# lowa Office of the State Medical Examiner Update 2022

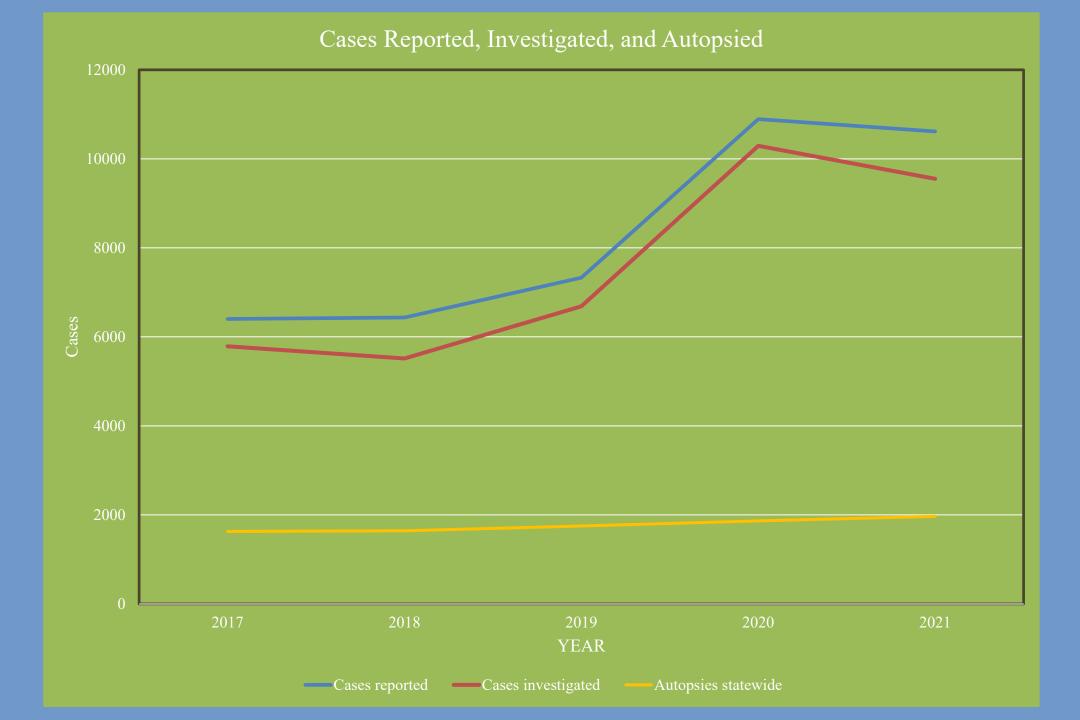
Dennis Klein M.D.

### **Mission Goals**

• Conduct high quality and professional medical legal death investigations

• Provide and Protect credible and useful information

• Serve the public ethically and compassionately



### 2021 Iowa ME System

#### **B. INVESTIGATIONS**

B B	1	INVESTIGATIONS Acceptance and Declining of Cases	Р	1	Resul	t
	a	Does the office have a written and implemented policy or standard operating procedure, signed within the last two years, covering case notification, acceptance of, and declining of cases?	п	Y	N/A	N
	b	Is there an existing law (state, federal, county, or city) covering the medical examiner's (or coroner's) geographical area of jurisdiction that requires that deaths falling under the medical examiner's jurisdiction be reported promptly to the medical examiner's office by law enforcement agencies, physicians, hospital personnel, funeral directors, or other persons who become aware of a reportable case?	I	Y	N/A	N
	C	Does the medical examiner accept notification from any person who has become aware of a death that might fall under the jurisdiction of the office?	п	Y	N/A	N
	d	Is the medical examiner/coroner's office's contact information easily found on the internet and/or in a telephone book?	II	Y	N/A	N
	e	Is the phone number staffed 24 hours a day by a person able to	п	Y	N/A	N
	f	Are at least 20% of the deaths occurring within the office jurisdiction reported to the office?	I	Y	N/A	N
	9	pronouncement of death?	I	Y	N/A	N
	h	Does the office attempt to notify the next-of-kin as soon as possible, if notification by another agency or individual cannot be confirmed?	I	Y	N/A	N
	i	Is the case reviewed by a medical examiner at the time jurisdiction is released, or at a minimum, within 24 hours of release?	I	Y	N/A	N
	J	Does the office have a written and implemented policy, signed within the last two years, covering the handling of objections made to the performance of autopsies on bodies falling under medical examiner/coroner jurisdiction based on personal, religious or cultural grounds?	п	Y	N/A	N

Cases Reported 31% of total deaths (10,615 Reported 33,996 Deaths)

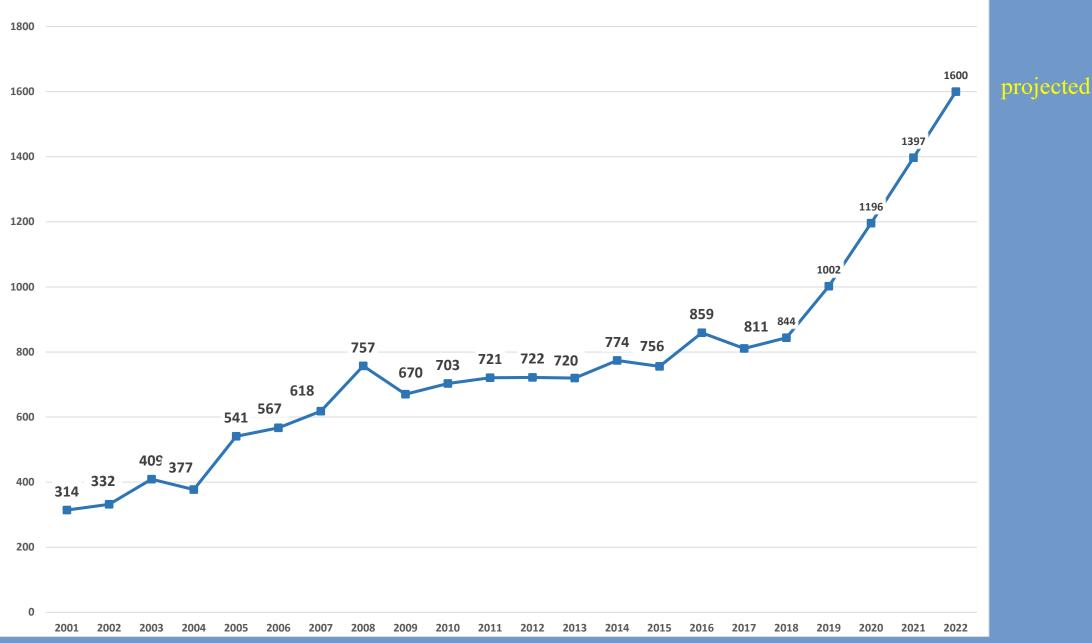
Cases Autopsied 5.7 % of total deaths (1967 ME autopsies 33,996 Deaths)



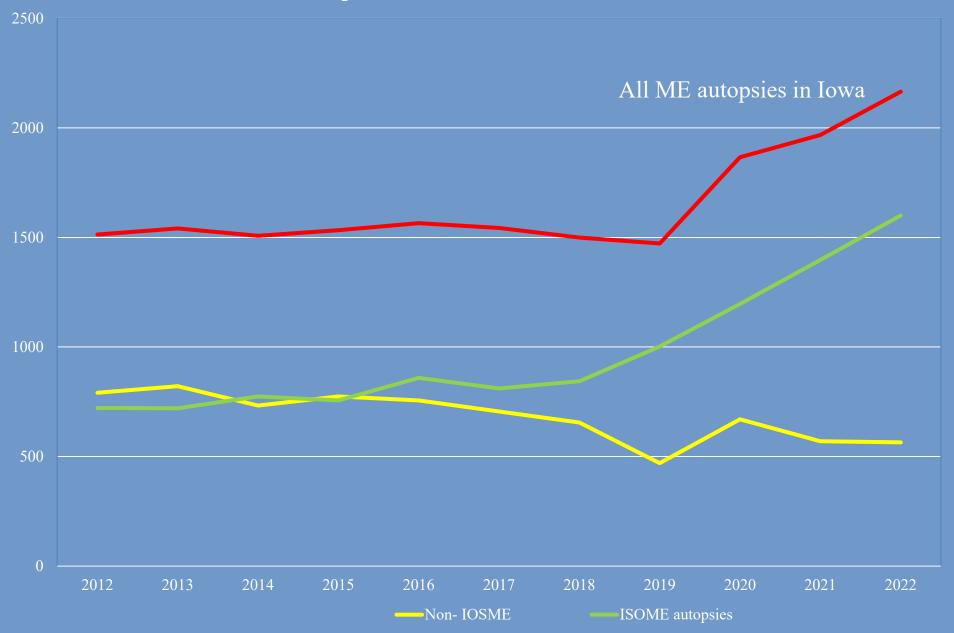


	Number Autopsied	% of Cases Autopsied	% of Cases Autopsied
HOMICIDES	107	100%	100%
ACCIDENTS	871	46%	66%
SUICIDES	385	69%	42%
NATURALS	638	9%	8%
UNDETERMINED	94	94%	95%

#### **IOSME AUTOPSIES BY YEAR**



Autopsies State wide and at IOSME



### **IOSME Staffing**

### 18 Full Time

- 5 Forensic Pathologists
- 2 MEI liaisons
- 3 Medical Examiner Investigator
- 1 Office manager
- 4 Autopsy Technicians
- 2 Administrative Assistants
- 1 Radiology Technician

### 30 Part Time

- Autopsy technicians
- Morgue Attendants
- Administrative Assistants
- Investigator (1)
- Pathologists (6)

### Partnership

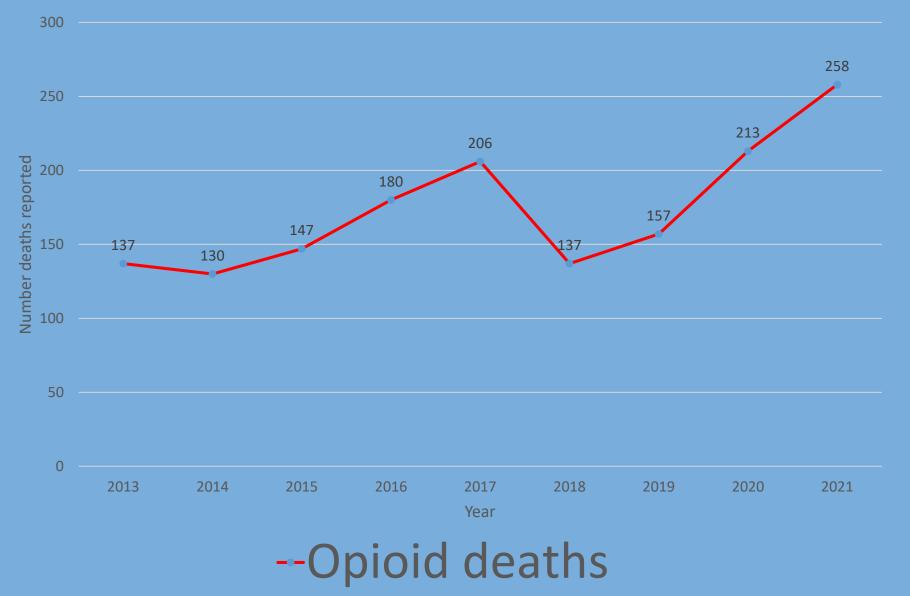
• 2 IDN Liaisons/investigators

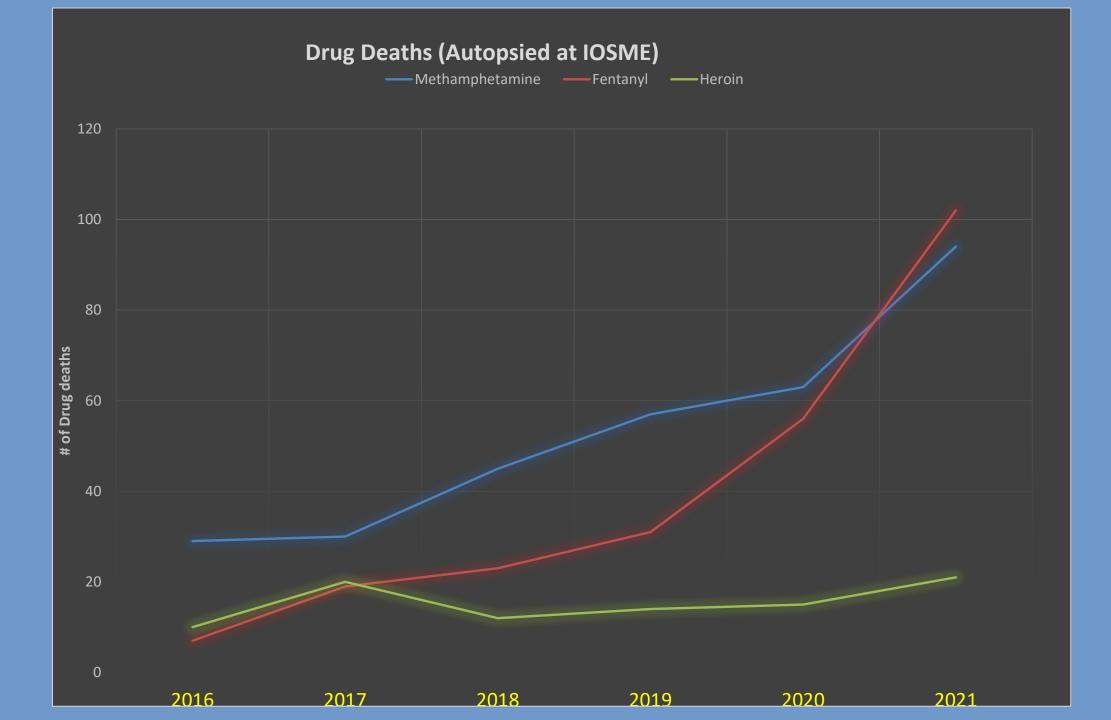
48 hour, 72 hour Autopsy Completions at IOSME



Annual 48 hours 72 hours

### **Opioid deaths in Iowa**





### The Rise of Fentanyl

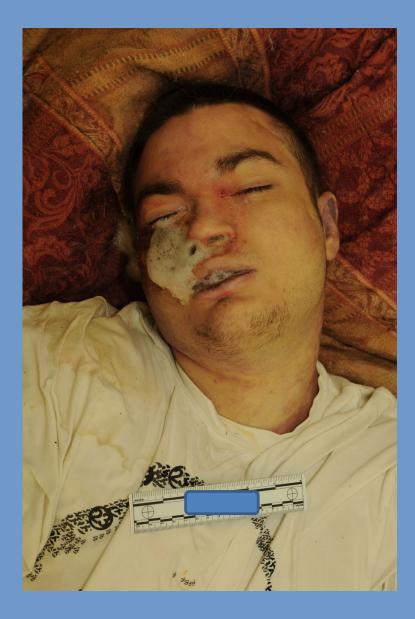
- Drug Deaths involving Fentanyl
   2018 23%
   2021 46%
- Concentration of Fentanyl (over 20 ng/mL)
   2018 0%
  - -2021 17%

# Autopsy

- NAME standards-
  - The forensic pathologist shall perform a forensic autopsy when:
    - the death is by apparent intoxication by alcohol, drugs, or poison, unless a significant interval has passed, and the medical findings and absence of trauma are well documented.
    - WHY?
      - -Interpretation
      - -Prosecution
      - -Sentinel novel drugs

### Complete and Accurate Drug Death Reporting

- Sensitivity: Depends on history and suspicion at the scene
  - Age is not a good discriminator
  - Absence of drug at scene, not a good discriminator (e.g. Methamphetamine)
  - Appropriate toxicology testing
- *Specificity*: Depends on interpretation
  - Proper specimen collection
  - Autopsy findings
  - Review of medical history
  - Review medication history (e.g. PMP)













Decision making at scene Maintain High Index of Suspicion

- Drug use and intoxication
   OPIOIDS
  - Opioid deaths highest in Age group 25-34 (31%)
  - 55+ Age group (18%)
    - Complex interpretation of Natural Disease and Toxicology
  - Person may not know taking Fentanyl
  - METHAMPHETAMINE
    - Long T<sub>1/2</sub> (6-15 hr depending on route) may not see drug at scene
    - Age not a reliable discriminator

### Importance of Accurate Drug Death Reporting

- State and Federal policies rely on accurate and complete data
   Data obtained from Death Certificate
  - List of drugs need to appear in Cause of Death statement
  - Indicate in EMER presence or absence of drug paraphernalia

Example: "Mixed drug (fentanyl and methamphetamine) intoxication." Avoid: "Polysubstance use", "Opioid overdose"

- Actionable data for law enforcement
  - Timely reporting- Interdiction and prevention
  - Accurate reporting- Prosecution

### IOSME study Rapid Preliminary Toxicology Reporting

- Same day qualitative testing of common drugs of abuse (e.g. Methamphetamine, Fentanyl)
  - Validating Sensitivity and SpecificitySyndromic surveillance



### Elder Abuse

- Most reported form of elder abuse is financial exploitation, often occurs with emotional, <u>physical</u>, and <u>sexual abuse</u>.
- Perpetrators most commonly trusted people e.g. Family
- Area Agencies on Aging
  - Six regional agencies in Iowa

SF 522 Past Elder Abuse Law Signed into law June 15, 2022

- Older defined as 60 YO or older
- Abuse- "the infliction of physical harm or the deprivation of goods or services that are necessary to meet essential needs or to avoid physical harm or psychological harm"
- Care giver "individual who has the responsibility for the care or custody of an older individual, whether voluntarily, by contract, by receipt of payment for care, and includes but it is not limited to a family member or other individual who provides, whether on the individual's behalf or on behalf of a public or private entity, compensated or uncompensated care of an older individual."

## Elder Neglect

- Failure of caregiver to provide
  - Food
  - Shelter
  - Clothing
  - Supervision
  - Goods or services necessary to maintain health and safety
- If not provided "denial of critical care"

### Dependent Abuse Tab in EMER

	IOWA OFFICE O			KAMINER	JURISDICTION DECLINED AUTOPSY
PRELIMINARY MEDICAL EXAMINER REPORT Worksheet for EMER (Electronic Medical Examiner Reporting) DECEDENT:					NO County IOSME Private/Hospital Facility Where Autopsy Performed:
	(First Name)	(Middle Name)	(Last Name)	(Suffix)	Bag Lock #:
ADDRESS:			lowa		
(residence)	(Number and Street or Route,	Box No.) (City)	(State)	(Zip Code) (Coun	ty) (County Assigned Case #)

DEPENDENT ABUSE	Was this death expected?  Is This Death Suspicious For: Physical Abuse Sexual Abuse Neglect Insurance Collection Inappropriate Care (e.g. mishandling of resources/medication)	Decedent Mentation:         Recent change in mentation or condition         Communicative and Appropriate         Dementia:         Ambulation:	Senses and Communication Verbal Hearing Eyesight Sensation
	Living Situation Communicative & Appropriate		Nursing Assistance: Name:
	Caregiver Dementia		Agency: Frequency:

### 26 Questions

### Importance of History in Infant Deaths

- Review of literature and IOSME experience
  - Low yield microbiology without positive history or gross findings
  - Interpretation of post mortem multiple bacterial species
- Directed microbiology testing, based on history
   Recent illness (respiratory, GI), fevers, exposures
- Reduce cost

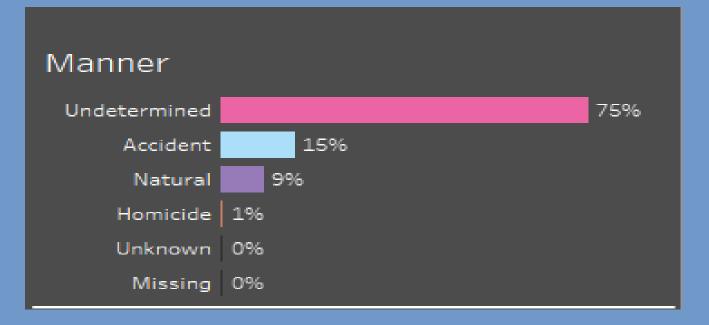


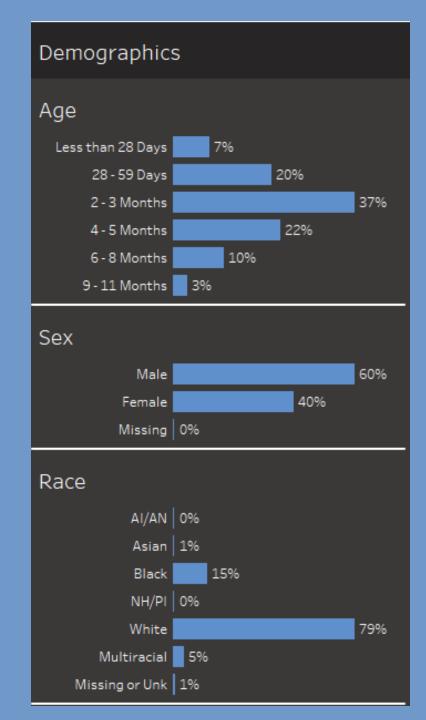
### INFANT (0-3) Tab in EMER

	IOWA OFFICE 2250 South At	OF THE STATE			ER	JURISDICTION DECLINED AUTOPSY
		NARY MEDICAL EX for EMER (Electronic Medica				No County IOSME Private/Hospital Facility Where Autopsy Performed:
	(First Name)	(Middle Name)	(Last Name	e)	(Suffix)	Bag Lock #:
ADDRESS:			lowa			
(residence)	(Number and Street or Rout	te, Box No.) (City)	(State)	(Zip Code)	(County)	(County Assigned Case #)

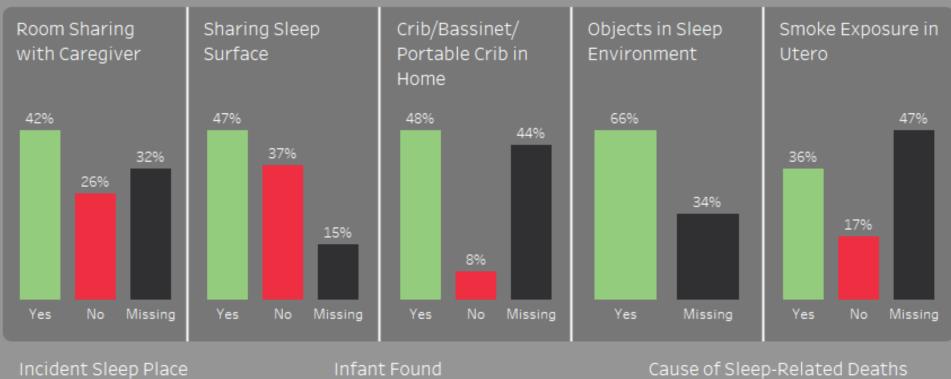
-		•		
		Mother	Father	Caregiver at Time of Death
		Name	Name	Name
		Date of Birth:	Date of Birth:	Date of Birth:
		Address:	Address:	Address:
		City:	City:	City:
		County:	County:	County:
		State: Iowa Zip:	State: Iowa Zip:	State: Iowa Zip:
		Phone (inc area code):	Phone (inc area code):	Phone (inc area code):
		Other States Where Resided:	Other States Where Resided:	Other States Where Resided:
				Relationship to Decedent:
		History of:	History of:	How Long Cared for Child:
		Smoking Drugs	Smoking Drugs	History of:
		Alcohol Mental Illness	Alcohol Mental Illness	Smoking Drugs
				Alcohol Mental Illness
	ကို	Position at Time of Death	Bedding	Home Where Found
	ė	Who Found Child? (parent, sitter, etc.)	Sleep Environment?	History of:
	片	Parent Grandparent		_
	A	Aunt Uncle	If On Mattress, Type?	Smoking Drugs
	Ч	Friend Significant Other of Parent	Covering Narrative:	
	=	Other	Covering Mariative.	— Room Temperature (F): F
				Thermostat Setting (F): F
			Bed Contents:	
		Where Was Child Found? (bedroom, crib, etc.)		Describe Heating and Cooling System:

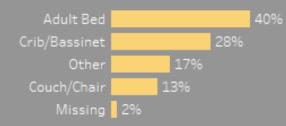
CFRP IOWA Sleep Related Infant Deaths 2005-2019





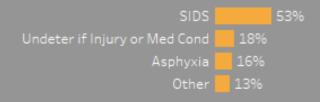
### Sleep Related Risk Factors (2005-2019)







On Stomach		40%
On Back		33%
Missing	13%	
On Side	13%	



### Criteria for Infant Death Caused by Asphyxia

- Complete autopsy
- Toxicology, histology, vitreous electrolytes as necessary
- Review of medical history
- Obstruction of both nose and mouth or compression of neck or chest, reliably witnessed or demonstrated by doll reenactment
- No reasonable competing cause of death

### **Doll Reenactment**









### **Doll Reenactment**





# Autopsy

### Doll Reenactment





# Autopsy



### Deaths with Law Enforcement Interaction "In Custody"

#### IVES Entry Every case

#### Law Enforcement

Law Enforcement or Corrections Related Death

○Not a Law Enforcement or Corrections Related Death

Not a Law Enforcement or Corrections Related Death but death within 30 days of unrestricted release from prison or jail

Law Enforcement or Corrections Related Death

Pre-apprehension (pre-custody, before direct physical contact with law enforcement, e.g., vehicle pursuit, barricade)

Apprehension (direct physical contact between decedent and law enforcement, e.g., physical altercation)

Officer involved shooting

In custody (from arrest to sentencing)

Corrections custody (incarcerated in jail or prison post-sentencing), including death of prisoner in hospital

### MEI Qualifications – Admin rule

• At least 2 years experience nurse or medical care provider

- Within 3 years

   St Louis Basic course or its IOSME-approved equivalent
   Obtain ABMDI certification
- Waiver if above not able to be achieved

# First Training Course in Ankeny

## **1ST ANNUAL MIDWEST DEATH INVESTIGATION COURSE**

 > Fulfills appointment requirements for Death Investigators in the State of Iowa
 > Preparation for ABMDI Certification
 > Continuing education available

- DMACC in Ankeny
- July 18 20, 2022
- Lecture presentations and practicums in new Crime Scene House

# Practicums in new DMACC facility







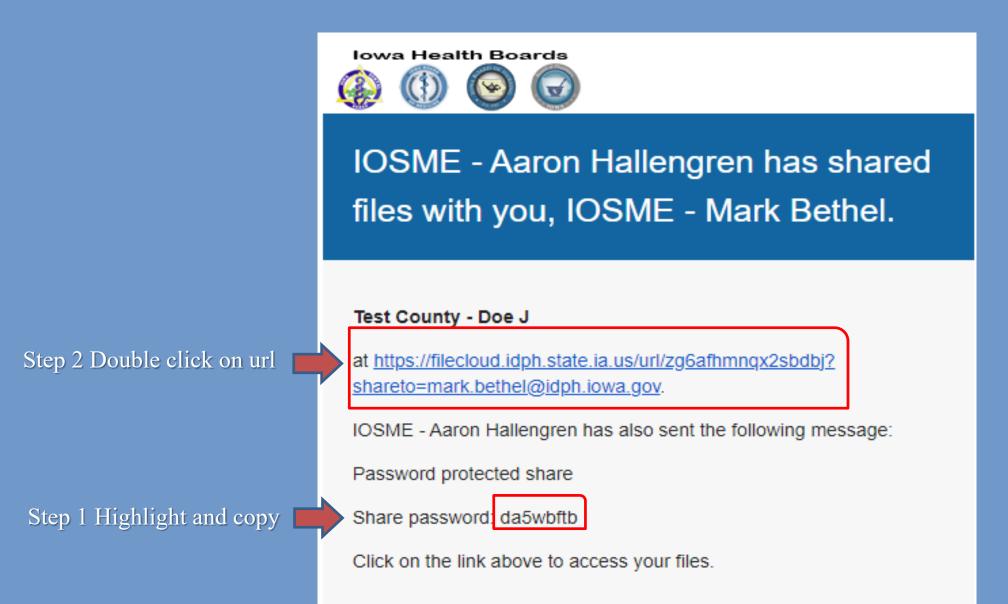
# Mark Your Calendars

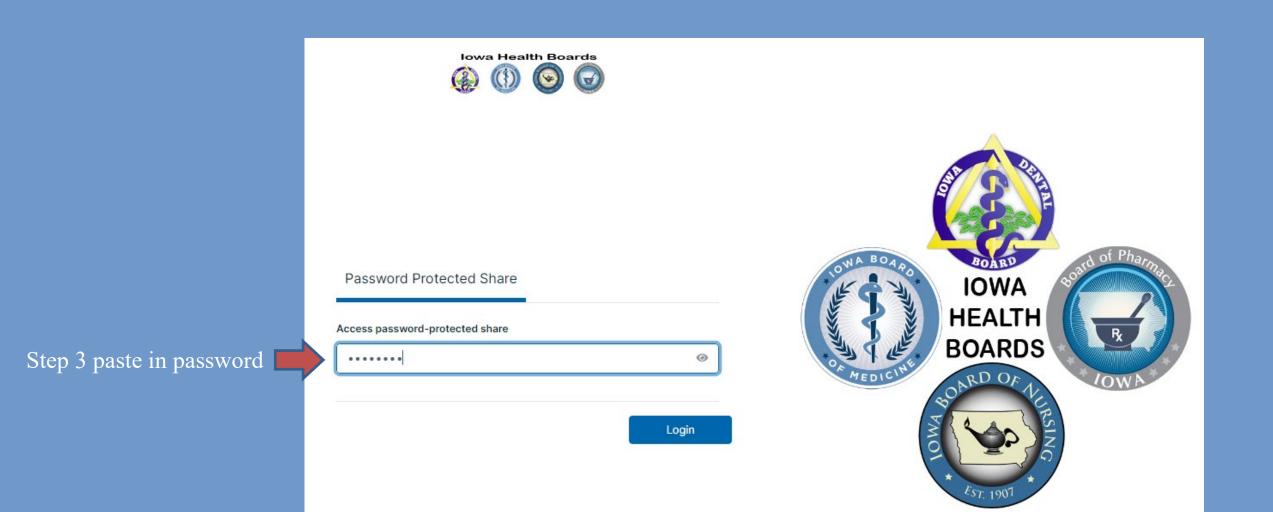
- Midwest Medicolegal Death Investigator Course (MDIC)
- When: May 1- 3, 2023
- Where: DMACC Ankeny
- Cost: Tuition \$499
- Funding available: Tuition and lodging
- Meets MEI training qualification (Admin code127.7)

# Scene Photos

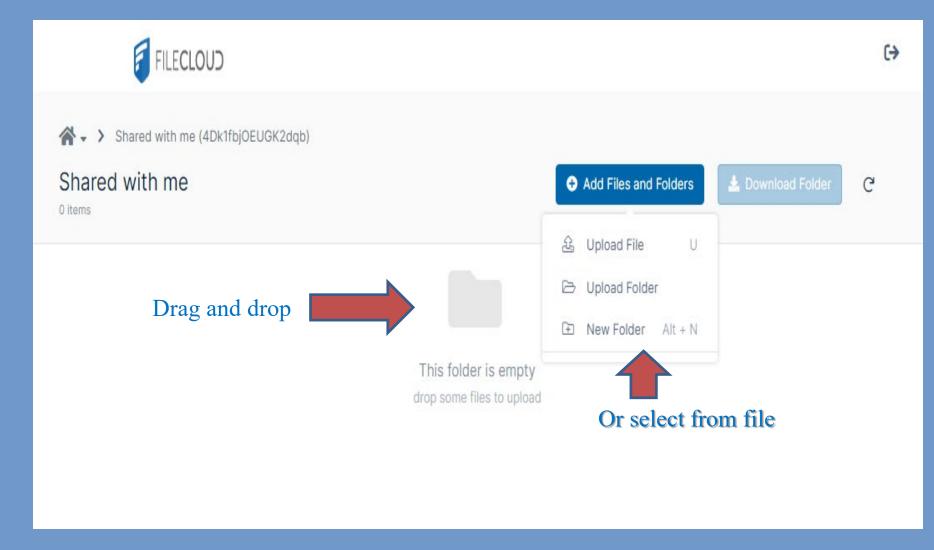
- Two or three properly exposed and in focus photos worth paragraphs of description
- Methods for sending photos
  - iosme.me1@idph.iowa.gov– Filecloud (NEW)
- Do save on county servers
- Don't save on home computer







### Step 4 upload photos



## **Evolution of MIE Death Reporting**

	Central Office Use Only					
PRELIMINARY	(Date of Receipt)					
DECEDENT:	(DOD Code)					
ADDRESS:	(First Name)	(Middle Name)		(Last Name)		(COD Code)
(residence)	(Number & Street or Rout		(City, State)		(County)	(County Assigned Case #)
		TION ABOUT DECEDE				
AGE (If less than 2 yrs. give months & days) Age: Date of Birth:	SEX Male Female Undetermined	CLOTHING Clothed" Party Clothed" Unclothed	BODY TEMPERAT Warm Cool Cool Cool Site:		Nose Mou Ears Clot None	hing TYPE OF WORK:
MARITAL STATUS	HEAD-HAIR None Partly Bald	EYES-Color:	RIGOR Neck: 00 01 0 Arms: 00 01 0	203 0	IOTH Present Abs Ior.	fremen, farmer, salesman, homemakar) ent INDUSTRY:
Widowed Divorced Separated	Bionde Brown Red Black	R:mm/L:mm WEIGHT:	Legs: 00 01 01 17 - absent, 12 -		THER irt, water etc.) Nose Mouth	(Example: tectile, barking, fre dept., farming, insurance, home)
RACE White Black Hispanic Asian	Gray White OTHER HAIR Mustache Beard	LENGTH: Inches MISCELLANEOUS Circumcised	LIVOR Color: Pixed? Yes I Anterior Posterior Lateral (R / L)		Ears None COMPOSITION Early Advanced	Information HISTORY OF DOMESTIC VIOLENCE Ves No
Other		-	-		None	
		INFORMATION AB	SOUT OCCURRE	NCE		
ITEM DATE	TIME (niltary)	LO	CATION		COUNTY	TYPE OF PREMISES (Home, farm, highway, hospital, etc.)
INJURY OR ONSET OF ILLNESS						ON THE JOB?
LAST SEEN ALIVE		(By Whom / Location where				
DEATH (PRONOUNCED) FOUND		(Name of Pronouncer / Address where Pronounced)				
POUND DEAD BY POLICE		POLICE AGENCY:	m / Address where Found) AGENCY: OFFICER:			
NOTIFIED		(By whom: Name and Addre			OFFICER	
NOTIFIED		(by whom: Name and Addre	566)			
VIEW OF BODY						NOT VIEWED
TO HOSPITAL			Notified? 1-800-831-4131			Yes No
WITNESSES (Name a	and Address)			BLOOD SA	MPLE DRAWN: Urine Uvitreou	Yes No Why Not?
		MANNER	OF DEATH			
	HOMICIDE	ACCIDENT			TERMINED	PENDING
M.E. AUTOPSY AUTHORIZE	D PROBABLE C	AUSE OF DEATH:		charge of the death in acc	e body and made inqui ordance with Chapter 3 arein regarding such d	notice of the death described henein I took rise regarding the cause and manner of 331.801 and 802 and the information eath is true and correct to the best of my
PATHOLOGIST	- 2. Due to: _			knowledge a	ind belief.	
State Case #, if applicable SME	3. Due to:			-		
NON-M.E. AUTOPSY DONE	Contributing to	I.S.M.E. review:		PRINT NAME: (Signature of Medical Examiner/ Medical Examiner Investigator)		miner Investigator)
How injury Occurred (44, of di	eath certificate):			(Date	Signed)	(County of Appointment)
	and an an an and an a f					
S Form ME-1 (revised 08/2013)	end original to low:	State Medical Examiner. Co	ples must be forward	led to County	Attorney's office	(6).





### Real time import to IOSME

Ability to update EMER and submit 2<sup>nd</sup> send

1983 -2019

2019-2020

2021-present

2023

# **NAME** Accreditation

### • Four year accreditation cycle

- 2020 Downgraded to provisional status
  - Phase II deficiency < 90% Autopsies performed in 72 hours
  - Phase I deficiency < 90% Autopsies performed in 48 hours</li>
  - Concern for Phase II 90 day Autopsy report final (90.2%)
- 2021 Corrections and inspection
  - Phase II Corrected 91.8% autopsies completed within 72 hours
  - Concern for Phase II corrected 97.7 % completed in 90 days (93.0% within 60 days)
  - Regained full accreditation
- 2022 Annual Review
  - No Phase II deficiencies
  - Phase I deficiencies in 48 hour autopsy turn around and Number of autopsies /path

## Mass Fatality and Surge Preparedness

- Table Top Mass fatality Exercise
  - Collaboration with Johnson County
  - Identified communication gaps
- Increase Autopsy throughput efficiency
  - IT solutions
  - Increased X-ray capacity
    - Ceiling mounted with floating table and stitching capability
    - Portable X-ray
  - Demonstrated increased autopsy throughput



Iowa Mass Fatality TTX Player Briefing June, 16th 2022 Mass Fatality and Surge Preparedness

Cooler capacity

 High Density racks
 Max capacity now <u>70</u>

On-site Cooling

 Reefer trailer
 Tommy lift and racks



# Refrigerated trailer



#### 2022



Iowa Office of the State Medical E>





#### **Protected Page**

The page you are trying to view is password protected. Please enter the pas Password \*

#### CME

#### Enter



#### Iowa Office of the State Medical Examiner



Home Fax Search Action Lavarg Tools Activity Act

#### County Medical Examiner Handbook



Iowa Office of the State Medical Examiner 2250 S Ankeny Blvd.

Ankeny IA 50023-9093 iosme.iowa.gov

# Parting Reminders and Requests

#### **IOWA OFFICE OF THE STATE MEDICAL EXAMINER**

2250 South Ankeny Blvd. Ankeny, IA 515-725-1400

#### PRELIMINARY MEDICAL EXAMINER REPORT Worksheet for EMER (Electronic Medical Examiner Reporting)

	MARY OF CIRCUMSTANCES SURROUNDING DEATH (add sheet if needed):
Brief Case Description (1 to 3 sentences	5):
History/Circumstances (surrounding the	e death):
Scene Description (include location and	I position of body):

		Suspension	Ligature Type:	Object/Source of Attachment:	Platform:	
HANGING	Body Location Description:	Ligature Length: in.	Other:	Platform Used Platform Overturned		
		Description of Ligature:	Point of Suspension On Body:	Platform Scuff Marks Found No Platform		
	Body Position Description:	Ligature Texture:	Knot Type: Description of Knot:	Platform Distance From Ground in. Platform Distance From Body in. Description of Platform:		
		Possible Autoerotic Asphyxiation				
		Volisio Vol			Describe attempts to seal	

Please complete specialty tabs and narrative

# **Tissue Donation**

- Continue to refer EVERY death to IDN
  - Protocols are continuously changing
  - Case referred for possible corneal donation
  - Efficiency of information reporting
- Transportation
  - If challenges in timely transport
    - Ask to speak with Funeral Director donation specialists
- Identification tags on body (not clothing)

## Indemnification and Workman's Compensation

• 641—127.11(331,691,670) Indemnification. A board of supervisors shall defend, hold harmless, and indemnify a county medical examiner and any properly appointed staff members to the extent provided in Iowa Code chapter 670.

 Coverage for work related injuries depends on employment status : Independent contractor –not covered.
 Employee of County, covered.

# Mass Fatality Preparedness

• Reach out to your County Emergency Management Administrator

• Review (create) Mass Fatality Plan