



Reporting Protocol for the Examination of Gross Autopsy of Adult Decedents

Version: autopsy-adult-20-02-1000
Protocol Posting Date: February 2020

Accreditation Requirements

The use of this protocol is not required for accreditation purposes.

This protocol may be used for the following procedures:

Procedure	Description
Autopsy	Includes routine autopsy for adult decedents

The following should NOT be reported using this protocol:

Procedure
Forensic autopsy
Pediatric autopsy

Authors

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With guidance from the CAP Autopsy Committee.

** Denotes primary author. All other contributing authors are listed alphabetically.*

Summary of Changes

1000 – New autopsy reporting protocol

Reporting Template

Notes: This case summary may be useful for reporting autopsy findings but is not required for accreditation purposes. (NOTE A)

PATIENT IDENTIFICATION AND CONSENT FOR AUTOPSY

Patient name: _____

Consent and patient ID reviewed by

Dr. _____

Mr./Ms. _____

Two unique patient identifiers reviewed

Patient name: _____

Date of birth: _____

MRN: _____

Other: _____

___ **Type of autopsy**

___ Complete

___ Brain only

___ No head

___ Chest only

___ Abdomen only

___ Other: _____

Name of consenter: _____

Relationship to the deceased: _____

PRIOR POSTMORTEM PROCEDURES

___ **Organ Donation (select all that apply)**

___ Corneas

___ Skin

___ Bone and soft tissue (specify): _____

___ Organs (specify): _____

___ Other (specify): _____

___ **Funerary Preparation (select all that apply)**

___ Eye caps

___ Jaws wired or sewn closed

___ Evidence of embalming (specify): _____

___ Other (specify): _____

EXTERNAL APPEARANCE

___ General

- Well-developed
- Other (specify): _____

___ Age: _____

___ Race

- Caucasian
- African American
- Hispanic
- Asian
- Other (specify): _____

___ Sex

- Male
- Female
- Other (specify): _____

Body Weight (kilograms) _____ kg

Body Length (centimeters) _____ cm

BMI _____

Note: use formula weight (kg)/ [height (m)]²

___ Personal effect with or on the body

- No
- Yes (specify): _____

___ Toes / fingernails:

- Unremarkable
- Onychomycosis
- Splinter hemorrhages
- Cyanotic
- Other (specify): _____

___ Skin

- Unremarkable
- Other (specify): _____

___ Palpable lymph nodes

- No
- Yes
 - Neck
 - Axilla
 - Groin
 - Other (specify): _____

___ Hair length

- (centimeters): _____ cm
- None
- Balding
- Other (specify): _____

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___ **Hair color**
___ Black
___ Brown
___ Blond
___ Grey
___ Other (specify): _____

___ **Eye color**
___ Brown
___ Blue
___ Hazel
___ Green
___ Other (specify): _____

Pupil measurement- right (centimeters): _____ cm

Pupil measurement- left (centimeters): _____ cm

___ **Sclerae**
___ Anicteric
___ Icteric
___ Other (specify): _____

___ **Ears**
___ Unremarkable
___ Other (specify): _____

___ **Nose**
___ Unremarkable
___ Other (specify): _____

___ **Oral cavity**
___ Good dentition
___ Poor dentition
___ Dentures
___ No teeth
___ Exam not performed due to rigor
___ Other (specify): _____

___ **External genitalia**
___ Normal male
___ Normal female
___ Other (specify): _____

___ **Leg circumference 10 cm from medial malleolus**
___ Right (centimeters): _____ cm
___ Left (centimeters): _____ cm

___ **Edema**
___ None
___ Peripheral
___ Generalized
___ Other (specify): _____

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___ Scars/ incisions

- ___ None
- ___ Present (specify): _____
- ___ Location (specify): _____
- ___ Size (centimeters): ____ cm

___ Evidence of therapy

- ___ None
- ___ Nasogastric tube
- ___ PEG tube
- ___ Endotracheal tube
- ___ Foley catheter
- ___ Other (specify): _____

___ Back

- ___ Unremarkable
- ___ Other (specify): _____

INCISIONS AND BODY CAVITIES

___ Incision

- ___ Standard Y-shaped
- ___ Biparietal
- ___ Other (specify): _____

___ Organs in normal anatomic positions

- ___ Yes
- ___ No
- ___ Other (specify): _____

Panniculus (centimeters): _____ cm

___ Peritoneal fluid

- ___ None
- ___ Present (milliliters): _____ ml
- ___ Serous
- ___ Cloudy
- ___ Serosanguinous
- ___ Sanguinous
- ___ Other (specify): _____

___ Peritoneal surfaces

- ___ Smooth
- ___ Adhesions
- ___ Other (specify): _____

___ Right pleural cavity

- ___ Smooth
- ___ Adhesions
- ___ Other (specify): _____

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Right pleural fluid
 None
 Present (milliliters): _____ ml
 Serous
 Serosanguinous
 Sanguinous
 Other (specify): _____

Left Pleural cavity
 Smooth
 Adhesions
 Other (specify): _____

Left pleural fluid
 None
 Present (milliliters): _____ ml
 Serous
 Serosanguinous
 Sanguinous
 Other (specify): _____

CARDIOVASCULAR SYSTEM

Heart weight
 (grams): _____ g

Pericardium
 Intact
 Adhesions
 No adhesions
 Other (specify): _____

Pericardial fluid
 None
 Present (milliliters): _____ ml
 Serous
 Sanguinous
 Other (specify): _____

Epicardial fat
 Minimal
 Moderate
 Large amount
 Other (specify): _____

Epicardial surface
 Smooth
 Glistening
 Roughened
 Other (specify): _____

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Coronary ostia
 Normally positioned
 Patent
 Other (specify): _____

Foramen ovale
 Closed
 Probe patent
 Other (specify): _____

Coronary arteries follow normal anatomic course
 Yes
 No
 Other (specify): _____

Coronary circulation
 Right dominant
 Left dominant
 Co- dominant

Atherosclerosis

Left anterior descending artery (LAD)
 None
 % stenosis: _____
 Eccentric
 Concentric
 Other (specify): _____

Left circumflex artery (LCX)
 None
 % stenosis: _____
 Eccentric
 Concentric
 Other (specify): _____

Right coronary artery (RCA)
 None
 % stenosis: _____
 Eccentric
 Concentric
 Other (specify): _____

Chamber dilation
 Yes
 No
 Other (specify): _____

Valve leaflets
 Thin/ delicate
 Other (specify): _____

Chordae tendinae
 Thin
 Other (specify): _____

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Valve circumferences

Tricuspid (centimeters): _____ **cm**
 _____ Abnormalities (specify): _____
Note: Reference range 10.0 – 12.5 cm

Pulmonic (centimeters): _____ **cm**
 _____ Abnormalities (specify): _____
Note: Reference range 7.0 – 9.0 cm

Mitral (centimeters): _____ **cm**
 _____ Abnormalities (specify): _____
Note: Reference range 8.0 – 10.5 cm

Aortic (centimeters): _____ **cm**
 _____ Abnormalities (specify): _____
Note: Reference range 6.0 – 7.5 cm

___ **Myocardium**
 ___ Firm
 ___ Red-brown
 ___ Other (specify): _____

___ **Endocardium**
 ___ Smooth and thin
 ___ Thickened
 ___ Other (specify): _____

Left ventricular free wall (centimeters): _____ **cm**
Note: Reference range less than 1.5 cm

Right ventricular free wall (centimeters): _____ **cm**
Note: Reference range less than 0.5 cm

Septum (centimeters): _____ **cm**
Note: Reference range less than 1.5 cm

___ **Pulmonary artery**
 ___ Appropriate caliber
 ___ Normal configuration
 ___ Contains embolus
 ___ Other (specify): _____

___ **Ascending aorta**
 ___ Appropriate caliber
 ___ Normal configuration
 ___ Other (specify): _____

___ **Major arteries arising from aortic arch**
 ___ Normal configuration
 ___ Patent
 ___ Other (specify): _____

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___ **Thoracic aorta**

- ___ No atherosclerosis
- ___ Mild atherosclerosis
- ___ Moderate atherosclerosis
- ___ Severe atherosclerosis

___ **Abdominal aorta**

- ___ No atherosclerosis
- ___ Mild atherosclerosis
- ___ Moderate atherosclerosis
- ___ Severe atherosclerosis

___ **Venae cavae**

- ___ Patent
- ___ Thin-walled
- ___ Thrombi present
- ___ Other (specify): _____

RESPIRATORY SYSTEM

___ **Epiglottis, larynx, trachea**

- ___ No lesions
- ___ Other (specify): _____

Right lung weight (grams): _____ g

Note: Reference range 360 – 570 g

Left lung weight (grams): _____ g

Note: Reference range 325 – 480 g

___ **Fixation**

- ___ Fixed in distension
- ___ Cut fresh
- ___ Other (specify): _____

___ **Right lung parenchyma**

- ___ Soft and pale red
- ___ Other (specify): _____

___ **Left lung parenchyma**

- ___ Soft and pale red
- ___ Other (specify): _____

___ **Bronchi**

- ___ Patent
- ___ Other (specify): _____

___ **Bronchial mucosa**

- ___ No lesions
- ___ Other (specify): _____

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___ **Pulmonary arteries**

- ___ No atherosclerosis
- ___ Atherosclerosis
- ___ Pulmonary emboli
- ___ No pulmonary emboli
- ___ Other (specify): _____

DIGESTIVE SYSTEM___ **Tongue**

- ___ Papillated
- ___ Smooth
- ___ Other (specify): _____

___ **Esophagus**

- ___ Normal anatomic configuration
- ___ Other (specify): _____

___ **Esophageal mucosa**

- ___ White
- ___ Intact
- ___ Other (specify): _____

___ **Squamocolumnar junction**

- ___ Sharply defined
- ___ Indistinct
- ___ Other (specify): _____

___ **Stomach**

- ___ Empty
- ___ Distended
- ___ Contains partially digested food and liquids
- ___ Other (specify): _____

___ **Gastric mucosa**

- ___ Intact, rugated
- ___ Other (specify): _____

___ **Appendix**

- ___ Present
- ___ Surgically absent
- ___ Other (specify): _____

___ **Small bowel**

- ___ Usual caliber
- ___ Dilated
- ___ Strictured
- ___ Other (specify): _____

___ **Small bowel serosa**

- ___ Tan pink shiny
- ___ Adhesions
- ___ Other (specify): _____

Small bowel contents (specify): _____

___ **Small bowel mucosa**

- ___ Tan
- ___ No lesions
- ___ Other (specify): _____

___ **Large bowel**

- ___ Usual caliber
- ___ Dilated
- ___ Stricture
- ___ Other (specify): _____

___ **Large bowel serosa**

- ___ Tan pink shiny
- ___ Adhesions
- ___ Other (specify): _____

Large bowel contents (specify): _____

___ **Large bowel mucosa**

- ___ Tan
- ___ No lesions
- ___ Polyps
- ___ Diverticula
- ___ Other (specify): _____

___ **Superior mesenteric artery**

- ___ No atherosclerosis
- ___ Degree of atherosclerosis (specify): _____
- ___ Other (specify): _____

Liver weight (grams): _____ **g**

Note: Reference range 1500 – 1800 g

___ **Liver capsule**

- ___ Smooth
- ___ Glistening
- ___ Intact
- ___ Other (specify): _____

___ **Liver parenchyma**

- ___ Slightly firm
- ___ Firm
- ___ Soft
- ___ Maroon-brown
- ___ Green tinged
- ___ Yellow orange
- ___ Rusty brown
- ___ Mottled red
- ___ Nodular
- ___ No focal lesions
- ___ Other (specify): _____

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___ **Gallbladder**
___ Present
___ Surgically absent
___ Other (specify): _____

___ **Gallbladder wall**
___ Thin
___ Fibrous
___ Other (specify): _____

___ **Gallbladder mucosa**
___ Velvety
___ Green
___ Other (specify): _____

___ **Gallbladder contents**
___ Dark green mucoid bile
___ No calculi
___ Calculi
___ Other (specify): _____

___ **Extrahepatic biliary system**
___ Patent
___ Other (specify): _____

___ **Portal vein**
___ Patent
___ Other (specify): _____

___ **Hepatic arteries**
___ Patent
___ Other (specify): _____

___ **Hepatic veins**
___ Patent
___ Other (specify): _____

Pancreas dimensions (centimeters): ___ cm x ___ cm x ___ cm

Note: Average 23.0 x 4.5 x 3.8 cm

___ **Pancreatic parenchyma**
___ Tan
___ Firm and lobulated
___ Autolyzed
___ Other (specify): _____

___ **Pancreatic duct**
___ Patent
___ Not probe patent
___ Other (specify): _____

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URINARY TRACT

Note: Average combined kidney weight 230-440 g

Right kidney weight (grams): _____ g

___ Right kidney cortex

- ___ Thickness (centimeters): _____ cm
- ___ Smooth
- ___ Granular
- ___ Scarred
- ___ Other (specify): _____

___ Right kidney parenchyma

- ___ Red-brown
- ___ Clearly demarcated corticomedullary junctions
- ___ Ill-defined corticomedullary junctions
- ___ Other (specify): _____

___ Right ureter

- ___ Patent
- ___ Not patent
- ___ Dilated
- ___ Not dilated
- ___ Other (specify): _____

Left kidney weight (grams): _____ g

___ Left kidney cortex

- ___ Thickness (centimeters): _____ cm
- ___ Smooth
- ___ Granular
- ___ Scarred
- ___ Other (specify): _____

___ Left kidney parenchyma

- ___ Red-brown
- ___ Clearly demarcated corticomedullary junctions
- ___ Ill-defined corticomedullary junctions
- ___ Other (specify): _____

___ Left ureter

- ___ Patent
- ___ Not patent
- ___ Dilated
- ___ Not dilated
- ___ Other (specify): _____

___ Renal arteries

- ___ Patent
- ___ No atherosclerosis
- ___ Mild atherosclerosis
- ___ Moderate atherosclerosis
- ___ Severe atherosclerosis

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___ **Bladder**

- ___ Collapsed
- ___ Volume of urine (milliliters): _____ ml

___ **Bladder mucosa**

- ___ Intact
- ___ Other (specify): _____

MALE REPRODUCTIVE TRACT (if appropriate)

___ **Prostate**

- ___ Normal size
- ___ Enlarged
- ___ Nodular
- ___ Size (centimeters): _____ cm x _____ cm x _____ cm
- ___ Other (specify): _____

___ **Testes**

- ___ Normal size
- ___ Enlarged
- ___ Other (specify): _____

___ **Testes cut surface**

- ___ Brown parenchyma
- ___ Tubules string in normal manner
- ___ Tubules do not string
- ___ Other (specify): _____

FEMALE REPRODUCTIVE TRACT (if appropriate)

___ **Uterus**

- ___ Present and appropriate size
- ___ Present (comment): _____
- ___ Surgically absent

___ **Right Ovary**

- ___ Size (centimeters): _____ cm x _____ cm x _____ cm
- ___ Not identified
- ___ Other (specify): _____

___ **Left Ovary**

- ___ Size (centimeters): _____ cm x _____ cm x _____ cm
- ___ Not identified
- ___ Other (specify): _____

___ **Endometrium**

- ___ Pale
- ___ Red
- ___ Other (specify): _____

___ **Vagina**

- ___ Without lesions
- ___ Other (specify): _____

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- Cervix**
 - Without lesions
 - Other (specify): _____

ENDOCRINE SYSTEM

Right adrenal weight (grams): _____ g
Note: Average weight 6 g (trimmed)

Left adrenal weight (grams): _____ g
Note: Average weight 6 g (trimmed)

- Adrenal parenchyma**
 - Uniform yellow cortices
 - Good demarcation from the medullae
 - Autolyzed
 - Other (specify): _____

- Thyroid**
 - Weight (grams): _____ g
 - Symmetrical
 - Red-brown
 - Firm
 - Nodular
 - Other (specify): _____
- Note: Average weight 30 – 70 g*

- Breast tissue contains small amount of white fibrous tissue within yellow fat**
 - Other (specify): _____

LYMPHORETICULAR SYSTEM

Spleen weight (grams): _____ g
Note: Average weight 150 – 200 g unless over 80-years-old, then average 100 g

- Spleen capsule**
 - Smooth
 - Intact
 - Other (specify): _____

- Spleen parenchyma**
 - Dark red
 - Other (specify): _____

- Bone marrow**
 - Dark red
 - Hard
 - Softer than usual
 - Other (specify): _____

- Lymph nodes**
 - Not enlarged
 - Other (specify): _____

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MUSCULOSKELETAL SYSTEM

___ **Diaphragm**
___ Intact
___ Other (specify): _____

___ **Skeletal muscles**
___ Red-brown and firm
___ Appropriate mass for age/ gender
___ Other (specify): _____

___ **Calvarium**
___ Intact
___ Normal thickness
___ Other (specify): _____

___ **Vertebral column**
___ Normal curvature
___ Kyphosis
___ Scoliosis
___ Other (specify): _____

___ **Ribs**
___ Fractures (specify): _____
___ No fractures
___ Other (specify): _____

___ **Vertebral bodies**
___ No fractures
___ Other (specify): _____

CENTRAL NERVOUS SYSTEM

___ **Brain**
___ Weight (grams): _____ g
Note: Average weight 1100 – 1700 g
___ No lesions
___ Other (specify): _____

___ **Cerebral hemispheres**
___ Symmetric
___ Other (specify): _____

___ **Hemorrhage**
___ None
___ Epidural
___ Subdural
___ Subarachnoid
___ Other (specify): _____

___ **Circle of Willis**
___ No atherosclerosis
___ Other (specify): _____

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___ **Herniation**
 ___ None
 ___ Other (specify): _____

___ **Dura**
 ___ Normal
 ___ Removal reveals no bony abnormalities
 ___ Other (specify): _____

___ **Spinal cord**
 ___ Intact
 ___ Other (specify): _____

EYES

___ **Eyes**
 ___ Submitted
 ___ Not submitted
 ___ Other (specify): _____

AUTOPSY PROCEDURES AND ANCILLARY TESTING

___ **Approach to autopsy dissection**
 ___ Rokitansky
 ___ Virchow
 ___ Other (specify): _____

___ **Special dissection**
 ___ None
 ___ Other (specify): _____

___ **Tissue retention**
 ___ Stock jar
 ___ All organs (until signout)
 ___ Other (specify): _____

___ **Additional samples taken**
 ___ Blood (specify): _____
 ___ Vitreous
 ___ Tissue (specify): _____
 ___ Other (specify): _____

___ **Ancillary testing**
 ___ None
 ___ Radiology (specify): _____
 ___ Blood cultures (specify): _____
 ___ Tissue cultures (specify): _____
 ___ Toxicology (specify): _____
 ___ Other (specify): _____

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Explanatory Notes

A. Introduction

The aim of this protocol is to improve the completeness, clarity, and portability of autopsy reporting, while being mindful of the wide range of practice settings in which the data in the report is generated and disseminated. Autopsy reporting has traditionally been entirely in prose, a methodology which complicates real time dictation in many cases, and which does not make data easily retrievable, particularly across institutions.

The protocol is based upon input from past and present members of the CAP Autopsy Committee and input from Katie Flickinger, MS, PA (ASCP)^{CM} as well as published recommendations.¹⁻³

The construction of this protocol does allow for the insertion of sentences where desired and thus combines the best of templating and traditional description. It is recommended that it be used as a paper copy or electronic tool directly in the autopsy suite while a case is being completed, though its use can be adapted as needed at different centers and depending on the information technology environment. Portions of the template may also be used in limited autopsies. The Autopsy Reporting Protocol is designed to function in the autopsy suite in conjunction with *An Introduction to Autopsy Technique*⁴ and *Special Autopsy Dissections*⁵ both available from CAP Press in laminated booklet format.

Not only will the template provide more easily reproducible and extractable data, it may be used as a guide for trainees and pathologists who may only perform a limited number of autopsies in their practice. The committee hopes this is a first step in providing a general framework for more standardized quality autopsy practice.

The content of the protocol represents the consensus opinion of the CAP Autopsy Committee. It was ordered by organ system rather than order of the block dissection in recognition of variations in dissection practices across institutions as well as to create the most intelligible final report. Recognizing that the order of elements may be adjusted by users, it is the Committee's recommendation that all elements be included in the Gross Description.

References

1. Fyfe-Kirschner B and Miller DK. The future of autopsy reporting: data repository and research support. In: Hooper and Williamson, editors. *Autopsy in the 21st Century: Best Practices and Future Ideas*. Switzerland: Springer;2019. 39-56.
2. Wittekind C, Habeck JO, Gradistanac T. Proposals for standardization of autopsy reports. *Pathologie* 2014;35:182-190. <https://doi.org/10.1007/s00292-013-1885-8>.
3. Collins K, editor. *Autopsy Performance and Reporting*. 3rd ed. Chicago: CAP Press;2017.
4. Collins KA, Hutchins GM. *An Introduction to Autopsy Technique*. 2nd ed. Northfield, IL: College of American Pathologists; 2005.
5. Collins KA, ed. *Special Autopsy Dissections*. Northfield, IL: College of American Pathologists; 2010.