Deaths and Violence Against Homeless Persons in Santa Barbara County

January 1, 2009 through March 31, 2010

A Report for the County Board of Supervisors

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Executive Summary

Background

In February 2010, the Santa Barbara County Board of Supervisors directed the Homeless Death Review Team to conduct a thorough review and develop recommendations to address violence and deaths among the homeless population. The Public Health Department's Health Care for the Homeless program led the project, in collaboration with other members of the Homeless Death Review Team including the Santa Barbara County Department of Alcohol, Drug and Mental Health Services, the Santa Barbara County Department of Social Services, the Santa Barbara Police Department, Casa Esperanza and Cottage Hospital.

Review Caveat

This report is informational and is not designed or intended to predict causality or propose final solutions for any of the questions raised. Caution is advised in extrapolating any of the findings or the conclusions based on certain inherent study limitations, such as the difficulty identifying, with 100% accuracy, persons experiencing homelessness who died within the study period; the cross sectional design limits the ability to differentiate cause and effect or the sequence of events; limitations in access to law enforcement records; limitations in the accuracy and completeness of information on death certificates as each death is not reviewed by the Coroner's Office; and, limited time and resources due to the short timeframe.

Methods

Case selection was accomplished by generating an initial list of 27 known deaths of homeless people through the Public Health Department's (PHD) practice management software. The initial list was confirmed and expanded with information from community informants, from the PHD Health Care for the Homeless (HCH) staff and from within the Homeless Death Review Team (HDRT). This revised list was confirmed and further expanded by searching the Electronic Death Registry System which includes all death certificates to match for deaths at any known SBC transitional or public housing settings during the study time period. One last review of all methods of selection identified sixty-six deaths for possible inclusion in the study. After final review of criteria for homelessness and study parameters, forty-five decedents were included for analysis under the Homeless Study Category.

Once cases were identified, data was collected by direct record review from HDRT members using a data collection form, HDRT members reviewed the data for case inclusion or exclusion and select information was entered into a Microsoft Access database for analysis.

Demographics

Forty-five (45) homeless decedents were identified for the review. Males represented 87% of the gender demographic, with Caucasian males between the ages of 50 and 59 years old (53%) the majority of decedents. Three quarters of all deaths occurred between the ages of 40 and 59 years old irrespective of gender, race or ethnicity. Average age at time of death for females and males is 48 and 53 respectively. For the total population, average age of death is 52 years old. Twenty percent of the patients were of Hispanic/Latino ethnicity. One decedent's citizenship was unknown, two were Mexican citizens, and the remainder US citizens. Sadly, six of the decedents were also veterans.

Death Statistics

Natural causes for death were most frequently listed on the death certificates as the manner of death, with accidents listed next in frequency. These numbers may be somewhat misleading however, as 18% of the death certificates were unmarked for any manner of death. Trauma represented 11% of the deaths. One death occurred from exposure and hypothermia. 20% of deaths were related to illicit drugs, while 18% were directly attributable to alcohol.

Related Health Conditions

84% of the decedents had identified cardiovascular disease. 68% were diagnosed with gastrointestinal disease. 89% had some type of mental health diagnosis ranging from adjustment disorder to schizophrenia. Patients diagnosed with any mental health condition also suffered from other conditions 39% of the time. More than 25% of patients with mental health conditions were also using illicit drugs or alcohol. As expected, violence and trauma was also more prevalent with co-morbid mental health, drug use, and alcohol use.

Violence and Trauma

In addition to examining deaths of homeless people, the HDRT was also charged with looking at violence against homeless people in Santa Barbara. Information regarding violence and trauma was more difficult to collect than the data for the death review. Limitations were the result of: having no easy method to identify homeless persons in law enforcement and hospital reports; many reports of violence were anecdotal and incomplete; homeless persons often do not report such incidents through formal channels; and there was no organized system to gather such data. The team approached this task through multiple methods including: conducting focus groups; obtaining data from the Sexual Assault Review Team; and seeking data from multiple community partners. Anecdotal information was available but the lack of accurate and reliable data prohibited a full understanding of the scope of the problem of violence and trauma against homeless people. The team recommends that a system be established to maintain this information.

Summary Conclusions

This descriptive study highlights the complicated health care needs of people experiencing homelessness in Santa Barbara County. Some of the key highlights are:

1. An overwhelming number of the deaths involved individuals diagnosed or suspected of having severe dependence on, and abuse of, alcohol and/or drugs. Of the numerous clients who did not have formal treatment with ADMHS (no records), the majority had a diagnosis of alcohol and or substance abuse/dependence from other records (Public Health, for example) or alcohol or drug abuse was identified as a contributing factor to their death.

2. It is unclear how many homeless were also Severely Mentally Ill (SMI). Some clients were not identified due to the severity of their substance abuse issues and/or due to lack of contact with ADMHS mental health programs. Of the people seen by ADMHS (mental health, ADP, Jail MH, or PHF), a significant majority appeared to have more mild to moderate mental health conditions (depression, anxiety) that were secondary to a primary substance abuse diagnosis.

3. There was a frequent reference to psychiatric diagnosis in non-ADMHS records that are unconfirmed by ADMHS due to having no contact with this group in the study.

4. For a number of clients shared between Public Health and ADMHS, the extent of physical health problems, frequency of contact with Public Health, and medications prescribed were not routinely known to ADMHS service providers.

5. The lack of accurate and reliable data is a major hindrance in fully understanding and addressing the problem of violence and trauma against homeless people in our community. The team recommends that a system be established to maintain this information.

As this is an initial review, it presents more questions than it proposes solutions. Further work can be built upon this analysis to identify additional opportunities to provide treatment and recovery for people in need living in our community.

Homeless Death Review Team Study

Background on Homelessness in the United States and Beyond

Inadequate housing is a worldwide crisis as documented in the *United Nations - Habitat Annual Report 2009* where it was reported that "those without adequate shelter, water and sanitation grows by 70 million people per year" (UN-Habitat [updated 6/17/10]). In the United States, urban, suburban, and rural communities are all being affected and homelessness persists as an ever increasing public health and social concern. Although the *U.S. Department of Housing and Urban Development* (HUD) *2009 Annual Homeless Assessment Report to Congress* (HUD.GOV [updated 6/16/10]) established a slight decline in total individual homelessness between 2008 and 2009, the number of homeless families increased. From the same report, a nationwide single night survey, conducted in January 2009, found 643,000 persons were homeless, either in sheltered or unsheltered environments. California, New York, and Florida accounted for 39% of this total. Additional data from the report, using 12-month counts, demonstrated 1.56 million persons experienced homelessness between October 1, 2008 and September 30, 2009.

The primary source of medical care for homeless persons in the U.S. is funded via grants from the federal *Health Resources and Services Administration* (HRSA) *Health Care for the Homeless* (HCH) program. As reported in 2008, "HRSA-funded health centers served nearly 934,000 persons experiencing homelessness living on the streets, in transitional housing, or in homeless shelters" (BPHC [updated 6/15/2010]). Santa Barbara County Public Health Department (PHD) is a current grantee of the HRSA HCH Program and is the county's primary provider of health care for homeless patients.

History of Homelessness in Santa Barbara County

Santa Barbara County has long been a home for people experiencing homelessness dating back to 1917 with the establishment of the homeless camp at the Lillian Child's estate (Walker, 2004). In addition to the myriad of individual reasons why someone becomes homeless, in Santa Barbara County factors resulting in homeless may also include: the high cost of living, high property values, the desirable climate, and the cyclical economic impact on employment (especially in regards to the number of agricultural and service industry jobs).

Patients who are homeless present unique challenges within the context of complex medical and logistical needs. In partnership with HRSA, the PHD's HCH program strives to "provide a coordinated, comprehensive approach to health care including substance abuse and mental health services" (BPHC [updated 6/15/2010]).

The PHD has a unique approach to addressing issues related to homelessness in each area of the county. Each of the three more heavily populated areas (Lompoc, the Santa Barbara region and Santa Maria) have shelters established, provide access to medical care and provide other social services designed to aid those who find themselves without a home. Unfortunately, due to a lack of resources, homes are not immediately available to everyone who wants or needs them. This reality means that, without the stability of a home, people are left unsheltered and exposed to the elements, to violence and to mortality risks which may be significantly increased by other life issues they are facing (e.g., low income, physical problems, mental illness and addictions).

Formation of the Homeless Death Review Team

A comprehensive review of deaths among the homeless population in Santa Barbara County has not been conducted prior to this report. As will be discussed, the collection of death statistics is difficult to analyze. Prior to this report, death statistics were handled by social worker Ken Williams who compiled lists when he was notified of a death. Because Mr. Williams worked in the Santa Barbara area, his lists primarily tracked only those who died in that area.

In 2007, Mr. Williams, alarmed by the increasing number of deaths among the homeless, approached Dr. Peter Hasler, for help. Dr. Hasler, who at the time was the PHD's Health Care for the Homeless Medical Director,

recommended that a *Homeless Death Review Team* be established in a similar fashion to the *Child Death Review Team*.

The Homeless Death Review Team was created consisting of county personnel and several Santa Barbara area service providers, such as shelter staff, Cottage Hospital social workers, nurses from the Parish Nursing Program and Santa Barbara police officers. The first meeting took place in October 2007. Utilizing death certificates and the available data from the team members' programs, the objectives of the first meeting were:

1. Examine the causes of death

2. Identify trends

3. Explore ways to avert similar deaths in the future

The meeting was informal but useful as an opportunity to assess what could be done differently. Due to the informality of the process, no single agency or person had a lead role in the organization of the review team. As a result, the next meeting did not take place until January 2010.

Examining Death and Violence in the Homeless Population

In 2009, the increasing number of deaths in the homeless population caused community advocates to begin focusing more on the plight of the homeless in Santa Barbara County. Questions were raised as to what could be done about the number of deaths and the amount of violent crimes directed at homeless persons. Unfortunately, the absence of quantifiable data regarding violence against the homeless made it difficult to determine the extent to which deaths from violent acts occurred in the homeless population.

To gain a better understanding of the circumstances involved in deaths and the extent of violent acts against the homeless population, the Board of Supervisors tasked the *Homeless Death Review Team* to conduct a thorough review and develop recommendations to address violence and deaths among the homeless, including the causes of death and the quality/consistency of available data collection and tracking.

To achieve this goal, the Homeless Death Review Team established the following two (2) specific objectives:

1. Identify the number, causes and characteristics of deaths occurring in Santa Barbara County from 1/1/09 through 4/1/10 in patients who are homeless or formerly homeless.

2. Develop recommendations to improve healthcare and thus reduce preventable, premature deaths within the homeless patient population.

Review of Current Literature

Studies in current literature as early as the 1970s examined a causality between homelessness and mortality. From 1969 to 1971 mapping mortality statistics for census tracts in Los Angeles County suggested a three times greater mortality in the socioeconomically depressed areas of Watts and the skid row areas of Los Angeles and Long Beach (Satin et. al. 1982, cited in O'Connell 2005). A study of all deaths that occurred in Massachusetts from 1972 to 1973 found one district in Boston with the highest number of deaths and greatest area of excess mortality for the entire state. This "zone of excess mortality" (Jenkins et. al. 1977, cited in O'Connell 2005) incorporated severe poverty, social isolation and disability, sub-standard housing with marked overcrowding and homelessness as congruent factors. The authors also concluded from this small environmental "death zone" (Jenkins et. al.), there were significantly more deaths than predicted by statewide mortality rates, and actually exceeded, at that time, the number of deaths occurring in areas federally declared as national disasters (Jenkins et. al.).

Over the next three decades a variety of studies comparing an association between homelessness and early mortality within major cities across the United States, Canada, Europe, Asia, and Australia confirmed this intricate and troubling relationship (O'Connell 2005). Some of the more referenced studies, including those from Atlanta (CDC

1987), San Francisco (Wlodarczyk 1991) and Seattle (HCHN 2003) studied data compiled from their local Medical Examiner (ME) databases. A study of homeless deaths in Ottawa (Guirguis-Younger et. al. 2003) was designed with a case study approach and used interviews within a network of decedent contacts to obtain data rather than exclusively by cohort record reviews. Subsequent reports from these jurisdictions (CDC 1991; Hanzlick and Parrish1993; HCHN 2009) combined various methodologies to gather and report their data.

The more reviewed retrospective cohort studies from primarily large urban centers are thought to provide more consistent data on the Standard Mortality Ratio (SMR) comparing actual homeless patient deaths over a given time period to the total homeless population in a specific location; a limitation of the ME studies already discussed. These primarily urban studies from New York (Barrow et. al. 1999), Boston (Hwang et. al. 1997; Hwang et. al. 1998), Toronto (Hwang 2000; Hwang 2002; Cheng et. al. 2004), Stockholm (Alstrom 1975), Philadelphia (Hibbs et. al. 1994) and Copenhagen (Nordentoft 2003) consisted of larger cohort groups over longer time spans. All of these urban center studies demonstrated an increased SMR across all ages for homeless people when compared with age similar, non-homeless cohorts of each city's general population.

More recent studies reviewing morbidity and mortality within sub-groups of the homeless population are also available. These studies ranged from a prospective cohort of young adults ages 14-25 living on the streets of Montreal, Canada over a 5 year period (Roy et. al. 2004, cited in O'Connell 2005) to a 9 year retrospective cohort comparing non-homeless and homeless U.S. Veterans with mental illness (Kasprow and Rosenheck 2000, cited in O'Connell 2005). One of the most recent and interesting sub-cohort studies (O'Connell and Swain 2005, cited in O'Connell 2005) is a prospective study of chronically homeless persons living on the streets of Boston for at least six consecutive months. As with the other sub-group studies reviewed, this study also suggests an increased mortality rate for that cohort studied within the limitations of bias toward any sub-group when compared with a more general population. Interestingly, this study reported the most common causes of death as cancer and cirrhosis, with only one death attributable to hypothermia with deaths occurring year round, and "not only during the colder months of winter" (O'Connell 2005). This surprising finding did correlate with many of the other studies also mentioned where exposure is actually listed as an uncommon cause of death. This conclusion should be viewed with caution, however, as data for cause of death is often taken directly from a death certificate completed without an autopsy or with regard to the potential long term effects of extended unsheltered living on chronic illness.

The most recent and comprehensive study reviewed is an 11 year follow up study by Hwang et. al. examining mortality in a nationwide Canadian sample of the homeless housed in shelters or transitional housing. Over 15,000 participants counted in the 1991 census were evaluated for SMR, life expectancies and survival probability by comparing data from cohorts with income in the lowest and highest twentieth percentiles, and within the entire cohort. The data suggested a higher SMR for homeless and transitionally housed across all age groups and sexes, a lower life expectancy after age 25, and a lower probability of survival to age 75. Comparing data within the entire cohort, the authors also concluded that living in shelters and transitional housing confers a much higher SMR than expected based on low income alone, and to reduce the SMR for the homeless and transitionally housed population would additionally require addressing and treating the chronic medical illnesses associated with the major causes of death reported (Hwang et. al. 2009).

Regardless of if these studies were part of the peer-reviewed literature or less formal unpublished data collections from various jurisdictions around the world, and despite the application of various designs and methodologies studying a defined homeless cohort or sub-group within the cohort, the literature reviewed suggests a disturbing SMR trend that "homeless persons are 3-4 times more likely to die than the general population" (O'Connell 2005). Equally as disturbing is the realization that many of the studies recognized a limitation in their data collection was correctly identifying the actual number of homeless deaths over a designated time period compared with the total homeless population in the given area evaluated. Both critical elements of the SMR and accepting potential inaccuracy suggest the possibility of even higher death ratios.

Methods

Because people who are homeless are often hidden, e.g., sleeping in cars, under bridges, and in tunnels, it is very difficult to measure the homeless population with 100% accuracy. Estimates for the annual national homeless population range between 2.3 – 3.5 million people. This number represents approximately 0.9% to 1.3% of the U.S. population.[1]

Santa Barbara County's ideal climate, large tourism industry and shortage of affordable housing, all contribute to a higher than national average of homeless persons (about 1.5% of the population). This high number of homeless people results in an ever-increasing demands for homeless services.

To achieve its two specific objectives, the Homeless Death Review Team chose a cross-sectional design similar to the reports from Atlanta (CDC 1987), San Francisco (Wlodarczyk 1991) and Seattle (HCHN 2003) for this initial report. This study design was highly dependent on existing records and documents. Time limitations and a small sample size dissuade the use of a cohort or case control study, both designs are better suited to predict causality, but require much more time to develop the design, validate the data, and allow for follow-up data collection.

Case inclusion was based on an adaptation of the current homeless individual definition taken from the U.S. Department of Health and Human Services (HHS) Health Resources and Services Agency (HRSA) Bureau of Primary Health Care (BPHC [updated 5/22/2010]):

> *HOMELESS PATIENTS – Are defined as patients who lack housing (without regard to whether the individual is a member of a family), including individuals whose primary residence during the night is a supervised public or private facility that provides temporary living accommodations, and individuals who reside in transitional housing.*

This definition includes people who live in cars, RVs or other nonpermanent and unstable types of arrangements, e.g., couch surfing, temporarily doubling-up, etc. For the purposes of the Team's review, also included were people who were homeless anytime during the 12 months prior to their death even if housed at their time of death.

Case Selection Criteria

Case selection was accomplished using a multifaceted approach by generating a list of known deaths of homeless people through the Public Health Department (PHD) Practice Management software. This initial list of twenty seven people was confirmed and then expanded by information from community informants, the PHD Health Care for the Homeless (HCH) staff and within the *Homeless Death Review Team* (HDRT).

The revised list of forty nine people was confirmed and then further expanded by searching the SBC Medical Examiner ME database using an address match approach. The database was queried for "Usual Residence" addresses listed on a death certificate matching the address of a known shelter in SBC, a PO Box, an "Unknown", or a "No Permanent Address". Matches for any known SBC transitional or public housing (HUD, Choice Voucher, or locally financed) included those people who were transitioning out of homelessness yet still met criteria for the study. The additional public housing match was devised to select cases for a *Formerly Homeless* category. This category was established to study trends in patients who were not homeless within 12 months of their death, but were homeless prior to that. The HDRT determined people who documented their living situation as stable for more than

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[1] Key Data Concerning Homeless Persons in America, National Law Center on Homelessness and Poverty (http://www.nlchp.org/content/pubs/Homeless) July 2004 from Martha Burt et al., Helping America's Homeless 49-50 (The Urban Institute Press, 2001). The information provided in this book is based on data from the National Survey of Homeless Assistance Providers and Clients, conducted in 1996. Sampling data was obtained in 76 different cities and rural areas from 16 different types of homeless assistance programs, including emergency shelters, soup kitchens, and alcohol/drug programs. All of the data in this book was weighted in order to be nationally representative. Weighted data was subsequently used to create estimates on the number of homeless persons for October/November 1996 and February 1996. Referred to in the report, "Bringing Our Community Home (SB County's 10-Year Plan to End Chronic Homelessness)."

two years, without any moves during this time, were not homeless and were therefore excluded from the study. One final review using all methods of selection identified sixty-six deaths for further study investigation.

Deciding Which Cases to Include in the Study

Once the cases were identified, data was collected from the PHD medical chart for the person (when available). The data was input into the Data Collection Form (Appendix A) which was adapted from the 2003 Seattle study's Data Collection Tool (HCHN 2003). The PHD added custom fields to this form to evaluate SBC services provided, recent hospitalization(s) or emergency room visits, Manner of Death and additional History/Background. The form was also customized to provide information for the most recent clinical health care encounter(s), comments and/or additional information from the HDRT agencies. The rationale for these customizations to the Data Collection Form will be explained fully in the Discussion section of this report.

Data entry by HDRT PHD staff and member agencies was very time intensive, but was accomplished more quickly through the use of templates uploaded to a secure website. As templates were completed, HDRT members reviewed the data for case study inclusion or exclusion. Cases where insufficient data existed to conclude homelessness, or clear evidence existed that the decedent was not homeless, were excluded.

Once a form was completed for each person in the study, select information from each form was entered into a Microsoft Access database designed by the HDRT and PHD Information Technology staff for analysis.

Results

Cases Reviewed

Table 1 summarizes the method of identifying decedents using the ME database match. After all data was reviewed, the HDRT found only one decedent meeting the criteria for the *Formerly Homeless* category, and then by only two months. Although Table 1 displays the single *Formerly Homeless* decedent, the HDRT ultimately agreed to enter this decedent into the *Homeless Category* and remove the *Formerly Homeless* category from future review.

Twenty-one cases were excluded based on the "Exclusions" criteria. After transferring the single *Formerly Homeless* case to the *Homeless* category, forty-five decedents were included for analysis under the Homeless Study Category.

Table 1: Potential Case Identification and Study Category		
Method of Identification	**Cases**	**% of Cases**
Shelter residence address	16	24%
Transitional or Public housing residence address	17	26%
No permanent address identified during address match review	12	18%
Living outdoors streets identified during address match review	6	9%
Doubling up identified during address match review	8	12%
PO Box residence address	0	0%
Unknown residence address matched in SBC practice mgmt software	3	5%
Community informant, PHD HCH or Death Review Team confirmation	4	6%
Total:	66	100%
Included Cases Study Category and Exclusions	**Cases**	
Homeless	44	
Formerly homeless (current stable housing, but homeless within 2 years)	1	
Exclusions		
Stable housing > 2 years with no evidence that decedent was homeless	17	
Insufficient data to determine living status as homeless	3	
Death certificate unavailable at time of investigation	1	
Total:	66	

Demographics of the Case Studies: Age, Gender, Race, Ethnicity, Veteran Status

Data representing demographic information for the deaths selected for inclusion are summarized in Table 2. Males represented 87% of the gender demographic, with Caucasian males between the ages of 50 and 59 years old (53%) the majority of decedents. However, three quarters of all deaths occurred between the ages of 40 and 59 years old irrespective of gender, race or ethnicity. Average age at time of death for females and males is 48 and 53, respectively. For the total population, average age of death is 52 years old. Twenty-two percent of the patients were of Hispanic/Latino ethnicity. One decedent's citizenship was unknown, two were Mexican citizens, and the remainder U.S. citizens. Sadly, six of the decedents were also veterans. This data is distinctly different from the demographics of the total PHD patient population with 62% females, 23% Caucasian, and 68% Hispanic.

Table 2: Demographic Data		#	%
Total Deaths		45	100%
Gender			
	Females	6	13%
	Males	39	87%
Race			
	African American	2	5%
	Caucasian	37	83%
	Hawaiian	1	2%
	Hispanic	1	2%
	Mexican	1	2%
	Mexican American	2	4%
	Native American	1	2%
Hispanic as Ethnicity		10	22%
Veteran		6	13%
Age			
	0-19	0	0%
	20-29	0	0%
	30-39	4	9%
	40-49	10	22%
	50-59	24	53%
	60-69	5	11%
	70-79	2	5%
	80-99	0	0%
Average age at time of Death			
	Females	48	(n=6)
	Males	53	(n=39)
	Total Population	52	(n=45)

Living Situation

Table 3 provides more detail on the living situation for the people reviewed. It was very difficult to identify the type of living situation from death certificates alone, as there is no data field on the certificate that identifies people as homeless. The "Decedent's Residence Address" entered on the death certificate is provided by the coroner's office research, and unless it matched one of the known area shelters, an in-depth review of the PHD Medical Record (if one existed) was required. For those people not receiving care from the PHD, information from other agencies or community informants guided the categorization of living situation.

The location city is based on the decedent's residence zip code listed on the death certificate, and may not always correlate with the last known living situation. It does, however, provide some insight into the decedent's last known location and gives a more comprehensive view of the entire county.

Single Room Occupancy (SRO) was used to categorize those people living in motels or hotels as transitional housing. The single case categorized as transitional housing was, in fact, the person transferred from the *Formerly Homeless* to *Homeless* category discussed earlier in this report.

Doubled-up denotes those people known to be living with friends or relatives, yet are not in what is considered as stable housing. No permanent address was used to identify people who were relocating frequently. This category was also used for those who could not be identified as doubling up, living distinctly outdoors, staying in shelters or in transitional housing. Of the six people initially identified as living outdoors, two were known to be living in vehicles. In reality, no matter what living situation is classified, most homeless people are outdoors at least part of the time.

Table 3: Living Situation and Residence Zip Code for Homeless Decedents

Living Situation	#
Doubled up (with other people)	8
No permanent housing	12
Outdoors	4
Shelter	15
SRO (motel/hotel)	3
Transitional	1
Vehicle	2
Total	45

Residence Zip Code		#
93101*+	Santa Barbara	10
93103*+	Santa Barbara	14
93105*+	Santa Barbara	4
93108	Montecito	1
93110*+	Santa Barbara	1
93111*	Santa Barbara	2
93427	Buellton	1
93434*	Guadalupe	1
93436*+	Lompoc	4
93454*+	Santa Maria	4
93458*	Santa Maria	3
	Total	45

* Location of current PHD service site or partner site
+ Location of current ADMHS service site
If living situation is outdoors/Vehicle, zip code of death location used.

Death Statistics

Natural causes as identified by the certifying physician were most frequently listed on the death certificates as the manner of death, with accidents listed next, as shown in Table 4. These numbers may be somewhat misleading however, as 18% of the death certificates were unmarked for any manner of death. Indoor deaths were more frequent than outdoor deaths, but many indoor deaths did occur in hospitals. When able to identify that an outdoor event precipitated death, the death was entered as an outdoor death even if the location at the time of death was a hospital. Again, caution is advised when interpreting this data, as it was not always clear where the patient was prior to their transport to, and ultimate death in, a hospital. For PHD patients, more deaths occurred in the winter months in direct contrast to other studies in areas with much colder winter climates than Santa Barbara County.

Table 4: Manner of Death and Environmental Data		
(n=45)		
	#	%
Manner of Death		
Natural	19	42%
Accident	16	36%
Homicide	0	0%
Suicide	1	2%
Undetermined	1	2%
No Information	8	18%
Location of Death		
Outdoor Death	10	22%
Indoor Death (Hospital death)	35 (17)	78% (38)%
No Information	0	0%
Season		
Winter	19	42%
Spring	6	13%
Summer	13	29%
Fall	7	16%

While considering the death statistics of homeless persons, a point of reference are the causes of death in the general population of Santa Barbara County. In the Santa Barbara County Public Health Department's *2009 Community Health Status Report: Leading Causes of Premature Death, Risk Factors and Prevention Steps,* the top leading causes of death are coronary heart disease, stroke, lung cancer, chronic obstructive pulmonary disease (COPD)/emphysema, and Alzheimer's disease. The leading causes of premature death are coronary heart disease, motor vehicle accidents, accidental drug overdose, stroke, and chronic liver disease. Premature death is death before the age of 75. This data reflects all deaths in Santa Barbara County in 2007.

Cause of death information in the homeless presented in Appendix B is raw data taken directly from the death certificates and includes immediate and underlying causes. Even with the small sample size for this report, this data demonstrates the varied entries used to classify the "Immediate Cause" of death which can sometimes be misleading unless the "Underlying Cause(s)" are examined.

Two additional tables are included in an attempt to present this data in a unique way. The more traditional cause of death categories are compared with the true probable underlying cause of death. This unique perspective was only obtained after extensive chart documentation review and case discussion with PHD staff and the HDRT. This approach may seem controversial, but it is important to present in the hopes of stimulating thought and discussion regarding death certificate reporting and, more importantly, improving treatment strategies.

Table 5a presents the more traditional categories for causes of death, while Table 5b contrasts the proposed or extrapolated underlying causes.

Table 5a. Primary Cause of Death (Traditional Categories)		
(n=45)		
Cause of Death	**#**	**%**
Accidental choking	1	2%
Accidental exposure to noxious substance	2	4%
Accidental fall	1	2%
Accidental non-transport injury	1	2%
Alcohol induced death	4	9%
Alcoholic liver disease	4	9%
Asthma	1	2%
Atherosclerotic cardiovascular disease	5	11%
Diabetes	1	2%
Drug induced death	9	20%
Event of undetermined intent	1	2%
Heart failure	1	2%
HIV	1	2%
Hypertensive heart disease	3	7%
Hypothermia	1	2%
Myocardial infarction	2	4%
Neoplasm of the liver	1	2%
Neoplasm of the lung	2	4%
Pneumonia	1	2%
Ruptured mycotic pulmonary aneurysm	1	2%
Sepsis	1	2%
Undetermined secondary to decomposition	1	2%

Table 5b. Primary Cause of Death (Extrapolated Categories)		
(n=45)		
Cause of Death	**#**	**%**
Acute alcohol intoxication	1	2%
Chronic alcohol abuse	17	38%
Chronic depression	3	7%
Chronic polysubstance abuse	5	11%
Hepatitis C	1	2%
HIV/AIDS	1	2%
Medical non-compliance	5	11%
Myocardial infarction	1	2%
Obesity	1	2%
Polysubstance abuse	3	7%
Schizophrenia	3	7%
Tobacco abuse	3	7%
Unknown	1	2%

Regardless of which table you study, it is clear that drug and alcohol related deaths are most frequent. Even with traditional categorization 20% of deaths were related to illicit drugs, and 18% directly attributable to alcohol.   These numbers are even more startling when direct chart review allows insight into a patient's history that is not always evident to the Medical Examiner, including information about substance use. With extrapolation of this knowledge

into Table 5b, 65% of the deaths are related to some form of substance abuse, whether alcohol, illicit substances, tobacco, or a combination of more than one substance (listed as polysubstance abuse).

The category of medical non-compliance is not meant to be demeaning. With chronic illness there is responsibility and expectation for regular clinical follow-up, taking prescribed medications, and following additional instructions or advice. If a patient's death is caused by an intracerebral hemorrhage due to malignant hypertension, and appropriate medications were prescribed with appropriate counseling and follow-up provided, one can ask: "is the cause of death really a hemorrhage from the hypertension, or from medical non-compliance?" And if it is medical non-compliance, what is the underlying cause? If a patient can not afford their medications, does not have adequate housing to store their medications, has difficulty with access or transportation to care, or has an underlying mental illness, including any substance abuse, which impairs their judgment to the point of appropriate self-care, is this really medical non-compliance? Again, the information in Table 5b is meant to stimulate thought in hopes of furthering action.

One of the enhancements to the SBC Data Collection Form was adding fields to demonstrate which county services were accessed by the decedents. Agencies represented include Alcohol, Drug and Mental Health Services (ADMHS), Department of Social Services (DSS), PHD, and the Sexual Assault Response Team (SART). Appendix C provides a brief description of each agency and services provided. Table 6 lists the services accessed with percentage for each agency. Appendix D provides an example of the data collected by DSS and a summary of services provided. Although no patients accessed SART services, there was one patient with a documented history of sexual abuse.

Table 6. SBC Agency Access		
Service Provider	**# of Patients (n=45)**	**% of Patients**
ADMHS	16	36%
PHD	42	93%
DSS	25	56%
SART	0	0%
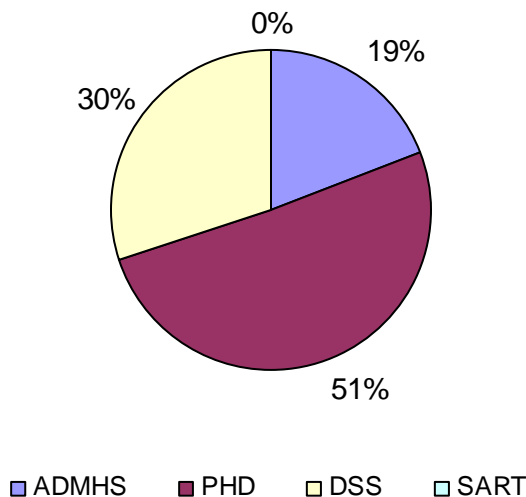
Another customization made to the form was the inclusion of data to record *outpatient encounters* for the PHD, ADMHS, and area hospitals. Due to circumstances beyond the control of the HDRT, complete hospital data was unattainable. The intent was to study any relationship between the last hospital admission/discharge and conditions treated to compare with the date of subsequent outpatient follow-up and condition treated. Although some data was entered from outpatient records, this data is inconsistent and insufficient to present as part of the report.

Extraordinary efforts by the PHD HCH team and ADMHS enabled enough data to be captured to report on outpatient visits for these agencies. Again, the intent was multifold:

- to gain insight into the type and prevalence of health conditions treated;

- to determine if those conditions were being properly addressed, both with the type of visit and quality of care expected;

- to determine any relationship between dates of last visits and time of death; and

- to determine if current PHD clinic locations are in areas readily accessible to PHD patients.

Complete visit history by agency, clinic location, date, type of visit, and number of days between last encounter and date of death are shown in Appendix E. Table 7 below provides a summary of that data.

The type of visit suggests whether a chronic condition was addressed at a follow-up (F/U) visit; a more acute problem addressed during an urgent care (UC) visit; a Public Health Nurse (PHN) encounter; or a visit designated as other (O).

An extensive review for quality of care, as outlined below, will also provide insight into not only whether the patient conditions were addressed, but how they were addressed. Overall, after removing the PHN encounters from the total visits (since all are of an acute visit nature) for the PHD, 61% of visits were of the follow-up type while 39% were urgent care or other type visits. For ADMHS, there were 18 visits entered; 78% were follow-up visits and 22% classified as other.

Table 7: ADHMS & PHD Visits

ADMHS	Type	Visits	% Total	
	Follow-up	14	78%	
	Other	4	22%	
	Total	18	100%	
Average days from last visit to DOD		278		

| PHD	Type	Visits	%Total	% w/o PHN
	Follow-up	90	54.5%	61.2%
	Other	5	3.0%	3.4%
	Urgent	52	31.5%	35.4%
	PHN	18	11.0%	
	Total All Visits	**165**	**100%**	**100%**
	Total w/o PHN visits	**147**		
Average days from last visit to DOD		293		

Conditions were categorized into systems and the frequency of conditions within those categories is shown in Figure 1. An average of approximately 8 conditions per patient was calculated from the data entered. Many of the patients had multiple conditions within a category, but to truly demonstrate the burden of disease and give an overall health picture of the group, every condition for each patient is entered as part of the categories regardless of category duplication. There were discrepancies, at times, between medical records and conditions entered on the SBCME death certificates. Unless an autopsy demonstrated disease burden, it is not always clear how additional diagnoses are derived on the death certificates. In the small sample size studied, this could potentially impact the data, and this should be addressed in future studies.

Table 8 demonstrates the co-morbidity of certain illnesses within specific categories or conditions with the highest co-morbidity among patients with any condition and a Mental Health category. While the table indicates the condition with the highest frequency was Mental Health (n=39), only 16 of these individuals had contact with ADMHS. This does suggest a need to explore ways to improve mental health outreach efforts and coordination of care between public health and ADMHS providers.

Table 8: Frequency of Health Conditions		
	#	**% ***
Health Condition (category)		
Alcohol	32	73%
Cancer	3	7%
Cardiovascular	37	84%
Cerebrovascular	2	5%
Dermatologic	5	11%
Endocrine	7	16%
Gastrointestinal	30	68%
Genitourinary	7	16%
Hematologic	11	25%
HIV	1	2%
Illicit substance	31	70%
Infectious Disease	16	36%
Mental Health	39	89%
Musculoskeletal	35	80%
Neurologic	10	23%
Nutrition-related	6	14%
Other	27	61%
Pulmonary	14	32%
Renal	4	9%
Tobacco	21	48%
Trauma	7	16%
Tuberculosis	4	9%
Unknown	2	--
Co-morbidity of Conditions		
Illicit drug use with Chronic pain syndrome	9	20%
Illicit drug use with Mental Health	12	27%
Alcoholism with Chronic pain syndrome	12	27%
Alcoholism with Mental Health	13	30%
Violence/trauma with Mental Health	7	16%
Violence/trauma with Illicit substance	9	20%
Violence/trauma with Alcohol	12	27%
Mental Health with any other condition	17	39%

* All percentages exclude cases with no known medical information "Unknown". Although there were two cases with condition categories of "Unknown", only 1 case had no other conditions listed. Therefore, only that case was excluded from the percentages. Homeless n=44 (of 45)

Co-Morbidity of Conditions

8%   19%

10%

14%

10%

13%

13%

13%
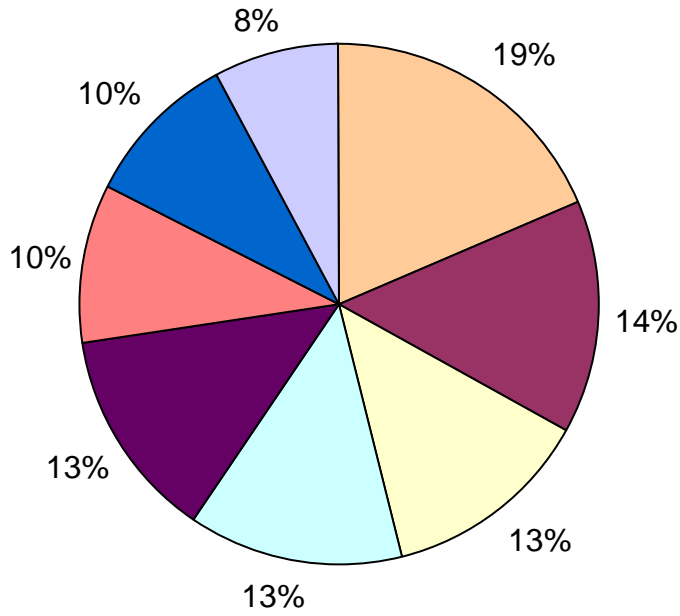
- ☐ Mental Health with Any Other Condition
- ☐ Alcoholism with Mental Health
- ☐ Illicit Drug Use with Mental Health
- ☐ Alcoholism with Chronic Pain Syndrome
- ■ Violence/Trauma with Alcohol
- ☐ Illicit Drug Use with Chronic Pain Syndrome
- ■ Violence/Trauma with Illicit substance
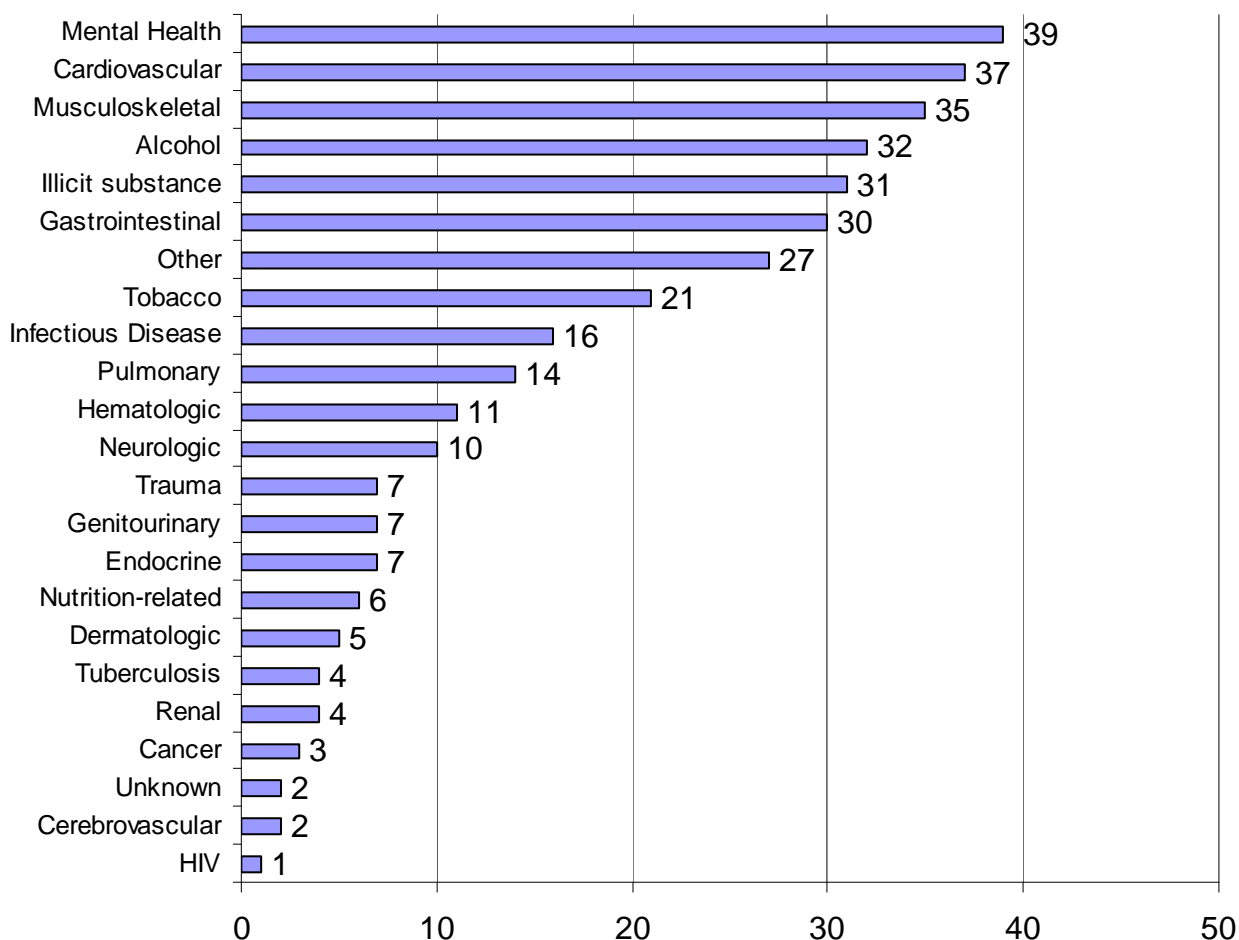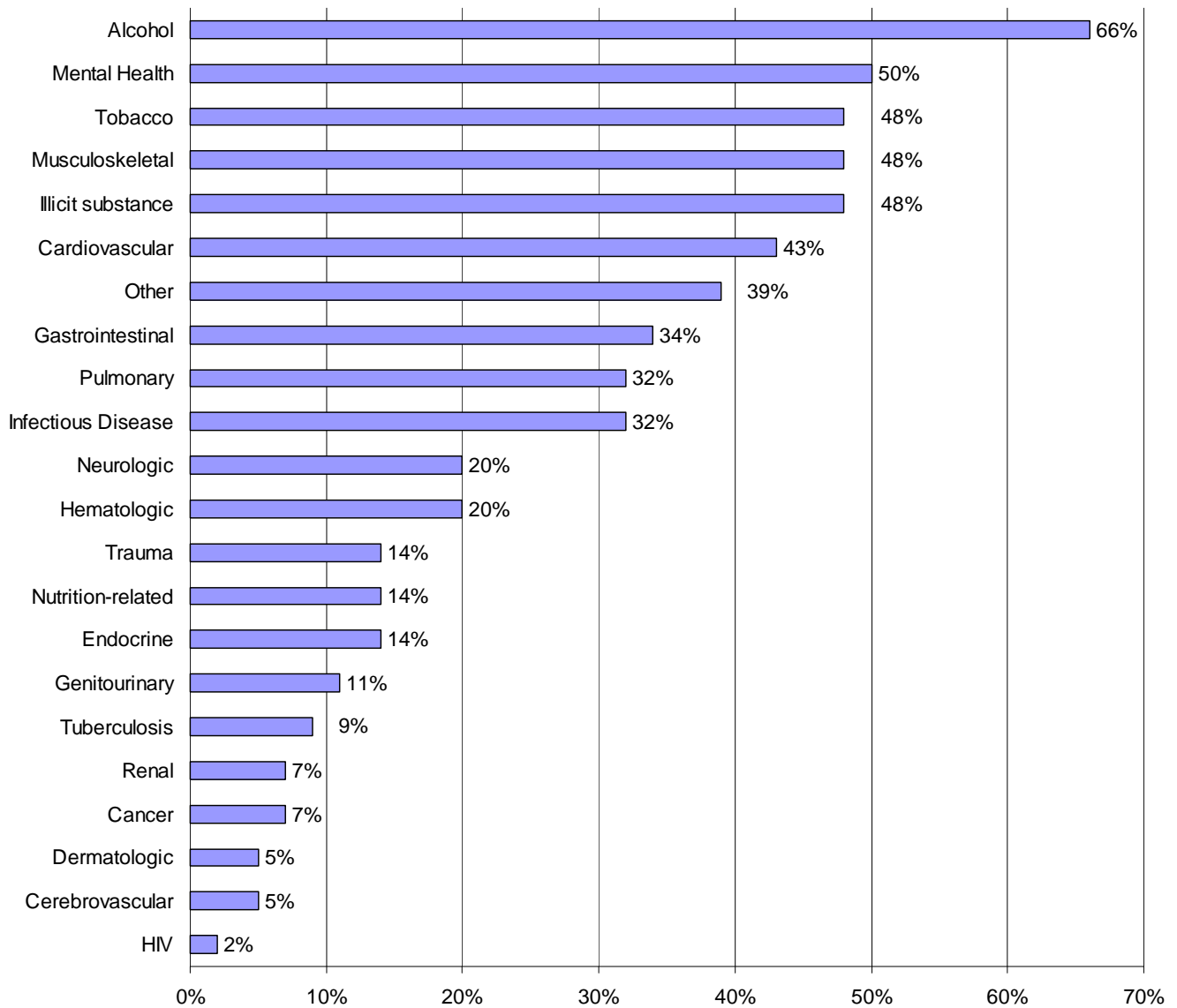- ☐ Violence/Trauma with Mental Health

Figure 1. Patient Condition by Category

Figure 2 demonstrates the actual percentage of patients with conditions per category. Even though many patients were diagnosed with multiple health problems within a single category (one patient may have hypertension, coronary artery disease, history of myocardial infraction, etc.), no duplicates are allowed within a category and each category is listed a maximum of one time per patient. Comparing the data from Table 8 and Figure 2 provides insight into the disease burden for each patient. For example, 84% of the total conditions diagnosed were cardiovascular, but removing duplicate conditions shows only 43% of all patients were diagnosed with a cardiovascular condition. That's still a large number even within a small sample size, and clearly the numbers for Alcohol, Mental Health, and substance abuse are concerning. After time was taken for extensive medical record review, the Homeless Death Review Team realized the possibility that additional patients may have had undiagnosed mental health problems as suggested by trends of violence, trauma, or by a significant lack of concern for their own health and safety.

Figure 2. Percent of Patients per Category

Category	Percent
Alcohol	66%
Mental Health	50%
Tobacco	48%
Musculoskeletal	48%
Illicit substance	48%
Cardiovascular	43%
Other	39%
Gastrointestinal	34%
Pulmonary	32%
Infectious Disease	32%
Neurologic	20%
Hematologic	20%
Trauma	14%
Nutrition-related	14%
Endocrine	14%
Genitourinary	11%
Tuberculosis	9%
Renal	7%
Cancer	7%
Dermatologic	5%
Cerebrovascular	5%
HIV	2%

Discussion

The cross sectional design of this report limits the ability to differentiate cause and effect or the sequence of events. It can, however, suggest prevalence. Time and resources were limited in the preparation of this report. In early February 2010, the County Board of Supervisors requested this report within 3-5 months. The logistics alone of coordinating the members of the HDRT along with other county agencies was difficult, and much time was needed for data researching, entry and compiling the report. It was necessary for select medical staff from the PHD HCH to review medical records to ensure data accuracy. The number of HCH staff is relatively small compared with workload, and often spend many extra hours in service to our patients. The additional hours required to review medical records was substantial, and only through the dedication and commitment to our patients by the HDRT and HCH staff was this report possible. In comparison, other similar studies reviewed were not limited with strict time lines or were substantially funded when time limits imposed.

Questions & Answers

In discussing the reported results, a question and answer approach is best suited to address the objectives for this study. Each question addresses a portion of an objective, either directly or by prompting the recommendations which are found later in this report.

Q. Are we identifying patients who are homeless consistently and correctly?

A. As a recipient of HCH funding HRSA requires the PHD to screen all patients for homelessness in order to determine eligibility for the program. For patients to maintain access to care, this process must be consistent and accurate. We currently rely on Practice Management software to enter our patients into the PHD system. Coding for homeless status further classifies patient eligibility for the HCH program. For the initial review of deaths, we attempted to match our current homeless designation code for patients deceased during the evaluation period. Of the sixty-six cases potentially selected for the study, three were excluded due to insufficient records classifying housing status; and three were excluded because they were not PHD patients. Of those remaining sixty cases, seventeen were excluded as not homeless and all were correctly coded in our system.

Of the remaining forty-three cases, our Practice Management software initially identified twenty-seven patients. Of the remaining sixteen patients, nine were coded correctly, but not initially identified as deceased on our system. In review, 100% of the potential cases excluded as not homeless were correctly coded in our system, 84% of the patients included in the study were coded correctly, and 16% were coded incorrectly. These numbers suggest that although PHD staff is doing a good job identifying our homeless patients, there is room for improvement.

Q. Are we establishing patients to receive continuity of care?

A. Identifying patients is the first step. Establishing care and providing follow-up care, however, is instrumental in maintaining health. Reviewing Table 7 and Appendix E, it is clear these patients did not obtain follow-up care. Highlighting this is the fact that in ADHMS, there was a nine month average time from last follow-up to death, and in PHD, there was a ten month average.

With a transient population, follow-up care is an ongoing problem, but it was clear by health record review, many of those patients not seen for months or years were out of the county, and failed to re-establish care upon return. Others simply stopped following-up or frequently missed their appointments. Regardless, when patients do show up for care, it is important to address their total needs since their return is not predictable.

No information is available from ADMHS, but in a random sampling of non-homeless PHD patients who regularly follow-up for care, 83% of their appointment types are follow-up while only 17% are of the urgent care type. Comparing this with the data in this report suggests a need to increase follow-up care for our homeless patients.

Evaluating access to care requires reviewing the data in Table 3, specifically Residence Zip Code. Although inconsistencies were found in documenting the correct address on the death certificates, this data does suggests that PHD maintains clinics, outreach sites, and/or partner sites in 82% of the areas in which addresses are listed. ADMHS provides sites in 55% of those locations, although extensive outreach services are available.

Q. What demographics suggest a high risk patient?

A. For this review, deaths among males occurred in a much higher proportion than females throughout all age groups, but the death rate was highest between the ages of 50-59 years old. The risk for this age group is further supported by the average age at time of death of 52 years old for the total population.

Ages 0-29 are under-represented in this study, however, that may suggest the method for case identification was inadequate for younger age groups. The previous Montreal study (Roy et. al. 2004) of street youth ages 14-25 found a SMR of 11.4 which was consistent with age-related mortality ratios form other large urban

studies. There is no clear distinction of risk based on one single living situation, but it is clear that having no fixed address, or living in shelters, does suggest increased risk.

This review demonstrates 87% of deaths were males while 13% females and suggests males as the higher risk patient. More deaths occurred from the 93103 zip code area, but, again, because of potential inaccuracy of the death certificate residence addresses, no conclusions are viable. The data does not always correlate with statistics from the PHD HCH program. Reviewing statistics on patients served by the program, ages 40-49 years old comprise 26% of total patients, followed by ages 50-59 at 20%. Ages 0-29 are being treated with 27% of patients from this age group. Males represent 65% of program patients, Caucasians 47%, while Hispanic ethnicity is more represented within the HCH program with 54% of patients identifying themselves as Hispanic. Patients in shelters are 38% of the total living situation category. Some comparison demographics from the total PHD patient population were already presented, and again, are different compared with the population reviewed for this study and with the HCH program population.

As previously outlined, the HDRT was not able to successfully identify enough people in transitional housing to report data for this study category. Two possible explanations are 1) there is more transitional housing in North County than South County (as evidenced by the residence at the time of death on a number of cases) and 2) the method of identifying this type of housing needs review for further studies.

Q. *What causes of death are most prevalent, and are any considered preventable?*

A. By far, drugs and alcohol are most prevalent as either the primary cause or as another significant condition contributing to the deaths. This mirrors the prevalence of those combined conditions discussed below. The very high incidence of drug and alcohol induced deaths suggests an immediate need to further assess drug and alcohol treatment programs available for the homeless population. This is further outlined under the question for mental health and substance abuse by ADMHS.

On a death certificate there are six options for manner of death including natural, accident, homicide, suicide, pending investigation, and could not be determined. Natural causes were listed on the death certificates in this study most often as manner of death, followed closely by accidents. Again, it is difficult to suggest a true frequency for any manner of death when 18% of the death certificates listed no information. This is an area that needs further evaluation for future studies. Also, multiple drug ingestion is listed as an accident unless there is definitive evidence of suicide, and this may not always be accurate. The coroner's office does not complete an autopsy for each death, and detailed information is not always known i.e. we had no toxicology reports for review or other reports related to circumstances of death.

There were no homicides of homeless people identified in this review, which is a positive, but underrepresented when compared with other cross-sectional ME studies already cited from large urban centers. During discussions with the HDRT, at least one of the deaths reviewed was thought suspicious enough not to be accidental, and one cause of death could not be determined due to decomposition.

Trauma represented 11% of the deaths with three trauma deaths embedded within acute alcohol, and alcohol or drug induced deaths. It was unclear if there were any instances of violence other than self-inflicted injuries that induced these deaths.

One death occurred from exposure and hypothermia. Through discussions with the HDRT, it was unclear what efforts were made or the circumstances of the actual night of this death, but ongoing efforts in the preceding weeks failed to convince this patient to enter any of the established shelters which had availability.

There was insufficient information surrounding the circumstances of death for many of the decedents to determine if these deaths were preventable. As outlined below, almost all of the patients received good care when care was accessed. Regardless of your views on substance and alcohol abuse as a disease, form of self-medication, or choice, the extreme number of deaths in this category suggests more resources are needed for these conditions, as well as mental health resources for the burden of these diseases on individuals, before any can be classified as preventable. It is to easy to blame medical non-compliance as a non-preventable cause, but clearly there are challenges for all involved in the care of homeless patients to encourage more consistent care and compliance to prevent deaths from treatable medical illnesses.

Q. What health conditions are most prevalent and predict a high risk patient?

A. As demonstrated by the data, the abuse of any substance predicts a high risk patient. However, the co-occurrence of disease suggests our patients suffer from many other illnesses. Reviewing the data from the co-morbidity section of Table 8 provides some insight into this burden. Patients diagnosed with any mental health condition also suffered from other conditions 39% of the time. More than 25% of patients with mental health conditions were also using illicit drugs or alcohol. As expected, violence and trauma were also more prevalent with co-morbid mental health, drug use, and alcohol use. The conditions associated with chronic pain also suggest a high co-morbidity of alcohol and drug use. It is difficult to estimate the excess burden of the co-morbidity for these conditions. It is certainly well known that substance and alcohol abuse leads to serious and many times deadly physical health conditions with the impact likely to be heightened for someone who is homeless. As suggested previously, what role does self medication play within the chronic pain patients? The increased drug and alcohol induced deaths supported by the prevalence of these conditions within the population raise the question of sufficient resources for patients to receive care. An idea more fully addressed later in the report.

Q. Are we addressing health conditions, especially those identified as conferring high risk, within current standards of care?

A. An intensive health record review was performed to evaluate quality of care. A simple grading system was devised based on a system of points assigned while reviewing care for patient conditions. Given that quality indicators are often based on a "snapshot" of patient care instead of overall quality, the HDRT devised a system where three factors were considered in scoring overall care:

1) Trends for conditions over time; *i.e.* is the condition improving, worsening or showing no trend with treatment?

2) Are there confounding factors to care; *i.e.* when a patient has severe cancer pain and the immediate focus is on controlling that pain, is the care consider to be of lesser quality when a blood pressure reading is not at a certain mandated goal?

3) Was the patient compliant?

Combining these factors with a direct scoring of current standards of care, a letter grade of A (for excellent), B (good), C (average), D (below average), and UE (unable to evaluate) was assigned as outlined in the key of Figure 3.

Overall, most patients received good or excellent care, and only one patient received a below average score. Four decedents were either not PHD patients or made appointments but then failed to establish care and, as such, were not included in the quality review.

Figure 3. Quality Indicator Results
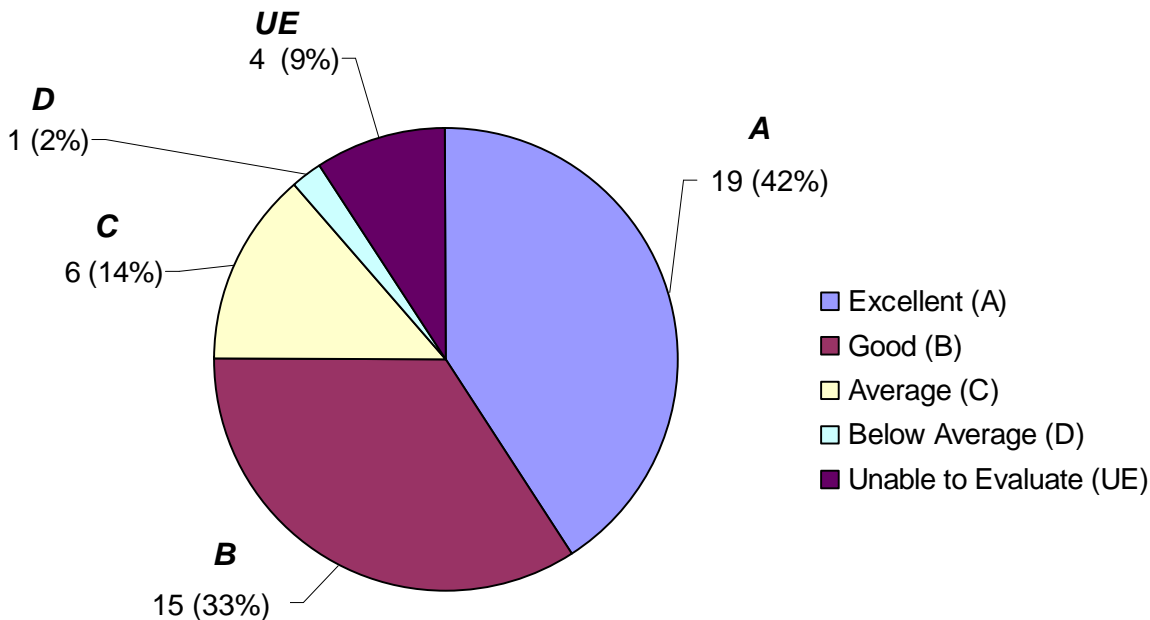
Since a limitation of this study is internal review, where PHD staff reviewed charts internally, a second review of current quality measures mandated by HRSA for all HCH grantees was reviewed. Programs are required to incorporate "systems of quality assessment, quality improvement, and quality management that focus provider responsibilities on improving care processes and outcomes" (BPHC [updated 5/26/2010]) and report on these measures through the Uniform Data System (UDS).

For the purposes of this report, only adult measures were reviewed. Six patients were excluded from all UDS measures based on fact that they were not PHD patients, or did not establish care. Results are displayed in Table 9 with a comparison of the PHD HCH program to all California (CA) HCH programs. The actual published criteria for these measures are available in Appendix F.

Table 9. UDS Measure Review			
UDS Measure	Total Patients Included	% Compliant for Measure PHD HCH Program	% Compliant for Measure California HCH Programs
Diabetes	7	51%	73%
Hypertension	17	35%	67%
Pap	5	20%	62%
Substance Abuse	39	82%	No data available
Oral Health	39	51%	No data available
HIV	1	100%	No data available
	6 patients excluded		

The small sample size and the fact that many of the patients had limited contact with the PHD or were lost to follow-up, likely skews this data. Confounding conditions and compliance were again reviewed with these measures and also impacted the data. Trends were also reviewed. For instance, in reviewing the Hypertension measure, six out of the seventeen patients were compliant for the measure and, for the most part, compliant with medications and follow-up. Of the remaining eleven non-compliant for the measure,

four demonstrated improving trends or were being treated for cancer pain at the time of last visit where a blood pressure was taken. Of those remaining non-compliant for the measure, two showed no, or a worsening, trend (suggesting more aggressive treatment was needed) and five were medically non-compliant.

More current data on current patients enrolled in the HCH program also supports the notion that this data is skewed. The last report entered into the UDS database reported compliance rates of 57%, 59%, and 34% for hypertension, diabetes, and Pap testing. The PHD's plan for improvement and enhanced care is discussed under the Recommendations section of this report.

Q. What is the prevalence of mental illness, substance and alcohol abuse, and do we have sufficient resources?

A. The prevalence of these conditions has already been presented in various tables and figures. The HDRT is fortunate to include representatives from ADMHS and this question is better addressed by the following statement from ADMHS:

A review of ADMHS records for individuals identified through the Homeless Death Review, produced the following points regarding their involvement with ADMHS. It should be noted that the review consisted of an electronic records review of patient service in both mental health and alcohol and drug programs through County services.

- Of the list of the homeless individuals included in the review, about 52% (22) did not have any contact with ADMHS (no records evident on search).

- About 48% (20) had at least one record of contact with an ADMHS program. These programs would either be an Alcohol or Drug program (ADP), mental health program, jail mental health, or an inpatient hospitalization.

- Of the individuals with existing records, 12 were served in a mental health program. Of those 12, six also had records of service with an ADP program. Of the 12, two also had services through jail mental health.

- Of the 12 individuals who had contact with a mental health program, 11 had a co-occurring alcohol and/or substance problem.

- 3 of the 12 who had contact with a mental health program had a diagnosis considered Serious Mental Illness (SMI). The other 9 persons had minor to moderate mental health conditions secondary to alcohol or substance abuse.

- There were an additional 3 individuals that had records of service from an ADP program without any services in a mental health program.

- An additional 5 individuals had records of being served by jail mental health with no evidence of service received from an outpatient program in either ADP or mental health.

- One individual had an admission to the Psychiatric Health Facility (PHF) and no other treatment documented; and one other individual had a screening documented with no follow up admission documented.

A review of the death certificates and available records led to the following conclusions:

- An overwhelming number of the deaths involved individuals diagnosed with severe dependence and abuse of alcohol and/or drugs. Of the numerous clients who did not have formal treatment with ADMHS (no records), the majority had a diagnosis of alcohol and/or substance abuse/dependence from other records (Public Health, for example) or alcohol or drug abuse was identified as a contributing factor to their death. Out of the 22 individuals with no ADMHS records, 15 had an alcohol and/or substance abuse problem indicated in other records.

- Of all of the cases reviewed, 3 were diagnosed and getting treatment for what would be considered serious and persistent mental illness. Of these 3, two of these clients were diagnosed with Bipolar Disorder and one with Schizophrenia. These are typically the diagnoses considered for treatment through the ADMHS long-term mental health clinics per DMH guidelines and mandates, which apply to persons who have Medi-Cal coverage. It is unclear how many other homeless individuals were also SMI but not identified due to the severity of their substance abuse issues and/or due to lack of contact with ADMHS mental health programs. Of the people seen by ADMHS (mental health, ADP, Jail mental health, or PHF), a significant majority appeared to have more mild to moderate mental health conditions (depression, anxiety) that were secondary to a primary substance abuse diagnosis.

- Another issue related to diagnosis was the frequent reference to psychiatric diagnosis in non-ADMHS records that are unconfirmed by ADMHS due to having no contact with this group in the study.

- On a number of shared clients (shared between PHD and ADMHS), the extent of physical health problems, the frequency of contact with Public Health, and the medications prescribed were not routinely known to ADMHS service providers. Considering this, it appears there would be a benefit to identify strategies that improve care coordination between Public Health and ADMHS on shared cases as well as review of a referral process from one agency to another.

- ADMHS is challenged with limited resources to meet the demands of homeless individuals needing services. However regardless of these limitations, another barrier in delivering necessary substance abuse services has been resistance to recommended treatment. It appears a significant number of homeless individuals declined or struggled with acceptance of needed substance abuse services. Unlike mental health services, there is not a system structure that allows for legal, involuntary care for people experiencing severe alcohol or substance abuse problems. For individuals with severe mental health conditions that consistently put them at risk there are short term (5150 involuntary hospitalization) and long term (conservatorship) options for involuntary care. Those options do not exist for treating a person with severe substance abuse problems involuntarily.

Q. What do we know about violence against the homeless people in Santa Barbara County, and how do we improve coordination between agencies to report, investigate and prevent violence and trauma within our homeless population?

A. In addition to examining deaths of homeless people, the HDRT was also charged with looking at what is known about violence against homeless people in Santa Barbara County. The team approached this task through multiple methods including:

- Conducting two focus groups of homeless people

- Conducting a focus group with representatives interested community groups including the Human Services Commission, Mental Health Commission and the Sheriff

- Obtaining data from the Sexual Assault Review Team

- Seeking data from multiple community partners

It became evident that there was very limited information about violence against homeless persons available to the team. There is no easy method to identify homeless persons from law enforcement reports and hospital reports. Many reports of violence were anecdotal and incomplete. Homeless persons often do not report such incidents through formal channels and there was no organized system to gather such data. There is a concern about the level of violence based on the following:

- Sexual Assault Response Team medical-legal exams between July 1, 2007 and April 15, 2010

- Incidents reported to Ken Williams between January 10, 2010 and May 4, 2010

- Focus group results

Sexual Assault Response Team Related Violence

Sexual Assault Response Team (SART) is a countywide program providing care to victims of sexual assault. An interagency program, SART coordinates with law enforcement, rape crisis centers, victim witness assistance, and a medical team of trained professionals, nurses, and physicians. The SART program provides approximately 100 medical-legal exams for both children and adults annually. Between July 2007 and April 2010, approximately 250 medical-legal exams were performed. Of this number, 10 were confirmed to be homeless individuals.

The experience of those working closely with homeless persons suggests that individuals who are homeless do not report crimes to law enforcement at the same rate as other populations. It is possible that the number of sexual assaults is likely to be much higher than the 10 that were reported and included in the SART program during this time frame.

Incidents Reported to Ken Williams

Due to the difficulties finding accurate statistical information on violence experienced by people who are homeless, Ken Williams collected information from people experiencing homelessness as well as information forwarded to him by his colleagues at Cottage Hospital and Santa Barbara Police Department. He began his informal data collection process on January 10, 2010 and for the purposes of this report, the data goes through May 4, 2010.

This data is extremely limited in scope and detail, and it is not validated, however, it does provide a good snapshot of the violent experiences reported by people while living on the streets.

During the nearly four-month period, Mr. Williams collected thirty-seven reports of violence, twenty-seven were from males and ten from females. Twenty-five reported being victims of assault and the description of the assaults ranged from being attacked by five people, to a dog being deliberately sent to attack an individual. There were five accounts of rape and three reports of domestic violence. Only seven informed Ken that law enforcement was notified while seventeen involved a visit to the Emergency Room or hospitalization. Animal Services was contacted following the dog attack. Overall, the reports of incidents reflect frequent acts of violence as reported by homeless persons.

Focus Group Results

Focus groups with homeless people as well as the focus group with community stakeholders, reflected concerns about a high degree of violence. A large number of focus group participants reported personal experiences of violence. A number of contributing factors were identified by all focus groups including a lack of understanding of mental illness and homelessness, a perceived lack of personal values of homeless persons, gang initiation expectations, and substance abuse. Violence between homeless persons was identified in addition to violence by others against homeless persons. A number of potential actions were identified to prevent and reduce the level of violence such as various housing options, increased coordination between community-based agencies and organizations, a mental health court, training for law enforcement officers and others. A full summary of the focus group results is available in Appendices G and H of this report.

Conclusions and Recommendations

Homeless studies often generate more questions than answers. This report is informational but is not designed or intended to predict causality or propose final solutions for any of the questions above. Caution is advised in extrapolating any of the findings and conclusions based on the limitations previously discussed.

- Male Caucasian adults ages 40 to 59 years old were the decedents represented most frequently. Younger adults appeared underrepresented. Caucasian males appear over-represented while Hispanics under-represented when compared with demographics from the total PHD and HCH program patient population.

- The PHD is identifying homeless patients correctly and entering patients into the HCH program with 84% of homeless patients in this study identified correctly.

- There are a large number of days between last follow-up encounter and date of death for both ADMHS and PHD. Follow-up care versus urgent care type appointments are less of a percentage of encounters for our homeless patients compared to a random sampling of non-homeless. Reasons other than medical non-compliance and a transient population for this data need additional evaluation.

- Sixty percent (60%) of the decedents were in a shelter or had no permanent address as a living situation. Natural cause was listed for 42% of the cases, and accidental was listed for 36% of the decedents. Most deaths occurred in the 93103 and 93101 Santa Barbara zip code areas. There are clinical services available from the PHD and ADMHS in both these areas.

- Drug and alcohol induced deaths, either from chronic use or acute intoxication/overdose accounted for 38% of the deaths. Deaths due to medical illnesses were under-represented compared with other studies reviewed. Five deaths were a result of direct trauma; one death was from hypothermia, and although none were identified on the death certificates as homicide, one is under review as a possible homicide.

- Allowing only one condition per category, alcohol abuse was prevalent in 66% of the decedents, followed by mental health (50%), illicit substance abuse (48%), and tobacco abuse (48%). The most prevalent medical conditions were in the musculoskeletal (48%) and cardiovascular (43%) categories. Co-morbidity within the population study was evident with an average of 8 conditions per patient.

- In a subjective review of quality care indicators, 75% of patients reviewed received good to excellent care. UDS measure compliance rates were low compared with other programs, but our data appeared skewed based on reasons already given.

- The prevalence of mental health conditions is high within the homeless population. ADMHS, the main provider especially for the seriously mentally ill, is challenged with a limitation of resources.

- There is a lack of reliable data to propose any conclusions about violence and trauma against homeless persons in our communities.

PHD Recommendations

Identifying Homeless Patients

For future death reviews, adding a field to the ME database identifying decedents as *likely* or *probably homeless* will improve efficiency with data collection and reporting. This recommendation was made following the 2003 King County review (HCHN 2003) and was then successfully implemented for their 2007 report (HCHN 2009).

Updating PHD forms, specifically the HCH Program Certification Form to identify a completion date rather than relying on a preprinted label (which was often absent) would help establish time lines for housing status, and improve classifying potentially formerly homeless patients. Modifying the PHN Encounter Form to include a complete address rather than only housing type would also improve housing status accuracy.

Improving PHD accuracy of coding homeless status correctly and updating forms appropriately would improve access to and overall quality of care. In service training for front office personnel is already scheduled for all PHD clinic locations to help correct this problem.

Establishing Patients and Improving Continuity of Care

Outreach

The logistics of providing care for our homeless patients throughout SBC is daunting. Outreach is our primary, and sometimes only, access to care for many of our patients, and more is needed. The PHD HCH Program outreach staff consists of 2.5 FTE PHNs who are supported by 1.5 FTE Medical Assistant/Health Services Aides. Given the prevalence of mental health and substance abuse illness within the population, increased access to care is desperately needed for these areas.

The PHD is currently evaluating increasing outreach hours for our Lompoc PHN, but budgetary constraints make any increase difficult at this time. There are a number of individual and group volunteer and funded organizations operating throughout the county, but continuity is lacking.

Access

Discussions are in progress between the PHD, Casa Esperanza and Cottage Hospital to improve continuity of care for our homeless patients. Specifically, the goal is to increase outpatient access utilizing a volunteer corps of medial providers at Casa Esperanza. This should decrease non-emergent use of Cottage Hospital ER, and improve immediate continuity of care for patients discharged from Cottage Hospital or ER.

Continuity of Care Via Shared Resources

Similar discussions are needed between the PHD and other organizations throughout SBC to improve continuity of care. Documenting and sharing resources between the various organizations is an ongoing challenge. Electronic medical records will assist these efforts and a planned system acquisition by the PHD is proceeding. Once in place, under the direction and supervision of the PHD, efforts will be made to improve access to resources for those providing care for our homeless patients

Comprehensive Care Clinics

A shift from the established urgent care approach at PHD HCH shelter clinics at Casa Esperanza and Good Samaritan to a comprehensive primary care clinic. This transition is underway with the introduction of a medical history questionnaire more specific to the needs of our homeless patients. An encounter form will also be used to

provide improved initial care, and continuity of care. Training and increased supervisory support for our mid-level providers is ongoing to ensure continued standards of care are met. Discussions between Casa Esperanza and PHD are in progress to improve the HSC site at Casa Esperanza to mirror the improvements already implemented at Good Samaritan HSC. Improvements include: adding a front office/triage area including a designated patient waiting area to enhance the appearance of the services provided, streamline and simplify the intake and registration process, and increase overall practice management efficiency and overall care.

Shift from Urgent Care to Regular Care

Increase awareness at PHD primary health care clinics to shift the focus from urgent care to regular follow-up care for our homeless patients. Presentations for primary care providers at the main PHD clinics are planned to improve focus on the chronic medical conditions of our homeless patients.

Other Recommendations

Modify PHN encounter forms to incorporate dental and more focused substance abuse history will improve referral for care of these problems.

New referral forms are planned to improve coordination of care between PCP and specialty care especially for referrals to ADMHS.

Improve communication between PHD and ADMHS providers to ensure accuracy of diagnoses and continuity of care for homeless patients with mental illnesses or those in need of addiction services. Several meetings were already held, and additional meetings are planned to ensure improved care of patients with these highly prevalent diseases. Integrated behavioral and health care approaches combined with affordable housing is needed.

Initiate clinician peer group and record reviews to specifically improve diagnoses of underlying mental health conditions suggested by patient trends toward trauma, violence, and/or disregard for personal safety and overall health condition.

Contact additional resources outside SBC to compare how medical, mental health, and substance abuse services are provided to homeless patients in other communities. Explore other successful strategies currently in use in the context of limited resources for a growing, complex homeless patient population.

Monthly health record reviews of our homeless patients by PHD HCH team to ensure follow-up, determine need for additional outreach or interventions are in place and ongoing to improve overall care.

Continue yearly consumer surveys and focus groups to encourage active participation by our patients in obtaining the care they need and request.

Improve Access to Housing and Shelter

As mentioned in the body of this report, medical non-compliance is a suggested issue with our homeless patients, but without stable housing, is it really non-compliance? There is a lack of transitional housing in South County and these communities need affordable housing where services are readily available.

Safe shelter is essential to healthcare, and support to maintain stable, affordable housing is crucial for our homeless patients. Increasing access to healthcare, substance abuse, and mental health treatment must go hand in hand with access to affordable housing. More research with a committed investment of time and resources into this issue is needed. In the interim, training will be developed to assist our providers to recognize homelessness as a potentially treatable condition of their patient's overall health, and to improve communication and the referral process to other appropriate County agencies to assist our patients secure stable housing.

Continued support for shelter services is needed. There is a community perception that a large number of homeless persons die from hypothermia. Although this report cannot determine causality, the analysis did not appear to substantiate hypothermia as a significant primary cause of death in the homeless. However, adverse weather may have certainly been a contributing factor in worsening medical conditions. As even one death from hypothermia is too many, it is recommended that the County continue work with partner cities and organizations to ensure the availability of shelter services, particularly in inclement weather. The most appropriate means to address this issue need further review beyond the scope of this study.

Future Homeless Death Reviews

This report is a good beginning, but additional, and more formal, studies are required to provide more statistical analysis. If the Board and community desire a more traditional retrospective cohort study, proper funding and independent consultants outside the PHD should be considered to remove any unintentional bias.

Violence and Trauma – Recommendations

The lack of accurate and reliable data is a major hindrance in fully understanding and addressing the problem of violence and trauma against homeless people in our community. The team recommends that a system be established to maintain this information. This system would need to include law enforcement reports, hospital reports, county agencies, and shelter reports at a minimum. The system need not be an additional burden, but rather a simple indicator on existing reports that identifies a victim as a homeless person. Key organizations would need to come together to identify an easy, accurate and non-burdensome method.

The County of Santa Barbara currently provides services to homeless people through the departments of Public Health, Social Services, Alcohol, Drug and Mental Health Services, Housing and Community Development and the Sheriff's Department. Many of the county's homeless individuals are known to each of these agencies. The members of the Homeless Death Review Team see potential for increased coordination across county agencies. Specific methods and approaches could be further explored.

Additional Observations

During the process of reviewing each of the deaths of homeless persons and discussing the violence perpetrated against homeless persons, team members made a number of observations related to geographic and regional considerations, mental illness, and data.

Geographic considerations: It is apparent that the tragedy of homeless deaths is one that affects both North and South County. While this issue has come to the forefront due to a lot of hard work on the south coast, homeless deaths are also evident on the north coast.

Regional differences in available housing: North County has more housing options available to the homeless and nearly homeless, as compared to South County. North County data provided a list of hotels, referred to as 'transitional housing". Transitional housing was more frequently the residence for some homeless who died in North County. "Transitional housing" in South County is not easy accessed by this population, because of the higher fees, which make it cost-prohibitive to the homeless in South County. As such, more of those that died in South County listed a last address as a shelter or hospital.

Mental illness and addiction: Like most chronic diseases left untreated mental illness is disabling. Most of the homeless had mental illness, addiction or both. There is increased observation nationally that some mentally ill people self-medicate with drug and alcohol abuse in the attempt to "treat" their mental illness. So, while many of these deaths have a drug or alcohol component, in some cases the real underlying condition that led to the substance abuse is untreated or under-treated mental illness. Among persons who are homeless it is generally documented that there is a significant incidence of alcohol of alcohol/drug, mental health, and co-occurring substance abuse. These conditions can cause homelessness when people with these conditions develop impairments that result in their

inability to work, causing them to lose the financial means to keep or get housing. People who become homeless can also develop (for the first time) or have a recurrence of alcohol, drug and mental health problems (e.g., depression) because the condition of poverty and homelessness is so stressful.

Incomplete and inaccurate data: For some cases, personal knowledge of team members about individual homeless persons was more accurate and up to date than information that was reflected on death certificates. Many cases did not have autopsies, thus key information surrounding a death was not available. For some cases, a mental health diagnosis was made for an individual in different county departments, but the records reflect different diagnosis and understanding of the mental illness in the same persons. All organizations participating in the study recognized that the available data on violence against homeless persons in not systematically collected or available. The lack of reliable information hinders our ability to comprehensively understand concerns related to deaths and violence in the homeless population.

Acknowledgments

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APPENDIX A

HEALTH CARE FOR THE HOMELESS DEATH REVIEW DATA COLLECTION FORM

Medical Examiner Case: _____

Name:	**Age at Death:**

Alias/Nickname: **Date of Death:**
Source of name: **Date of Birth:**
Study Category: Homeless / Formerly Homeless   **Sex:**
SBC Services Provided: (✕ all that apply) ☐ **ADMHS** ☐ **DSS** ☐ **PHD** ☐ **SART**   **Race/Hispanic:**
Include in study: Y / N   Exclusion criteria:

Living situation/Homeless Status: (no permanent address/shelter/transitional/SRO/doubled up...)		
Residence street address:		
Previous address (if residence above < 1 year):		
Length of time (housed/motel/transitional)		
Employed/Unemployed/Retired:	**Citizenship:**	
Last Occupation/Type of business:	**Veteran/Branch:**	
Incident day, date, and time:		
Incident address:		
Location/Type of location:		
Medical conditions/history:	1) 2) 3) 4)	5) 6) 7) 8)

Medical Info: ☐ Hospital Death ☐ Recent Hospitalization/ER Treatment	**Hospital/ER Date CC 1º Rx D/C Plan** 1) 2) 3) 4)	**Toxicology information:** ☐ Ethanol (EtOH) >0.08 ☐ Narcotics (Legal & Illegal) ☐ Other Medications or Substances
Day, date, and time of death:		
Place of death:		
Location/Type of location:	☐ **Indoor** ☐ **Outdoor Death**	
Hospital:		

Manner of Death: ☐ Natural ☐ Suicide ☐ Accident ☐ Suicide Declaration ☐ Homicide ☐ Undetermined ☐ Pending ☐ Exposure	**Primary Cause:** **Secondary Causes:**
Additional History/Background: History of: ☐ Mental Illness 1º Diagnoses:1) 2) ☐ Obesity Last BMI: _____ ☐ Alcoholism/alcohol use ☐ Illicit drug use ☐ Tobacco abuse ☐ Violence/trauma	**Circumstances of Death/Narrative Notes:**
Possessions: (use adjacent box) ☐ Drug kit items ☐ Alcohol ☐ Prescription medication ☐ Weapons ☐ Medic alert	**Other narrative notes: (incl. sources)**

Last PHD/ADMHS Clinic Visits:

Clinic	Date	Type*	Chief Complaint	VS**	Interventions	F/U Planned

* Type of visit: Regular Follow-up (F/U), Urgent Care (UC), PHN   **VS (Vital Signs) enter (N)ormal, (A)bnormal, (UL)
(Use back of form for any additional information)

APPENDIX B

IMMEDIATE AND UNDERLYING CAUSE OF DEATH AS ENTERED ON DEATH CERTIFICATE

Immediate Cause	Underlying Cause			
Multiple blunt force trauma				
Septic shock	Bacterial pneumonia	End Stage Liver Disease		
Probable atherosclerotic cardiovascular disease	Hypertension	Diabetes Mellitus 2	Alcohol Abuse	Medical Non-Compliance
End stage liver disease	Alcohol Abuse			
Anoxic brain injury	Probable heart failure	Probable coronary artery disease	Alcohol Abuse	
Coronary atherosclerotic disease	Hyperlipidemia	Diabetes Mellitus 2	Alcohol Abuse	
Hypothermia	Anemia	Alcohol Abuse		
Multiple blunt force trauma	Alcohol Abuse			
Alcohol Abuse	Diabetes mellitus 2	Anemia	Medical Non-Compliance	
Probable atherosclerotic cardiovascular disease	Alcohol Abuse	Hypertension	Medical Non-Compliance	
Blunt force craniocerebral trauma	Alcohol Abuse			
Coronary atherosclerotic disease	Alcohol Abuse	h/o Myocardial Infarction		
Complications of chronic alcohol abuse	Cardiomegaly	Chronic Obstructive Pulmonary Disease	Chronic Hepatitis C	
Blunt force craniocerebral trauma	Alcohol Abuse			
End stage liver disease	Alcohol Abuse	Cardiomegaly	Congestive Heart Failure	Chronic Obstructive Pulmonary Disease
Aspiration pneumonia	Heptatic encephalopathy	End Stage Liver Disease	Alcohol Abuse	Chronic Hepatitis C
Cardiomyopathy	End Stage Liver Disease	Alcohol Abuse	Chronic Renal Failure	
Gastrointestinal bleed	Portal gastropathy	End Stage Liver Disease	Alcohol Abuse	
Multiple drug ingestion	Depression	Polysubstance Abuse	Borderline Personality Disorder	
Multiple drug ingestion	Dilated cardiomyopathy	Obesity	Depression	
Acute morphine toxicity	Suicidal ideation	Depression		
Multiple drug ingestion	Coronary Atherosclerotic Disease	h/o illicit substance use		
Multiple Drug Ingestion	Chronic Obstructive Pulmonary Disease	Alcohol Abuse	Chronic Hepatitis C	Illicit substance abuse
Multiple Drug Ingestion	Coronary Atherosclerotic Disease	Cardiomegaly	Chronic Hepatitis C	Idiopathic thrombocytopenia purpura
Multiple drug ingestion	Illicit substance abuse	Chronic Pain Syndrome	Depression	Anxiety
Acute complications of narcotic abuse	Illicit substance abuse			
Respiratory Failure	Ascites	Hepatocellar Cancer		
Post splenectomy sepsis	AIDS	End Stage Liver Disease		
Hypertensive cardiovascular disease	Medical non-compliance			
Probable atherosclerotic cardiovascular disease				
Brain death	Intracerebral hemorrhage	Hypertension		
Cardiopulmonary arrest	Myocardial infarction	Diabetes mellitus 2	Chronic kidney disease	Peripheral Arterial Disease
Hypertensive cardiovascular disease	Tobacco abuse	Medical Non-Compliance		
Cardiopulmonary arrest	Presumed myocardial infarction	Diaphragmatic myocardial infarction	Hypertension	MSSA osteomyelitis

Probable atherosclerotic cardiovascular disease	Diabetes mellitus 2	Illicit substance abuse	Hyperlipidemia	Medical Non-Compliance
Pulmonary Hemorrhage	Ruptured mycotic pulmonary aneurysm	Congestive Heart Failure		
Inhalation of products of combustion	Methamphetamine abuse	Alcohol Abuse		
Inhalation of products of combustion	Methamphetamine abuse	Alcohol Abuse		
Asphyxia by aspiration of food bolus	Schizoaffective disorder			
Blunt force craniocerebral trauma	Alcohol Abuse	Chronic Hepatitis C		
Multiple drug ingestion	Hypertrophic obstructive cardiomyopathy	End Stage Liver Disease	Alcohol Abuse	Schizophrenia
Metastatic small cell lung cancer				
Lung Cancer				
Anoxic brain injury	Cardiorespiratory arrest	Status Asthmaticus		
Undetermined due to decomposition				

APPENDIX C

DESCRIPTION OF COUNTY AGENCIES AND SERVICES PROVIDED

ADMHS

Currently ADMHS services for the homeless is delivered through mental health programs and contracted alcohol and drug programs. For mental health, homeless clients diagnosed with severe and persistent mental illness are served through the ADMHS mental health clinic system of care. In Santa Barbara and Santa Maria, initial contact with the homeless for evaluation and crisis support is provided by the CARES South (SB) and CARES North clinics (SM). In Lompoc, initial contact and crisis services are provided by the Lompoc Adult clinic. If a homeless client meets diagnostic criteria (SMI) they are subsequently referred through the ADMHS treatment system to a long term care clinics.

PHD

Access to health care for people experiencing homelessness is provided through coordinated outreach integrated with the county Health Care Centers**.** The Public Health Department's Primary Care & Family Health Division provides primary (including obstetrical services) and specialty care (orthopedics, surgery, urology, ophthalmology, neurology and pediatric endocrinology) at the six Federally Qualified Health Centers, four satellite clinics, and five non-profit community clinics serving all areas of the County. The medical outreach is an important component in addressing barriers to access to health care for those who are homeless in the county. The field service team consists of Public Health Nurses (PHNs) stationed in thirteen homeless shelters and transitional living centers throughout the county. The nurses provide triage care and make referrals to the health care centers for those needing additional care. Physicians Assistants and Nurse Practitioners serve four shelter locations providing a vast array of medical services at the shelters. There is one dental provider contracted to serve the homeless population.   Substance abuse treatment is coordinated through a contract with local treatment programs and mental health services are accessed through referrals to local non-profits and/or the County's Department of Alcohol, Drug and Mental Health Services.

SART

Sexual Assault Response Team (SART) is a countywide program providing care to victims of sexual assault. An interagency program, SART coordinates with law enforcement, Rape Crisis Centers, Victim Witness Assistance, and a medical team of trained professionals, nurses, and physicians. The SART program provides approximately 100 medical-legal exams for both children and adults annually. Between July of 2007 and April of 2010, approximately 250 medical-legal exams were preformed. Of this number, 10 were confirmed to be individuals known to be homeless.

Experience of those working closely with homeless persons suggests that individuals who are homeless do not report crimes to law enforcement at the same rate as other populations. It is fair to assume that the number of sexual assaults is likely to be much higher than the 10 that were reported and included in the SART program during this time frame.

DEPARTMENT OF SOCIAL SERVICES

The Department of Social Services provides employment services and financial assistance that support the residents of Santa Barbara County in being productive and self-sufficient members of the community. With regard to homeless persons, they may be eligible for a number of services and support. General assistance and food stamps are most frequently applicable for single adults. CalWorks is an employment program for families with children. The department also employs homeless outreach social workers to assist individuals in applying for Social Security Income based on a disability. All of these programs and services have specified eligibility requirements, one of which is county residency.

APPENDIX D

Data on Services Provided by SBC Department of Social Services

Sample of collection information:

Program Active at time of death	Program Prior History	Comments: Date ranges and breaks in service (discontinuance reason)
CalWORKs ☐	CalWORKs ☐	
Medi-Cal ☐	Medi-Cal ☐	*Applied for Medi-Cal 12/08 - denied 1/28/09 for failure to provide completed DED paperwork.*
General Relief ☐	General Relief ☒	*5/07-7/07 Discontinued for failure to participate in work project. 1/09-3/09 Discontinued due to 3 month employable time limit.*
Food Stamps ☒	Food Stamps ☒	*3/07-7/07 Discontinued for failure to participate in work project. 3/08-12/08 Case discontinued for failure to complete required reporting. 1/09-7/09 (month of death)*
CWS ☐	CWS ☐	
IHSS ☐	IHSS ☐	
APS ☐	APS ☐	

Summary of DSS Services Provided		
Service	# of Clients	Access %
CalWORKS Active	1	4%
CalWORKS Prior	1	4%
MediCal Active	6	24%
MediCal Prior	4	16%
General Relief Active	3	12%
General Relief Prior	11	44%
Food Stamps Active	5	20%
Food Stamps Prior	16	64%
IHSS Active	1	4%
IHSS Prior	2	8%
APS Prior	1	4%
	n=25	

APPENDIX E

COMPLETE LISTING OF ADHMS & PHD VISITS

ADMHS	Location	Type	Visits	%	Last Visit	Date of Death	Days
	ADMHS	F/U	2	Total	12/3/2007	2/6/2009	431
	ADMHS-CARES	F/U	4		9/1/2009	9/4/2009	3
	ADP	F/U	1		12/2/2008	7/4/2009	214
	Jail ADP	F/U	1		8/14/2009	8/16/2009	2
	Jail MH	F/U	1		1/8/2009	1/8/2009	0
	Lompoc MH	F/U	1		2/13/2009	2/17/2009	4
	Samsung	F/U	1		8/26/2008	1/29/2009	156
	SM Foster Road	F/U	1		8/13/2009	8/16/2009	3
	SM	F/U	2		12/17/2004	12/8/2009	1,817
	Total F/U		**14**	**78%**	3/20/2009	8/16/2009	149
	ADMHS	O	1				
	ADMHS-CARES	O	2				
	Jail ADP	O	1			**Average Days**	**278**
	Total O		**4**	**22%**			

PHD	Location	Type	Visits	%Total	% w/o PHN	Last Visit	Date of Death	Days
	Carpinteria	F/U	4			7/1/2009	7/10/2009	9
	CE	F/U	4			1/8/2009	7/4/2009	177
	Franklin	F/U	4			9/1/2009	9/4/2009	3
	GS	F/U	1			10/21/2009	12/5/2009	45
	Lompoc	F/U	5			12/5/2008	12/8/2009	368
	RM	F/U	1			10/2/2009	11/25/2009	54
	SB	F/U	32			3/20/2009	8/16/2009	149
	SB ID	F/U	4			7/14/2009	1/8/2010	178
	SB Ortho	F/U	7			12/21/2009	1/13/2010	23
	SB Tb	F/U	3			4/9/2007	10/17/2009	922
	SM	F/U	24			8/26/2008	1/29/2009	156
	SM Foster Rd	F/U	1			10/23/2008	3/28/2009	156
	Total F/U		**90**	**54.5%**	**61.2%**	5/21/2008	2/6/2009	261
						2/13/2009	2/17/2009	4
	SB	O	3			1/16/2009	3/13/2009	56
	SM	O	2			11/17/2009	1/24/2010	68
	Total O		**5**	**3.0%**	**3.4%**	5/5/2006	1/28/2010	1,364
						1/7/2009	1/20/2009	13
	Carpinteria	UC	1			5/22/2009	6/11/2009	20
	CE	UC	15			12/1/2009	12/10/2009	9
	Franklin	UC	2			5/16/2008	3/28/2009	316
	GS	UC	1			5/2/2003	11/28/2009	2,402
	Lompoc	UC	1			7/2/2009	8/2/2009	31
	Outreach Stearns Wharf	UC	1			2/4/2009	4/28/2009	83
	RM	UC	1			8/3/2009	8/12/2009	9

APPENDIX E - CONTINUED

COMPLETE LISTING OF ADHMS & PHD VISITS

PHD	Location	Type	Visits	%Total	% w/o PHN		Last Visit	Date of Death	Days
	SB	UC	22				11/19/2008	5/28/2009	190
	SM	UC	8				4/24/2009	9/21/2009	150
	Total U/C		**52**	**31.5%**	**35.4%**		6/1/2006	2/11/2009	986
							8/27/2009	9/11/2009	15
	Bethel House	PHN	1				5/13/2009	5/18/2009	5
	CE	PHN	2				2/19/2009	9/29/2009	222
	Drop In	PHN	1				9/7/2006	3/3/2009	908
	GS	PHN	8				12/8/2008	2/3/2009	57
	SA	PHN	5				8/14/2009	8/16/2009	2
	SM	PHN	1				8/13/2009	8/16/2009	3
	Total PHN		**18**	**11.0%**			11/19/2003	3/3/2009	1,931
							8/25/2008	2/4/2009	163
	Total All Visits		**165**	**100%**	**100%**		9/14/2007	5/28/2009	622
	Total Visits minus PHN		**147**	**89%**			8/6/2009	9/3/2009	28
							1/13/2009	4/8/2009	85
							1/8/2009	1/8/2009	0
							9/28/2009	12/15/2009	78
								Average Days	**293**

Key:
CE   Casa Esperanza Homeless Shelter Clinic, Santa Barbara (SB)
GS   Good Samaritan Homeless Shelter Clinic, Santa Maria (SM)
ID   Infectious Disease Clinic, SB
RM Rescue Mission, SB
SA   Salvation Army, SB
SB   Santa Barbara Calle Real Health Care Clinic (HCC)
SM Santa Maria HCC
Tb   Tuberculosis Clinic, SB

APPENDIX F

UDS Measures Reviewed (BPHC [updated 5/26/2010])

Pap test - Percentage of women 24-64 years of age who received one or more Pap tests during the measurement year or during the two years prior to the measurement year

> Numerator: Number of female patients 24-64 years of age receiving one or more Pap tests during the measurement year or during the two years prior to the measurement year (for measurement year 2009, patients born on or after January 1, 1945 and on or before December 31, 1985), among those women included in the denominator.

> Denominator (Universe): Number of female patients 24-64 years of age during the measurement year (for measurement year 2009, patients born on or after January 1, 1945 and on or before December 31, 1985) who were seen for a medical encounter at least once during 2008 and were first seen by the grantee before their 65th birthday.

Diabetes - Percentage diabetic patients whose HbA1c levels are less than or equal to 9 percent

> Numerator: Number of adult patients age 18 to 75 years of age with a diagnosis of Type 1 or Type 2 diabetes whose most recent hemoglobin A1c level during the measurement year is $\leq 9\%$, among those patients included in the denominator.

> Denominator (Universe): Number of adult patients age 18 to 75 years of age as of December 31 of the measurement year (for measurement year 2009, date of birth on or after January 1, 1934 and on or before December 31, 1991) with a diagnosis of Type 1 or Type 2 diabetes, who have been seen in the clinic at least twice during the reporting year and do not meet any of the exclusion criteria.

Hypertension - Percentage of adult patients with diagnosed hypertension whose most recent blood pressure was less than 140/90

> Numerator: Patients 18 to 85 years of age (for measurement year 2009, date of birth on or after January 1, 1924 and on or before December 31,1991) with a diagnosis of hypertension with most recent systolic blood pressure measurement < 140 mm Hg and diastolic blood pressure < 90 mm Hg.

> Denominator (Universe): All patients 18 to 85 years of age as of December 31 of the measurement year (for measurement year 2009, date of birth on or after January 1, 1924 and on or before December 31,1991) with diagnosis of hypertension and have been seen at least twice during the reporting year, and have a diagnosis of hypertension before June 30 of the measurement year.

Substance Abuse and Oral Health - In addition to the above UDS clinical measures, health centers must include one Behavioral Health (e.g., Mental Health or Substance Abuse) and one Oral Health performance measure of their choice in the Health Care Plan.

Criteria: All patients screened and referred when needed.

HIV – 100% of the homeless HIV (symptomatic and asymptomatic) patients' case notes will be reviewed quarterly in a multidisciplinary team meeting.

APPENDIX G

Violence Against People Who are Homeless
Focus Groups with Homeless People

Two focus groups were conducted with people experiencing homelessness and/or receiving services from a homeless service provider. The first group was conducted on May 11 at Casa Esperanza in Santa Barbara and the second was on May 24 at *Good Samaritan's* Turning Point Sober Women Healthy Families facility in Lompoc.

What are the major causes of violence targeted at people who are homeless?
- Instability, substance abuse and mental illness.
- People who are homeless are at risk of being victims of violence from people who are not homeless.
- Gangs and skinheads target people who are homeless.
- Lack of understanding.
- People without anything forced to fight for scraps
- Intolerance
- Stereotypes
- Fear

What do you think could help prevent violence to people who are homeless?
- A better understanding from the general public about issues related to homelessness.
- More empathy
- Society should implement the 12-steps for everyone.
- Have special shelters specifically for older women and men should be available.
- Provide safer environments for people who are homeless where they can go when shelters are full or are not available near by.

How would you describe the relationship between law enforcement and people who are homeless?
- Antagonistic.
- Examples were given that display no regard for the safety of homeless

Talk about some ways that the two can work together to prevent and decrease violence.
- Cities should not make laws that create an antagonistic dynamic.
- City laws that prohibit RV parking overnight and ban digging through trash are used to move homeless people along. The laws and police should move people to helpful resources and services.

What needs to be done to better support survivors of violence who are homeless and guide them toward safety?
- Lompoc needs homeless shelters that have more structure.
- More services should be directed to get people permanently off the street.
- The organizations that do serve people who are homeless should work together and be centrally located.

For those of you who knew of someone who was homeless and died, what do you think could have prevented the death?
- Better supervision by shelter staff
- Nighttime monitoring
- A health evaluation upon entry at the shelter should be completed on everyone

APPENDIX H
Violence Against Homeless Persons – Community Focus Group Input

What do we know about the extent of violence?
- Most information is anecdotal and incomplete, but there is a subjective feeling that it is high (e.g. Ken has a listing of 39 "incidents" between January 1 and May 13, 2010)
- Law enforcement reports and hospital reports do not designate homelessness and there is no systematic way of collecting this data
- Many incidents are not reported at all

What factors contribute to the violence against homeless persons?
- There is a perception in our community that homeless persons are "less than human" "not like us" and it is easy to diminish them as people. "Let the thinning continue." There is a prejudice against the homeless.
- Reports that some gangs were attacking homeless as part of a gang initiation
- Reports that some young skinheads were attacking for no reason
- Mental illness issues can create a strong reaction to homeless
- Alcohol and drug use can also fuel violence
- There is some violence of homeless against homeless

What current activities prevent or reduce violence against homeless?
- The Rape Crisis Center self defense classes
- The Sobering Center alternative to jail
- Rape prevention whistles distributed among homeless women
- The Jail Discharge program providing rides upon discharge from jail
- Staff at shelters (non-profit and county staff)

What else is needed in our community to prevent or reduce violence directed at the homeless population?
- Increase networking and communication (e.g. between the Coroner and law enforcement)
- Implement a mental health court to provide access to mental health treatment
- Give medication to the homeless (as used to be done through CARES)
- Housing
    - Have a place/location that provides safety and respect 24 hours a day/ 7 days a week
    - Housing without rules is what is most needed by homeless persons
    - Different levels of housing options is desirable (e.g. cop living)
    - Ask Goleta Hospital to include housing for homeless in their rebuild
- Continue payments (e.g. to the mentally ill) even when county staff are on furlough
- Improve our statistics (possibly add a check box to law enforcement reports and hospital reports)
- Increase the number of beds at Casa Esperanza (an alternative that does not require additional funding – It's a matter of addressing community resistance and CUP)
- Address the alcohol and drugs that fuel violence
- Educate the community about homeless, humanize them, help others see it could be any one of us
- Increase funding
- Increase law enforcement
- Build an expectation that each of us begin with peace within ourselves
- Start by addressing sexual violence
- Provide self defense classes/training

Describe the relationship between law enforcement and homeless.
- It varies by individual law enforcement officers
- The Santa Barbara law enforcement chief has opened the door
- To improve this relationship:
    - Have more trainings for law enforcement officers about building rapport, etc.
    - Have more female law enforcement officers, they don't strong arm or lead with their ego
    - Have more joint ride-alongs with law enforcement and an advocate or service provider