. Collaborations between clinical agencies and academic organizations constitute effective teams working towards the goal of best practices and standardized methods in assessing and addressing homeless mortality.

Note: These suggestions are developed from a systematic review of the literature that has been submitted for publication.

Suggestions from a Review of the Literature

The Big Picture

1. Current research supports a “Housing First” approach. Experiencing homelessness has been shown to have lasting impact on early mortality, even after securing housing¹. This makes early intervention critical to mitigate the negative effects on health. Providing housing with interdisciplinary medical and behavioral health services² and outreach to people experiencing homelessness that are unsheltered²³ are key to addressing early mortality.
2. Policy must prioritize addressing social (or structural) determinants of health, such as lack of adequate employment, lack of appropriate educational programs, systemic racism, and limited access to socioeconomic resources.^{xxiv}
3. Coordination with other agencies, such as the Department of Veterans Affairs and Medicare,^{xxv} on data collection and accessing services is crucial.

Specific Intervention Recommendations

1. A focus on harm reduction programs^{xxvi}
2. Integrated mental health and substance use treatment, including tobacco use^{xxvii}
3. Suicide prevention interventions^{xxviii}
4. Standardized pain management protocols^{xxix}

The Need for Real-Time, Local Efforts

1. Addressing mortality among people experiencing homelessness calls for local response, as each geographical area may have different primary causes of mortality.^{xxx}
2. Assessing mortality data must be an ongoing, real-time process. Causes of death and, thus, changes in interventions will change over time.^{xxxi}
3. Unique populations will have different causes of death and, therefore, need unique targeted interventions. For example, research has discovered unique causes of early mortality in unsheltered individuals, families with children, youth, veterans, and older adults.^{xxxii}

Benefits of Academic-Community Partnerships

Partnering with an academic institution, namely a local college or university, provides several benefits to the process of developing a mortality count. Foremost, many colleges and universities have faculty that are experts in designing epidemiologic studies and in advanced statistical analysis. This may fill a gap in the available expertise in community and public health agencies. If human subject research approvals are called for, they often have the most expertise in obtaining this as well.

Pairing clinical expertise with research expertise can synergize the work of advocacy on issues related to homeless mortality. Some of the specific benefits to clinical agencies partnering with academic institutions on homeless mortality studies include the following.

- It is an opportunity to put research into action and implement research that can be rigorously compared to existing research models.
- It is an opportunity for small cities, rural areas, and other underrepresented groups to share findings. Much of the current research pertains to large city centers with extensive resources. A need exists to hear from other settings about what is happening, what interventions work, and what gaps in knowledge exist.
- Peer-reviewed research increases credibility because it is critiqued by peers with a history of publishing in the field and topic.
- Peer-reviewed publications can substantiate arguments for funding.
- Dissemination of results may also be widened and amplified by the academic partners. Publishing in journals can be a vehicle for capturing and sharing proven and reproducible methods with other organizations.
- Peer-reviewed research allows for your work to be referenced, which creates a documentation history and footprint.
- Faculty can assist the research process by creating a study design, ensuring adequate sample size to back-up findings, working on advanced statistical analysis, and co-authoring an article for a peer reviewed journal.
- Combining the clinical agency and university press relationships can enhance the ability to share the findings of a community's count back into the community.

How to Engage Academic Institutions

University researchers benefit from productive community collaboration and co-authorship on community and peer-reviewed publications. Academic health centers, in particular, often have community benefit mandates and/or mission-driven programs (whether paired with funding opportunities or not) for community collaboration.

Many universities have a greater focus on patient-centered care and population health and are eager to partner with health centers and organizations that represent the “real-world” setting and community-based care. Consider inviting university personnel from local universities to become board members.

If you have not partnered with universities, a mutually beneficial first step is promoting student internship opportunities. Students from a variety of disciplines are looking for quality internship experiences. Hosting an intern not only provides a fresh perspective and creative look at existing problems but also can be a bridge to university resources (i.e., access to statistical experts and software, access to public health researchers, and potential grant opportunities).

A Call to Publish Research

Published research can validate the need for attention to the issue of mortality among people experiencing homelessness. Research results can validate the need for funding towards this public health issue and show that funded interventions work. Published research is a communication tool between providers and agencies serving people experiencing homelessness.

As the community prepares to design and conduct a mortality count, whether organized by governmental or nonprofit agencies, they should reach out to local academic programs to identify thought partners who can participate.

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IV. Clinical Mortality Review: A Guide

Clinical mortality review is the process by which medical and other disciplinary experts review the circumstances of an individual death to explore root causes and identify interventions to prevent future deaths. When done systematically by a standing committee with the authority to direct resources and hold actors accountable, clinical mortality review can improve care and future health outcomes among people experiencing homelessness.

Continuums of care, counties, or cities can conduct clinical homeless mortality review in their communities. Clinical mortality review can be especially effective when conducted in conjunction with homeless mortality surveillance because communities with surveillance systems can have higher confidence that they are capturing cases.

An individual homeless health care provider can also conduct clinical mortality review. While Federally Qualified Health Centers are required to assess the most significant causes of death at least once every three years,^{xxxiii} routine and more frequent clinical mortality review supports a more agile response to shifting trends.

When done systematically by a standing committee with the authority to direct resources and hold actors accountable, clinical mortality review can improve care and future health outcomes among people experiencing homelessness.

Benefits of Clinical Mortality Review

As the impacts of the COVID-19 pandemic casts a stark light upon long-standing economic, racial, and ethnic disparities in health care outcomes in the U.S., the need for clinical mortality review of deaths among people experiencing homelessness grows more urgent. Through this process, providers and communities can:

- Understand the circumstances of cases
- Determine if cases could have been prevented
- Improve the quality of care and delivery of services
- Identify and address systemic issues
- Design best practices to reduce preventable deaths
- Evaluate the effectiveness of unedified intervenient

Implementation Guide for Communities and Health Care Providers

1. Identify Cases

- Establish a definition of homelessness informed by the definitions used by different sources of case data in the community
- Review all cases that fit the definition of homelessness, including demographics, acuity, and fatality risk factors that may be informed by the community's mortality surveillance data
- Consider the objectives for conducting clinical mortality review when determining if cases concerning formerly homeless individuals living in permanent housing should be defined as homeless

2. Establish a review committee

- Require representation of medical, behavioral health, and psychiatric expertise
- Consider an interdisciplinary approach, including housing and shelter providers, non-clinical service providers, persons with lived experience of homelessness, and the Office of the Medical Examiner or Coroner

3. Obtain case-level information

- Establish a relationship and/or data sharing agreement with the Office of the Medical Examiner or Coroner
- Establish data sharing agreements with service providers to ensure cases reviews have the necessary context, such as treatment and housing histories, employment, and income status, etc.

4. Choose cases to review

- Use historical data to estimate the likely number of cases on annual basis
- Establish criteria that prioritizes quality improvement opportunities, prevention of death and strategic needs of the community
- Apply criteria during preliminary review to eliminate cases that do not need further review
- Possible factors to include in criteria: quality improvement potential; emerging health or social trends; demographic or geographic groups of interest; community's strategic goals

5. Review cases

- Establish a committee meeting cadence that appropriately fits the review volume
- Ensure a systematic review of each case with a standardized case summary template that guides discussion

- The case summary should include data, cause, manner, location and circumstances of death, as well as diagnostic and treatment history, demographics, fatality risk factors and variables specific to committee priorities, which may evolve over time

6. Follow Up

- Draw on committee members' expertise and resources to identify quality improvement action items and their next steps
- Reserve time in each committee meeting to follow-up on outstanding action items from previous reviews
- Regularly communicate to broader community stakeholders about committee findings and the results of improvement actions
- Quarterly or annual summary reports can reinforce lessons learned, cultivate broader understanding of the purpose of clinical mortality review and increase awareness of emerging trends
- Examples of quality improvement actions might include: enhancing documentation workflows to improve cross-disciplinary communication or creating standing orders for vaccinations

References:

^{xxxiii} Health Resources & Services Administration's Health Center Program and Compliance Manual. (2018). <https://bphc.hrsa.gov/sites/default/files/bphc/programrequirements/pdf/hc-compliance-manual.pdf>

Appendix A—Clinical Mortality Review Example Materials

Mortality Review Case Summary

HOW TO PREPARE CASE SUMMARY FOR MORTALITY REVIEW MEETING			
	Gender:	Age:	DOD:
Death related information (from clinical records & autopsy report)			
10. Cause of death			
Manner of death			
Contributory causes			
Final Diagnosis			
Location of incident			
Time of death			
Coroners or Medical Examiner's scene description summary -Information obtained from shelter			
Length of homelessness			
Housing history (with month or year if available) Current status Past housing status (shelter, place not meant for habitation, transitional housing)			
Medical History			
Medical conditions			
Behavioral health conditions			
Medications			
Prior ER visit (last 12 months)			

Prior Hospitalization (last 12 months)	
Prior outpatient visits (last 12 months) PCP Psychiatry Substance use related	
Substance use history	
Active substance user at the time of death	
Substance used	
Drug treatment program history	
Alcohol treatment program history	
Overdose history	
Prior non fatal overdose	
Was this death preventable?	
If yes, what are the causes or fatality risk factors for concerns? <i>Source: Adapted from NYC Department of Homeless Services Mortality Review Committee</i>	

Discussion questions

1. What evidence or example of this success, gap, or failure was observed in this case?
2. What change or changes to the system you identified would you recommend to promote this observed success or address this gap or failure?

Source: New Mexico Intimate Partner Violence Death Review Team Member Feedback Form

Recommendations of the Committee

(To be completed by the moderator or individual taking notes and should be discussed at the end of the meeting)

If there was at least some chance that death could have been averted, what were the specific and feasible actions, if implemented or altered, might have change the course of events?

Recommendations	Level of prevention*	Level of impact**	Level of feasibility***	Responsible party to implement the recommendation

*Prevention: Primary-prevents contributing factors before it ever occurs; Secondary-reduces the impact of the contributing factors; Tertiary-reduces the impact of an ongoing contributing factors

**Impact: Small-education and counselling activities; Medium: clinical intervention and care coordination; Large: long lasting protective intervention; Extra-large: changes in environment (eg: improving access to services)

***Level of feasibility taking into account limited funding, staffing etc.

Source: Adapted from NYC Department of Homeless Services Mortality Review Committee

Appendix B—Homeless Mortality Workgroup Member Resources

City/County Mortality Reports

- [NYC Mortality for Unsheltered Homeless During COVID \(March – August 2020\)](#)
- [Recent Trends in Mortality Rates and Causes of Death Among People Experiencing Homelessness in Los Angeles County \(October 2019\)](#)
- [San Francisco Homeless Mortality Health Commission Presentation \(2019\)](#)
- [Multnomah County Homeless Death Report \(2018\)](#)
- [King County Washington Summary of Homeless Deaths \(2018\)](#)
- [Denver Homeless Death Review \(2018\)](#)
- [Sacramento Homeless Death Report \(2017\)](#)
- [Santa Barbara Homeless Death Report \(2017\)](#)
- [King County Mortality Study 2012-2017](#)
- [Orange County Homeless Mortality Report 2014-2018](#)
- [Philadelphia Homeless Deaths Report 2011-2015](#)
- [Sacramento Homeless Deaths Data Compilation 2002-2017](#)
- [Santa Clara Homeless Death Retrospective Study 2011-2016](#)

City/County Presentations

- [San Francisco Presentation \(May 9, 2019\)](#)
- [New York Presentation \(June 10, 2019\)](#)
- [Alameda County Presentation \(October 16, 2019\)](#)
- [Albuquerque Presentation \(October 16, 2019\)](#)