



OFFICE OF THE MEDICAL EXAMINER
701 W. Jefferson St.
Phoenix, AZ 85007

MEDICAL EXAMINER REPORT

DECEDENT: Kevin Joseph Woyjeck

CASE: 13-04428

DATE OF EXAMINATION: 07/02/2013

TIME: 1354 Hours

PERSONS PRESENT AT EXAMINATION:

Arizona forestry Division: Deputy State Forester Jerry Payne

Yavapai County Sheriff's Office: Lieutenant Tom Boelts

PATHOLOGIC DIAGNOSES

- I. Fire related injuries.
 - A. Thermal injuries.
 - 1. Approximately 95% total body surface area full thickness burns.
 - 2. Full thickness charring of the abdominal wall with exposure of the intestines, thermal fractures of the left tibia and fibula with avulsion of the distal left lower extremity, and heat-related epidural hemorrhage.
 - 3. Partial thickness burns of anterior scalp, the right upper quadrant of the anterior aspect of the chest, the area surrounding the right antecubital fossa, the dorsum of the left hand, the lateral aspect of the right lower leg, and the posterior aspect of the right heel.
 - 4. Pugilistic posturing
 - B. Inhalation of products of combustion.
 - 1. See separate toxicology report.
 - 2. Minimal soot in airways.
 - 3. Pink discoloration of musculature.
- II. No evidence of significant natural disease.
- III. See separate Toxicology Report.

CAUSE OF DEATH: Fire related injuries

MANNER: Accident

10/22/13
Date Signed


CHRISTOPHER K. POULOS, MD
MEDICAL EXAMINER

REPORTED CIRCUMSTANCES OF DEATH

On July 1, 2013, Yavapai County officials requested assistance from the Maricopa County Office of the Medical Examiner with the medicolegal death investigations of 19 firefighters who died in the Yarnell Hill wildfire on June 30, 2013. Under the Maricopa County Manager's authority and direction, the Maricopa County Office of the Medical Examiner examined the firefighters' remains for the purpose of forensic identification and postmortem evaluation. The Maricopa County Office of the Medical Examiner also agreed to provide consultative services to investigating authorities and the Yavapai County Medical Examiner. The Yavapai County Medical Examiner agreed it will certify the firefighters' death certificates. The following Maricopa County Office of the Medical Examiner case numbers were designated for this incident: 13-04425, 13-04426, 13-04427, 13-04428, 13-04429, 13-04430, 13-04431, 13-04432, 13-04433, 13-04434, 13-04435, 13-04436, 13-04437, 13-04438, 13-04439, 13-04440, 13-04441, 13-04442, and 13-04443.

The decedent was a 21-year-old firefighter involved in extinguishing a wildfire.

EXTERNAL EXAMINATION

The body is received in a zippered body pouch secured by evidence seal number 026512.

PHOTOGRAPHS:

Photographs are taken during the exam.

RADIOGRAPHS:

Total body radiographs reveal dental restorations, equipment associated with the body, and a fracture of the left tibia and fibula (thermal related).

IDENTIFICATION:

The body is identified by dental radiographs on 7/3/2013.

CLOTHING AND PERSONAL EFFECTS

The body is clothed and accompanied by the following items: a boot has fallen from the left foot, has most of the top portion burned away and is without name tag; the remnants of a yellow shirt (appears to be buttoned in place); a fire retardant pouch that covers the body and back of the head, however, the feet are outside of the pouch; one white sock without identifying features; a melted cellular phone; a relatively intact glove on the right hand with the initials "KW"; a remnant of a burnt glove near the left hand, a "wildfire series" fire helmet that is melted (was found in place on the head); eye protection that is broken in half; a bandana within the helmet; money including four dimes, one penny,

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two quarters, and an unknown coin that is partially melted; a can of chewing tobacco within the pocket of the remnants of a yellow shirt; a compass within the pocket of the remnants of the yellow shirt; an energy drink within the pocket of the remnant of the yellow shirt; a roll of black electrical tape within the pocket of the remnant of the yellow shirt; a lighter within the pocket of the remnants of the yellow shirt; acid reduction medication within the pocket of the remnant of the yellow shirt; and chap-stick within the remnant of the yellow shirt. Additional items include fragments of pants from Workrite Uniform Company, one earplug, a remnant of a belt, three metal tools believed to represent chain saw servicing tools, what appears to be folded aluminum foil in the fragmented pants, and a charred leather appearing wallet. The wallet contains a social security card for Kevin Joseph Woyjeck, miscellaneous papers of unknown value, and additional cards which are too fragile to be examined.

EVIDENCE OF MEDICAL INTERVENTION

There is no evidence of recent medical intervention.

EVIDENCE OF TRAUMA

External evidence of trauma includes full thickness burns of approximately 95% of the total body surface area. These include full thickness charring with exposure of the bone of the left elbow, full thickness charring of the abdomen with exposure of the intestines, and avulsion of the left foot with thermal related fracture of the tibia and fibula, and the presence of calcined bone fragments within the body pouch. Additionally, there are partial thickness burns of the apex of the head, the right upper quadrant of the chest, the right antecubital fossa region, the dorsum of the left forearm, the lateral aspect of the right lower leg, and the right heel and posterior aspect of the right lower leg.

Internal evidence of heat related changes include thermal epidural hemorrhage, thermal related changes of the intestines and liver.

Evidence of inhalation of products of combustion includes minimal soot within the airways and pink discoloration of the musculature.

SCARS, TATTOOS AND OTHER IDENTIFYING BODY FEATURES:

No scars, tattoos, or other identifying body features are readily apparent.

GENERAL EXTERNAL EXAMINATION

The unembalmed body is that of a male, 68-1/2 inches in height, weighing 135 pounds. Rigor mortis is generalized and livor mortis is indeterminant. The body is cool (refrigerated). The scalp hair is light brown, 1 inch and straight. The irides are of indeterminant color secondary to thermal related changes of the cornea. There are no lesions of the sclerae or conjunctivae. No petechial hemorrhages are identified on the sclerae, conjunctiva, or oral mucosa. The decedent wears a mustache and singed

remnants of beard. The ears are unremarkable and appear to be unpierced on the right; the left ear is extensively charred and piercing cannot be assessed. Dentition is natural and in good condition. The trachea is in the midline. The thorax is well developed and symmetrical. The abdomen, where intact, is flat with no palpable intra-abdominal masses. The external genitalia appear to be those of normal male however, there is extensive charring. The testes are bilaterally descended within the scrotum. The extremities are well developed and symmetrical where uninjured with no significant deformity. Fingernails, where present, are unremarkable. The feet and toes are not remarkable with the exception of the previously described thermal injuries. The posterior aspects of the torso are symmetrical and devoid of any acute injury patterns aside from the previously described thermal injuries. General appearance is compatible with the reported age of 21 years old.

INTERNAL EXAMINATION

The body is opened by a standard Y-shaped thoraco abdominal incision. All viscera occupy their appropriate anatomic relationships. Serous surfaces are smooth and glistening throughout where intact. There are bilateral accumulations of decomposition related fluid within the pleural cavities; however, no additional fluid accumulation or adhesions are within the body cavities or peritoneal cavity.

CARDIOVASCULAR SYSTEM

The 300-gram heart occupies its usual mediastinal site. The external configuration is unremarkable. The epicardial surfaces are smooth and glistening. All major vessels arise in their appropriate anatomic relationships. The coronary arteries arise normally and are distributed in a right dominant pattern with no significant atherosclerotic stenosis. The myocardium is firm, red-brown without areas of softening, hemorrhage or gross scarring. No abnormal communications exist between the cardiac chambers. Ventricular thicknesses are: left 1.2 cm, right 0.4 cm, and 1.0 cm. in the interventricular septum. The cardiac valves have thin, pliable leaflets. The valve circumferences are appropriate to the caliber of the cardiac chambers. The valve cusps and surfaces are free of fusion or vegetations.

The aorta is of normal caliber with all major arterial branches arising in their appropriate anatomic relationship. Elasticity is normal. The intimal surfaces are smooth without aneurysm formation or dissection. No systemic venous abnormalities or thrombi are present.

RESPIRATORY SYSTEM

The lungs weigh 675 grams left and 725 grams right. The upper and lower airways contain scant soot but are otherwise patent and of normal caliber. The pleural surfaces are smooth and glistening. The parenchyma is well expanded, light pink to dark red-purple, exuding moderate amounts of blood and frothy fluid. There are no areas of

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induration, consolidation, hemorrhage, or gross scarring. The pulmonary vessels are patent and of normal caliber.

DIGESTIVE/HEPATOBIILIARY SYSTEM

The oropharynx is grossly normal and unobstructed. The esophagus is of normal caliber with a smooth, white mucosal lining. The gastroesophageal junction is well defined. The stomach has intact mucosal surfaces and the lumen is empty. No areas of ulceration, erosion, or hemorrhage or scarring are present. The small and large intestines are externally unremarkable (where not injured) and are without palpable masses or diverticula. The appendix is present. The lobular tan pancreas is firm, without areas of fat necrosis, gross hemorrhage or space-occupying lesions. The pancreatic ducts are patent and of normal caliber.

The 1275-gram liver has a smooth intact capsule, covering an abnormally firm (thermal change) red-brown parenchyma. No localizing masses, lesions or areas of hemorrhage are evident on external or cut surfaces. The intrahepatic and extrahepatic ducts where visible are patent and of normal caliber. The gallbladder contains viscid bile. The gallbladder mucosa is grossly normal.

GENITOURINARY SYSTEM

The symmetric kidneys weigh left 150 grams and right 125 grams. They are similar in size and shape. The capsules strip with ease from the smooth, red-brown cortical surfaces. The cortices are sharply delineated from the medullary pyramids. The calyces, pelves and ureters are unremarkable. The renal vessels are patent and of normal caliber.

The urinary bladder contains approximately 150 ml of clear brown urine. The mucosal surfaces are flat and pink-tan. The prostate and seminal vesicles are unremarkable.

HEMATOPOIETIC SYSTEM

The 100-gram spleen occupies its usual anatomic site, with an intact, smooth and glistening capsule covering dark purple, moderately firm parenchyma. Regional lymph nodes have their usual distribution and appearance. Rib bone marrow is beefy, red, and unremarkable.

ENDOCRINE SYSTEM

The thyroid and adrenal glands are grossly not remarkable.

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NECK

The cervical spine is structurally intact. The hyoid bone and thyroid cartilage are intact. There are no hemorrhages in the strap muscles or soft tissues of the neck. The upper airway is patent but contains soot.

MUSCULOSKELETAL SYSTEM

The bony framework, supporting musculature and soft tissues are unremarkable except for the previously described thermal related injuries.

NERVOUS SYSTEM

The scalp is reflected in the usual fashion. There are no contusions, lacerations, or abrasions. There is no skull fracture. The 1350-gram brain is covered by thin, clear, delicate leptomeninges. The dura mater and falx cerebri are intact however; there is thermal related epidermal hemorrhage. There is good preservation of cerebral symmetry without flattening of gyri or widening of sulci. Convolutional patterns remain intact. External landmarks are readily identified. There is no evidence of herniation or either diffuse or localized swelling. The cerebral vessels are intact with no evidence of aneurysm or thrombosis. No significant atherosclerotic changes. Multiple coronal sections of cerebrum, cerebellum, and brain stem reveal no localized hemorrhages, masses, or lesions. The ventricular system is symmetrical, non-dilated and filled with clear fluid. The basal ganglia are grossly normal. The atlanto-occipital articulation is grossly normal.

EVIDENCE

Evidence collected includes a fire retardant pouch, a Wildfire series helmet, goggles, pants, and a yellow shirt.

TOXICOLOGY SPECIMENS

Samples of the following are collected and submitted for toxicological testing: known head hair sample, nasal swab, vitreous fluid, urine, iliac blood, cardiac blood, bile, subcutaneous fat, psoas muscle tissue, epidural clot, lung tissue, kidney tissue, splenic tissue, liver, and brain.

FINAL SUMMARY

Based on the autopsy findings and investigative history, as available to me, it is my opinion that Kevin Joseph Woyjeck, a 21-year-old male, died as a result of Fire related injuries.

The manner of death is Accident.

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CKP/gz
D 7/2/13
T 7/3/13

The Maricopa County Medical Examiner's Office is required by statute (A.R.S. § 11-594(A)(2) and (4)) to certify the cause and manner of death following completion of the death investigation of each case over which it assumes jurisdiction, and to promptly execute a death certificate, on a form provided by the state registrar of vital statistics, indicating the cause and manner of death. The form provided by the state registrar of vital statistics includes five manners of death: homicide, suicide, accident, natural, and undetermined. The determination of manner of death is a forensic determination by the pathologist predicated upon the totality of all then-known forensic evidence and other circumstances surrounding the cause of death; it is not a legal determination of criminal or civil responsibility of any person(s) for the death.

MARICOPA COUNTY OFFICE OF THE MEDICAL EXAMINER
REPORT OF TOXICOLOGICAL EXAMINATION

Case Number: 13-04428
Decedent: KEVIN JOSEPH WOYJECK
Date Submitted: 07/02/2013
Report Date: 08/02/2013

Rev CW
10/22

Specimens Collected: KNOWN HEAD HAIR, NASAL SWAB, VITREOUS, BILE, URINE, ILIAC BLOOD, CARDIAC BLOOD, SUBCUTANEOUS ADIPOSE TISSUE, PSOAS MUSCLE, EPIDURAL CLOT, LUNG TISSUE, KIDNEY, SPLEEN, LIVER, BRAIN, BLOT/FILTER PAPER,

Medical Examiner: CHRISTOPHER K. POULOS, MD

RESULTS*:

Vitreous: None detected for ethanol, methanol, isopropanol and acetone


Iliac Blood: Positive for
Carboxyhemoglobin (25% saturation)
Ethyl alcohol 0.03 g%
Ibuprofen (<10 mg/L)
None detected for methanol, isopropanol, acetone, amphetamine, methamphetamine, phencyclidine, cocaine, benzoylecgonine, methadone, morphine, codeine, benzodiazepines, barbiturates, antihistamines, phenothiazines, tricyclic antidepressants, fentanyl, oxycodone, and acid neutral drugs

Brain: Positive by GC/MS for
Benzene
Toluene
Xylene

Lung: Positive by GC/MS for
Toluene

Urine: None detected for amphetamine, methamphetamine, phencyclidine, cocaine, methadone, codeine, antihistamines, phenothiazines, and tricyclic antidepressants

*If results are not listed for any specimen(s), that/those specimen(s) is/are deemed to be on "HOLD"


Norman A. Wade
Laboratory Director



Maricopa County
Forensic Science Center

701 West Jefferson Street
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Phone: (602) 506-3322
Fax: (602) 506-1546

July 8, 2013

Christopher Poulos, M.D.
Maricopa County Forensic Science Center
Phoenix, Arizona

Re: Maricopa County Medical Examiner Case # 13-4428

Dear Dr. Poulos,

On July 2, 2013, a dental examination including dental radiographs was completed at the Maricopa County Forensic Science Center on Medical Examiner Case # 13-4428.

Also on July 2, 2013, I received the dental radiographs of Mr. Kevin Woyjeck from the dental office of Dr. Unatin in Seal Beach, California for a comparison to Case #13-4428.

Upon comparing the antemortem dental radiographs of Mr. Kevin Woyjeck and the postmortem dental radiographs of Case # 13-4428, a positive identification has been established, meaning that the antemortem and postmortem dental radiographs match in sufficient detail to establish that they are from the same individual.

Sincerely,


John Piakis D.D.S., D.A.B.F.O.

Forensic Odontologist
Maricopa County
Phoenix, Arizona