

What is today's objective?



**To understand
the steps of
an autopsy**

AUTOPSIES

*HIC LOCUS EST UBI MORS
GAUDET SUCCURRERE VITAE*

This is the place where death delights to help the living

AUTOPSY means "see for yourself"

PURPOSE: to learn the **truth** about the person's **health during life**, and **how** the person **really died**.

- *Find CAUSE & MANNER of death*

In most states, it can be ordered by the government.

Exactly who makes the decisions, and who just gives advice, depends on the jurisdiction.

- can be ordered in every state when there is suspicion of foul play.
- can be ordered (*in most states*) when there is some public health concern, i.e., a mysterious disease or a worry about the quality of health care.
- may be ordered (*in most states*) if someone dies unattended by a physician (or attended for less than 24 hours), or if the attending physician is uncomfortable signing the death certificate.

- If not required by law, the family can request autopsy from hospital
- ***In VEGAS: the hospitals do NOT do autopsies, but the funeral home does***
- Family can ask funeral home also (costs \$3-5K)

You could still have an open-casket funeral after an autopsy (*secret? pillow and clothes*)

- **Autopsies were developed in Germany; autopsy assistant often called “diener”, which is German for “*servant*”**







"Remember ...

This Room becomes sacred when a family entrusts us with one of their most precious possessions.

Keep faith with them by conducting yourself as though the family were present. The body is dear to them ...

... treat it reverently."

BIOHAZARD AREA



PERSONAL PROTECTIVE
EQUIPMENT
REQUIRED

RECOVERY

IN SERVICE

NEVADA DONOR





AUTOPSIES

Textbook

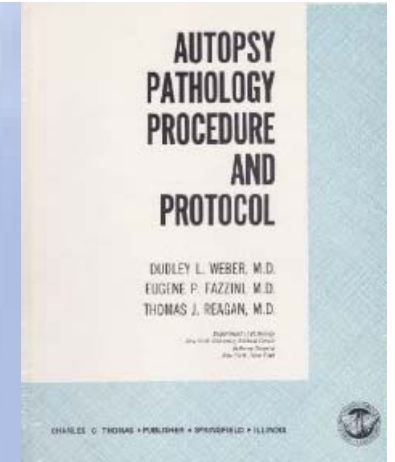


Steps to an Autopsy

1. The pathologist first examines the outside of the body.

A great deal can be learned in this way.

Many pathologists use scalpels with rulers marked on their blades.



2. The body is opened w/ a scalpel using a Y-shaped incision from shoulders to mid-chest and down to the pubic region.

There is almost no bleeding, since a dead body has no blood pressure except that produced by gravity.



3. The skin is reflected back to expose the chest.



4. The cartilages that join the ribs to the breastbone is cut (so *the ribcage can be removed and you can enter the chest cavity*).

This can be done using a *scalpel, a saw, or a stryker saw*, depending on the condition of the ribs





5. a) The breastbone and attached rib cartilages are removed, and examined.

Often they are fractured during cardiopulmonary resuscitation.



5. b) The abdominal cavity is explored

The 1st dissection in the abdomen is usually freeing up the large intestine. *Some pathologists do this with a scalpel, while others use scissors*

6. Freeing up the intestine takes some time. The pathologist in this picture is cutting along the attachment using a scalpel.



7. The chest organs, including the heart and lungs, are inspected.

Sometimes blood from the heart is checked for bacteria in the blood. (*Use a very large hypodermic needle and syringe*)

Other items might be sent to the microbiology lab to search for infection.
(ex. blood, urine, bile, or even the fluid of the eye)

- Then the pathologist must decide in what order to perform the rest of the autopsy.

The choice will be based on a variety of considerations.

- * This team will use the method of **Virchow**: removing organs individually.

(versus the Rokitansky procedure: organs all come out at once)



8. The pathologist examines the heart, and usually the 1st step is sectioning the coronary arteries that supply the heart with blood. *There is often disease here, even in people who believed their hearts were normal.*

9. When any organ is removed, you save a section in preservative solution.

The rest of the organ goes into a biohazard bag, which is being held up in a large container (like a 5 gallon “Homer bucket”)



10. Weigh the major solid organs (heart, lung, brain, kidney, liver, spleen, sometimes others) on a grocer's scale. The smaller organs (thyroid, adrenals) get weighed.



11. Explore the bile ducts and free up the liver.





12. After weighing the heart, you dissect it. There are a variety of ways of doing this, depends on case.

If the pathologist suspects a heart attack, a long knife may be the best choice.

13. The liver is removed and examined.

If it is too light, too orange, and a bit too big, there person maybe have been a heavy drinker. (*normal weight = 1400g*)