# SANTA BARBARA SHERIFF-CORONER'S BUREAU Still an Unhealthy Environment

#### **SUMMARY**

The 2012-13 Santa Barbara County Grand Jury's report on the operation of the Santa Barbara Sheriff-Coroner's Bureau (Bureau) found the Bureau in need of an upgrade. Subsequently, in response to the report, the Bureau concluded that it was not in compliance with the *California Code of Regulations (CCR); Title 8, Section 5199* Occupational Safety and Health Administration (Cal/OSHA) regulations to conduct autopsies. The 2014-15 Santa Barbara County Grand Jury (Jury) has determined the operation of the Bureau is still noncompliant and deficient in six specific areas: policy, training, equipment, facility, testing and documentation.

#### **BACKGROUND**

California Government Code section 27491 requires the Sheriff-Coroner to determine the circumstances, manner and cause of death in a wide range of cases, including those where the deceased was not under the care of a physician. Deaths in which a physician is not able to state the cause of death may require an autopsy. California Government Code Section 27491 grants the Bureau authority to determine the extent of investigation for all reported deaths. Santa Barbara Deputy Coroners are sworn peace officers under California Penal Code Section 830.5.

Since the Jury's 2012-13 report, the Santa Barbara County Board of Supervisors (BOS) and the Sheriff-Coroner have been aware of the Bureau's deficiencies as they relate to the control of Airborne Infectious Diseases (AirID), such as tuberculosis (TB), meningitis, and other communicable diseases. The BOS in its February 11, 2014 updated response to the 2012-13 Grand Jury report stated that, "Health and safety concerns identified through the facility condition assessment will be given high priority for funding."

The BOS commissioned Jorgensen Associates to prepare a facility condition assessment of all facilities within the County. The Jury understands the Facility Condition Assessment Report (Jorgensen's Report) fails to consider the \$130,000 recommended in the October 2013 study by Mechanical Engineering Consultants, Inc., directed by the BOS. The Jorgensen's Report recommended only \$13,200 of repairs to the Coroner's Facility. None of the projects identified by Jorgensen relate to the ventilation system.

www.dir.ca.gov/title8/5199.html

The extensive structural and mechanical upgrades to the facility have not been approved or budgeted by the BOS. It has recently been suggested to the Jury that it is sometimes less expensive to replace facilities than to renovate them.

The Board of Supervisors established the Bureau as a part of the Sheriff's Office in 1947. The current facility was built with inmate labor in 1987 for less than \$100,000.<sup>2</sup> There is no evidence the facility was constructed in compliance with appropriate standard building codes. The physical facility is in immediate need of structural and mechanical improvement to become compliant with *CCR Title 8 (Industrial Relations)*, *Division 1 (Department of Industrial Relations)*, *Chapter 4 (Division of Industrial Safety)*, *Subchapter 7 (General Industry Safety Orders)*, *Group 16 (Control of Hazardous Substances)*. The overall layout, infrastructure and fixtures prevent effective infection control, causing potential cross contamination between the autopsy room and the rest of the building area. The wood and particle board cabinetry, refrigerators, and other equipment in the autopsy room cannot be properly sanitized. The ventilation system continues to be a major concern.

Mechanical Engineering Consultants, Inc. was contracted to perform a study of the ventilation system in response to a prior Jury's report<sup>3</sup> regarding lingering noxious odors, lack of proper ventilation and improper air conditioning. The costs were estimated at \$130,000 to repair the ventilation system.<sup>4</sup> However, the study also revealed the existing heating, ventilation and air conditioning (HVAC) system consists of one unit for the entire facility. When the HVAC is running, odors and airborne pathogens circulate throughout the entire building. The ceiling of the building is not compartmentalized and the HVAC does not properly separate air distribution or introduce fresh air to the treatment room and the administrative office. The distribution of contaminated air, fumes and odors poses a major health concern with the potential spread of communicable diseases, and exposure to formaldehyde.

#### **METHODOLOGY**

The Jury reviewed the duties and functions of the Bureau by interviewing staff, visiting the location, and reviewing various documents including policies, procedures, training syllabus, equipment, testing procedures, the physical structure of the facility, and the Mechanical Engineering Consultants, Inc. report.

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<sup>&</sup>lt;sup>2</sup> 2012-13 Grand Jury Report, "Sheriff-Coroner's Bureau" www.sbcgj.org

<sup>3</sup> Ibid

<sup>&</sup>lt;sup>4</sup> Mechanical Engineering Consultants, Inc. Report, October 11, 2013 to BOS

#### **OBSERVATIONS AND ANALYSIS**

The work force at the Bureau is composed of a chief medical examiner contracted from Ventura County, a lieutenant supervisor, four Deputy Coroners, a sergeant, two retired part-time pathology assistants and one administrative support staff.

Approximately 150 autopsies are performed each year, 50 percent from north and 50 percent from south county. A "typical" autopsy takes approximately 1.5 hours to complete. There are two storage units on site with the total capacity of 16 bodies.

# Policy<sup>5</sup>

It is the policy of the Santa Barbara County Sheriff-Coroner's Office to protect the health and safety of its employees by:

- Eliminating hazardous exposures where possible
- Minimizing hazardous exposures that cannot be eliminated
- Avoiding placing employees into an environment of potential workplace hazards
- Requiring the use of Respiratory Protection Equipment

The greatest deficiencies relate to the control of Airborne Infectious Disease (AirID) and protecting employees and visitors in the facility. The current structure is not adequate for performing high-risk autopsies on known or suspected AirID cases. These cases require negative air pressure rooms and the use of Powered Air Purifying Respirators (PAPR), which are not available to staff. Thus, these cases are currently referred to an out-of-county Coroner's Bureau.

Proper controls and protocols are established by *CCR Title 8*, *Sections 5144*, *5193 and 5199* to ensure personnel working in any facility conducting autopsies are not exposed to infectious diseases when procedures are conducted on high risk cases of TB, other airborne infectious diseases, and blood-borne pathogens. Currently the Bureau does not have proper ventilation, nor does it routinely test its personnel for TB exposure or monitor for formaldehyde exposure. The Jury believes these deficiencies must be rectified immediately to protect staff and public visitors from being exposed to transmittable airborne pathogens.

In order to achieve *CCR Title 8; Sections 5144, 5193 and 5199* compliance, the facility requires extensive structural and mechanical upgrades.

In 1997, an investigation conducted by Cal/OSHA revealed that seven Los Angeles County Coroner's employees had been infected with TB, due to improper ventilation when the bone saw was utilized on bodies infected with TB.<sup>6</sup> Airborne Transmittable Pathogens (ATP) are transmitted via dust during bone saw procedures, such as cutting cranial cavities during autopsies.

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<sup>&</sup>lt;sup>5</sup> Santa Barbara County Sheriff's Office, Coroner's Unit and Coroner's Facilities, Illness and Illness Protection Program (IIPP), September 2, 2014, page 1

<sup>&</sup>lt;sup>6</sup> LA Times April 25, 1997 "TB Plagues Office of LA Coroner"

#### **Training**

The Jury learned that the Bureau staff does not receive the specialized training necessary to formulate an appropriate infectious disease control policy in compliance with *CCR*, *Title* 8.

## **Equipment**

The Bureau does not have the necessary equipment to complete its work safely. For example, it needs a Negative Air Pressure System and Powered Air Purifying Respirators to conduct autopsies on known or suspected AirID cases such as tuberculosis, measles, severe acute respiratory syndrome, avian influenza virus, and other diseases. The staff is also at risk without this equipment when processing decedents who have been intravenous drug users or homeless, as identified in *CCR*, *Title 8*.

#### **Facilities**

In order to create the negative air flow and remedy the repugnant smells in the autopsy room, the Coroner's staff has created a makeshift solution by using a fan and keeping a door open in the autopsy room during procedures. This involves closing and locking the door between the administrative area and the autopsy room and keeping the outside front door to the autopsy area open.

This makeshift practice does provide minimal ventilation, however several other issues arise including:

- Circumventing the air conditioning system increases the room temperature causing staff who are wearing protective gear to be potentially subjected to unhealthy conditions
- Allowing unfiltered air with contaminates to escape within the facility is a violation of Cal/OSHA regulations which require the door be closed during autopsies
- Allowing anyone from the public to walk in during an autopsy is a public safety concern

A code-compliant ventilation system is needed to ensure contaminated air exhausted from the autopsy room is not redistributed into other areas of the building. This is not possible with the present configuration.

## **Testing**

Currently the Bureau does not have a testing protocol to ensure that personnel have not been exposed to infectious disease, including tuberculosis and hepatitis. It does not conduct air testing to detect the levels of formaldehyde in the area.

#### **Documentation**

There is a lack of facility-specific infectious disease control written policies and procedures. The Bureau has not created *CCR Title* 8 compliant written policies and procedures that include facility and equipment decontamination; nor has it established proper work procedures.

# **CONCLUSION**

The 2014-15 Santa Barbara County Grand Jury believes the Sheriff-Coroner's Bureau facility should be replaced as soon as possible. As an alternative, an existing building could be acquired and remodeled to comply with *CCR Title 8, Section 5144, 5193 and 5199* regulations. The Santa Barbara County Board of Supervisors has not funded the estimated \$130,000 identified by Mechanical Engineering Consultants to merely improve the ventilation system at the Coroner's Bureau facility. The facility's existing mechanical systems were never designed to support current laboratory requirements. Major additional renovations are needed to the current facility to handle airborne infectious diseases.

Health, safety and security are serious concerns. Both operational and facility modifications are needed to comply with Cal/OSHA Standards.

The Santa Barbara County Board of Supervisors response dated February 11, 2014 to the 2012-13 Grand Jury report stated "Health and safety concerns identified through the facility condition assessment will be given high priority for funding." To date no funds have been allocated to upgrade the Coroner's Bureau facility.

#### FINDINGS AND RECOMMENDATIONS

# Finding 1

The Sheriff-Coroner's Bureau facility does not comply with *California Code Regulations*; *Title 8, Sections 5144, 5193 and 5199*.

#### **Recommendation 1a**

That the Santa Barbara County Board of Supervisors fund the construction of a new coroner's facility under the "health and safety prioritization" directive of the Board of Supervisors Facility Condition Assessment Reports to become compliant with infectious disease control regulations .

#### **Recommendation 1b**

That the Santa Barbara County Board of Supervisors identify and fund an existing building that could be used to perform the functions of the Coroner's Bureau in a manner compliant with infectious disease control regulations.

#### Finding 2

The Sheriff-Coroner's Bureau facility does not have the mechanical and structural systems including negative air pressure which are necessary for the control of infectious diseases, removal of noxious odors and dilution and expulsion of contaminants from the entire facility.

# **Recommendation 2**

That the Santa Barbara County Board of Supervisors make funds available to upgrade the structural and mechanical systems of the existing coroner's facility to become compliant with infectious disease control regulations to protect the health and safety of County employees and the public.

## Finding 3

The Sheriff-Coroner's Bureau safety polices and plans are insufficient to ensure compliance with the rules relating to infectious disease control pursuant to *California Code of Regulations Title 8, Sections 5144, 5193 and 5199*.

#### **Recommendation 3**

That the Sheriff-Coroner formulate and implement facility workplace hazard/infectious disease control policies that meet *California Code of Regulations Title 8*, *Sections 5144*, 5193 and 5199.

## Finding 4

The Coroner's Bureau staff is not properly trained relating to infectious diseases control both as it relates to AirID and blood-borne pathogens.

#### **Recommendation 4**

That the Sheriff-Coroner ensure staff receive appropriate annual training on infection control, AirID and blood-borne pathogens.

# Finding 5

The Coroner's Bureau facility does not have the Powered Air Purifying Respirator (AirID) equipment necessary to safely conduct high risk autopsies.

# **Recommendation 5**

That the Sheriff-Coroner provide personnel with appropriate full-face powered air purifying respirators.

# Finding 6

The Coroner's Bureau does not test employees nor provide vaccines for tuberculosis or Hepatitis B.

#### **Recommendation 6**

That the Sheriff-Coroner initiate testing protocol to ensure personnel are not exposed to infectious diseases and provide necessary vaccines.

# Finding 7

The Coroner's Bureau does not provide formaldehyde monitoring devices.

#### **Recommendation 7**

That the Sheriff-Coroner acquire and utilize the formaldehyde monitoring equipment necessary for testing the air for unacceptable levels of formaldehyde for the health and safety of the staff.

# **REQUEST FOR RESPONSE**

Pursuant to California Penal Code Section 933 and 933.05, the Jury requests each entity or individual named below to respond to the enumerated findings and recommendations within the specified statutory time limit.

# Santa Barbara County Board of Supervisors – 90 Days

Finding 1, 2

Recommendations 1a, 1b, 2

# Santa Barbara County Sheriff-Coroner – 60 Days

Findings 1, 2, 3, 4, 5, 6, 7

Recommendations 2, 3, 4, 5, 6, 7