Domicile
UNKNOWN
Review of deaths among people experiencing homelessness in Multnomah County in 2016
This report is dedicated to Israel Bayer, executive director of Street Roots.

Israel’s compassion, inspiration and persistence in working to end homelessness led to this unprecedented collaboration with Multnomah County and this annual review.
The 2016 Domicile Unknown report should remove all doubt that homelessness is the challenge of our time. Eighty of our neighbors died on our Multnomah County streets in 2016, dying 30 years before their time and in situations that were largely preventable. After the severe cold weather in early 2017 led to at least six deaths from cold exposure, we know that the 2017 numbers could be even worse.

These deaths reveal some hard truths: The housing crisis is now claiming lives in every geographic quadrant of our county. Secondly, a growing number of the suspicious deaths the Medical Examiner’s Office investigates every year are among people experiencing homelessness. Finally, these neighbors are literally dying right in front of us, with 32 people passing in a public space.

This is unacceptable. This is not normal. The housing crisis is not an accident, an act of nature or “how it’s always been.” Homelessness is the result of sustained policy and practices that, since the Reagan Administration, have shifted wealth to the rich by reducing federal investment in housing for people in need.

In Multnomah County we have said, “Enough.” The year 2016 was a turning point for our community. For the first time, we officially joined our investments with the city of Portland and created a Joint Office of Homeless Services. Both governments made hard choices to find tens of millions of dollars in new funding for housing services.

We immediately began work to double the number of shelter beds with new permanent year-round shelters. Specifically, we established safe, welcoming space for women experiencing domestic violence, couples and families. We also opened new seasonal and severe weather shelters. We increased the number of people who moved back into permanent housing and helped record numbers of people from ever becoming homeless in the first place. These investments in housing stability, shelters and the support that helps people stay housed save lives and save money long-term.

The latest Point in Time Count shows the progress we’ve made, but also the important work that still remains. Though we counted more people sleeping in shelter than outside for the first time, overall more neighbors said they were homeless and more neighbors said they were homeless, for longer periods of time. That’s why we can’t stand still as the crisis around us grows. We have to continue working together and investing in the solutions we know are making a difference.

We started Domicile Unknown in 2011 when Israel first asked the County a simple question – how many people die on our streets each year? The information, he thought, could better help us respond to the housing crisis. The work has helped us see that we also need to look for long-term revenue options that could more fully fund affordable housing. We need support in the Oregon Legislature for housing stability. And we need to continue to look for ways to reduce the harm of injection drug use.

And, while this report continues to inform, more than anything, it also compels us to act. Beyond any statistic, it is the reminder that someone’s beloved child, sister, brother, or parent died a premature and preventable death.

Deborah Kafoury  
Israel Bayer
Introduction

The Multnomah County Health Department’s annual review of homeless deaths finds that 80 people who were experiencing homelessness died on local streets in 2016. Since Multnomah County first began tracking deaths in 2011, at least 359 people have died.

The Department undertakes this report to determine the number, characteristics and causes of homeless deaths in Multnomah County. “Domicile Unknown” is intended to help the public, elected officials and social service providers identify how resources and policies can be directed to save lives.

What the report captures

The Oregon State Medical Examiner and Multnomah County Medical Examiner’s Office are responsible for investigating all suspicious or unattended deaths, including accidental or violent deaths or overdoses.

The Health Department works with the Multnomah County Medical Examiner’s Office to review cases in which people were likely homeless. The methodology has remained the same since the first report in 2011. It does not capture all deaths among people who were homeless, such as those who died in a hospital of natural causes. As a result, it is almost certainly an undercount.

Key Findings

• The people who died while experiencing homelessness in 2016 were similar in number, race, gender and cause of death to those who died in 2015.

• Of the 359 deaths identified since the first Domicile Unknown report, 88 people died in 2015, 56 in 2014, 32 in 2013, 56 in 2012 and 47 in 2011.

• Most of the people who died in 2016 were men, who ranged in age from 20 to 78.

• Seventeen women died in 2016, the same as the previous year. Their ages ranged from 25 to 62.

• Racial and ethnic numbers were also similar to 2015. Most of those who died were white, with nine of the deaths occurring among African American/Blacks.

• As in 2015, alcohol or drug toxicity either caused or contributed to half the 80 deaths in 2016.
Methods

Data Source
The Oregon State Medical Examiner maintains a database of all deaths investigated under its jurisdiction. In December 2010, the data field **domicile unknown** was added to the database for Multnomah County so that deaths of individuals who may have been homeless at the time of their death could be easily extracted. Death investigators make multiple attempts to identify a place of residence for decedents through scene investigation and interviews with relatives and social contacts.

According to ORS 146.090 the Medical Examiner investigates and certifies the cause and manner of all human deaths that are:

(a) Apparently homicidal, suicidal or occurring under suspicious or unknown circumstances;
(b) Resulting from the unlawful use of controlled substances or the use or abuse of chemicals or toxic agents;
(c) Occurring while incarcerated in any jail, correction facility or in police custody;
(d) Apparently accidental or following an injury;
(e) By disease, injury or toxic agent during or arising from employment;
(f) While not under the care of a physician during the period immediately previous to death;
(g) Related to disease which might constitute a threat to the public health; or
(h) In which a human body apparently has been disposed of in an offensive manner.

For the period January 1, 2016 through December 31, 2016, we extracted from the database the date of death, sex, race, age, cause, and manner for death for records in which the individual's address was noted to be “domicile unknown” or “transient.”

Data Analysis
Case information for all investigated deaths in Multnomah County during 2016 was extracted from the Medical Examiner database. Ninety-one cases were coded “domicile unknown.” Two reviewers independently assessed death narrative reports, supplemental information, and address information for each case to determine which investigations supported the classification of homeless using the Housing and Urban Development or Health and Human Services definitions. Discrepancies in classification were resolved by concurrent assessment or by using a third reviewer. Ultimately, eighty (88%) of 91 individuals initially coded as domicile unknown were classified as experiencing homelessness in Multnomah County at the time of their death. Of the 11 cases not included in this analysis, six (55%) included information that indicated that the individual was likely not homeless; three (27%) died in a Multnomah County hospital, but records indicated that they were transient in another county; and two (18%) were infant or fetal deaths in mothers who likely were transient in another county. This analysis is limited to the 80 individuals experiencing homelessness in Multnomah County at the time of death.

To protect the privacy of decedents, demographic data were suppressed if cell counts were below three. Low counts for manner of death were not suppressed because this information is publically available from the Oregon Health Authority.

1 https://www.nhchc.org/faq/official-definition-homelessness/
To create the map (Figure 1), the variable location of death was used, unless the location was a hospital, in which case the location leading to the death was used. Data were geocoded (i.e., assigned geographic coordinates) to the street level when possible; however, some locations were geocoded only to an approximate location (e.g., highway onramp). Decedents found on or in bodies of water were excluded, for a total of 75 deaths reflected on the map. The kernel density function was used to calculate the density of deaths by their point location. The kernel density tool fits a smoothly curved surface over each point; more points are reflected as “warmer” colors on the map (shades of red), while less points are reflected by “cooler” colors (shades of blue). In this manner, individual death locations are obscured for confidentiality, but the overall pattern of death is displayed. Mapping was performed in ArcMap 10.3.1.

Because of the limitations of using Medical Examiner data for this report (e.g. calculating denominators is not possible because deaths could include non-Multnomah County residents), we compiled only the frequencies of each variable and did not attempt to analyze differences in this group of homeless decedents to any other group, or to estimate specific rates. Frequencies were compiled using SAS 9.3. For the season of death, the year was divided into October-March and April-September.
Results

Age, Sex, Race

Seventy-nine percent of individuals who died were male with an average age of 51 years at death. The 17 females who died had an average age of 43 years. Although race was not established in all cases, the majority of decedents were classified as White (64, 82%), followed by Black/African American (9, 12%). Other racial categories accounted for fewer than three deaths each. Racial information was missing for two of the deaths.

<table>
<thead>
<tr>
<th>Sex</th>
<th>Number (%)</th>
<th>Mean Age (range) (N=80)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>63 (79%)</td>
<td>51 (20-78)</td>
</tr>
<tr>
<td>Female</td>
<td>17 (21%)</td>
<td>43 (25-62)</td>
</tr>
<tr>
<td>TOTAL</td>
<td>49 (20-78)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Race*</th>
<th>Number (%)</th>
<th>N=78</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>64 (82%)</td>
<td></td>
</tr>
<tr>
<td>African-American/Black</td>
<td>9 (12%)</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>5 (6%)</td>
<td></td>
</tr>
</tbody>
</table>

*Note: Values may not add up to total due to missing data and low counts.

Season

Because people experiencing homelessness are often exposed to environments without shelter, we looked at the frequency of deaths during cooler (October-March) and warmer (April-September) periods of the year. In 2016, around half the deaths (38, 48%) occurred between April and September, while 42 (52%) occurred during the colder months of October-March. However, the one death attributed to hypothermia occurred in September.

<table>
<thead>
<tr>
<th>Season</th>
<th>Number (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>April - September</td>
<td>38 (48%)</td>
</tr>
<tr>
<td>October - March</td>
<td>42 (52%)</td>
</tr>
</tbody>
</table>

Cause and Manner of Death

The Medical Examiner database includes information on the cause and manner of death. The manner of death is classified as natural, accident, suicide, homicide, or undetermined. Natural deaths are usually medical conditions, while the most common causes of accidental deaths are trauma and intoxication.

Table 3 shows the distribution of deaths by manner. Among the 33 accidental deaths, 20 (61%) were related to drug or alcohol consumption, while the most of the remaining individuals died from trauma (subtotals not shown). For the 32 natural deaths, nearly half (15, 47%) were from alcohol-related liver disease or atherosclerotic heart disease; other causes included cerebral edema, hemorrhage, sepsis, chronic obstructive pulmonary disease, and unspecified natural disease. Twelve deaths in total were attributed to suicide and homicide, while 3 had an undetermined manner. Causes of death for these undetermined manner included drowning and overdose.

<table>
<thead>
<tr>
<th>Manner of Death</th>
<th>Number (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accident</td>
<td>33 (41%)</td>
</tr>
<tr>
<td>Natural</td>
<td>32 (40%)</td>
</tr>
<tr>
<td>Suicide</td>
<td>9 (11%)</td>
</tr>
<tr>
<td>Homicide</td>
<td>3 (4%)</td>
</tr>
<tr>
<td>Undetermined</td>
<td>3 (4%)</td>
</tr>
<tr>
<td>TOTAL</td>
<td>80 (100%)</td>
</tr>
</tbody>
</table>
**Toxicology**

In half of the 80 deaths in 2016, drug or alcohol toxicity either caused or contributed to death. Some deaths were associated with more than one substance, and opioids (heroin or prescription) were noted in 19 (48%) individuals for whom drug or alcohol toxicity caused or contributed to death, or nearly one-quarter of all homeless deaths.

**Table 4**

Deaths Involving Substances as Primary or Contributing Causes of Death among Homeless Medical Examiner Cases, Multnomah County, 2016

<table>
<thead>
<tr>
<th>Substance</th>
<th>Number (%) (N=80)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No substance</td>
<td>40 (50%)</td>
</tr>
<tr>
<td>Any substance*</td>
<td>40 (50%)</td>
</tr>
<tr>
<td>Any opioid (heroin, prescription, or unspecified opioids)</td>
<td>19 (48%)</td>
</tr>
<tr>
<td>Any alcohol</td>
<td>19 (48%)</td>
</tr>
<tr>
<td>Any heroin</td>
<td>16 (40%)</td>
</tr>
<tr>
<td>Any methamphetamine</td>
<td>12 (30%)</td>
</tr>
<tr>
<td>Any prescription opioid</td>
<td>4 (10%)</td>
</tr>
<tr>
<td>Any cocaine</td>
<td>3 (8%)</td>
</tr>
</tbody>
</table>

*Note: Deaths involving more than one substance fall under more than one category. All these categories should have the same justification – alcohol is not a subset of opioid.

**Location**

Over one-third of homeless deaths occurred in outdoor public spaces followed by hospitals (Table 5). Outdoor public spaces included deaths where the decedent was struck by a vehicle or train (9, 28%).

**Table 5**

Location of Death among Homeless Medical Examiner Cases, Multnomah County 2016

<table>
<thead>
<tr>
<th>Location</th>
<th>Number (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outdoor public</td>
<td>32 (40%)</td>
</tr>
<tr>
<td>Hospital</td>
<td>12 (15%)</td>
</tr>
<tr>
<td>Hotel/Motel/Shelter</td>
<td>11 (14%)</td>
</tr>
<tr>
<td>Car, RV, camper*</td>
<td>9 (11%)</td>
</tr>
<tr>
<td>River</td>
<td>5 (6%)</td>
</tr>
<tr>
<td>Home/apartment</td>
<td>5 (6%)</td>
</tr>
<tr>
<td>Outdoor private</td>
<td>3 (4%)</td>
</tr>
<tr>
<td>Other non-residential</td>
<td>3 (4%)</td>
</tr>
<tr>
<td>TOTAL</td>
<td>80 (100%)</td>
</tr>
</tbody>
</table>

* Found dead in/around vehicle versus struck by vehicle
Figure 1 shows the location of homeless deaths by location of deceased. For individuals who died in hospitals, the location is where the event leading to death occurred. Deaths in or around rivers are excluded from the map. Deaths are fairly geographically distributed across the county, with a larger concentration in the downtown area.

Figure 1. Multnomah County ME Domicile Unknown Cases by Location of Death, 2016
Comparison to previous years

Since 2011, medical examiner deaths occurring in homeless individuals have been increasing, although the data show some variability. 2013 had the lowest count during the previous 6 years (32 deaths), and 2015 had the highest (88 deaths). The overall proportion of ME-investigated cases who are in homeless individuals has also varied over time, ranging from 3.4% in 2013 to 8.2% in 2016 (Figure 2).

Figure 2. Percent of Multnomah County ME deaths who are Domicile Unknown, 2011-2016

Homeless deaths as a percentage of total Medical Examiner Cases, Multnomah County, 2011-2016
Acknowledgments

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