


# Iowa Office of the State Medical Examiner Update 2018

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## Mission Goals

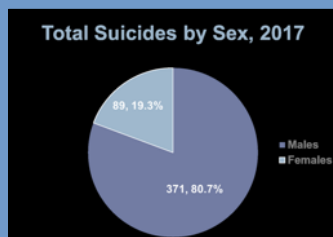
- Conduct high quality and professional medical legal death investigations
- Provide and Protect credible and useful information
- Serve the public ethically and compassionately

	2018	% Autopsied	Last 4 year avg
Total cases reported	5,515		5,522
Autopsies	1,499	26%	1,537
Homicides	88	100%	81
Suicides 	424	77%	305
Accidents	1,188	49%	1,217
Naturals	3,691	11%	3,583
Undetermined	99	95%	93

## IOSME Categories by Manner

- **Homicide:** Firearm (22), Sharp force (15), BFI (12)
- **Suicide:** Firearm (86), Hanging (46), Drug (19)
- **Accident:** BFI transportation (126), Drug (75), BFI (29)

## Iowa Violent Death Reporting System Data



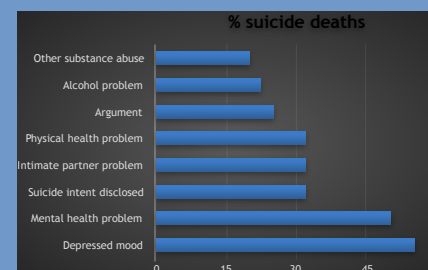
	Asphyxiation	Firearm	Poisoning	Other
Females	33.7%	15.7%	42.7%	7.9%
Males	30.2%	52.8%	10.8%	6.2%

Other: drowning, fire/burn, motor vehicle, non-powder gun, intentional neglect, and sharp instrument

## Iowa Violent Death Reporting System Data

### FACTORS CONTRIBUTING TO SUICIDE DEATHS

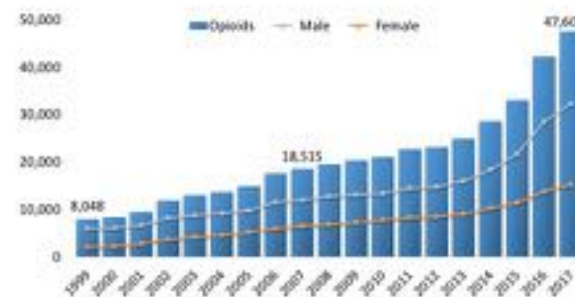
In 97% of Iowa's resident deaths by suicide, contributing circumstances surrounding the suicide deaths were documented in the records (N=445) by the medical examiner and/or law enforcement.



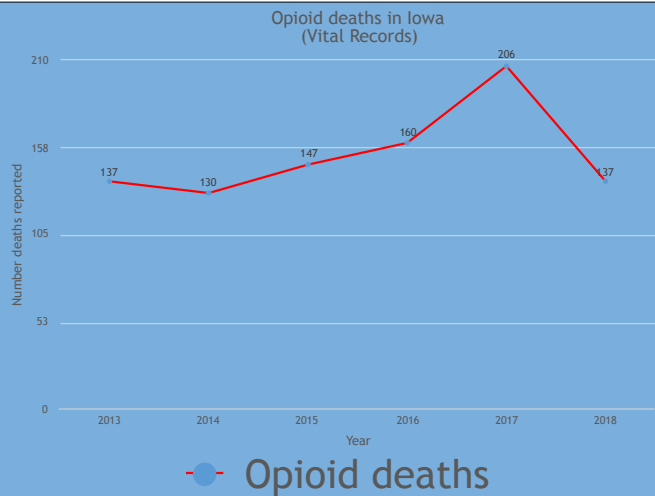
## Child Death Review Team

- Multidiscipline team reviews ME LE DHS Edu records
- Sleep related deaths (35-40 deaths /year)
  - Preventable
  - Need thorough scene investigation with doll re-enactments
  - Autopsies r/o anatomical, tox, infectious, inflicted, molecular
  - Team subcommittee working with Soc Media PSA

Figure 3. National Drug Overdose Deaths Involving Any Opioid, Number Among All Ages, by Gender, 1999-2017



Source: U.S. Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death, 1999-2017 and CDC WONDER Online Database, released December, 2018.



## Opioid Deaths by Age Group (in Iowa)

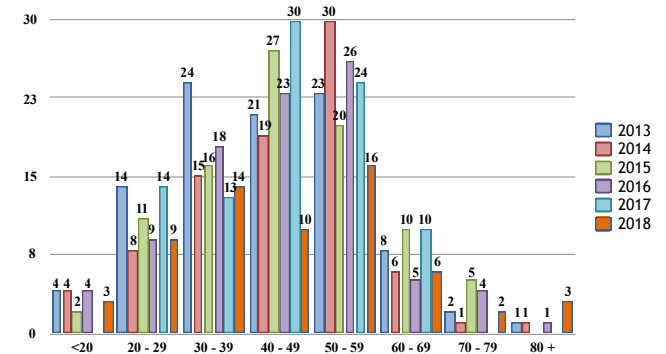
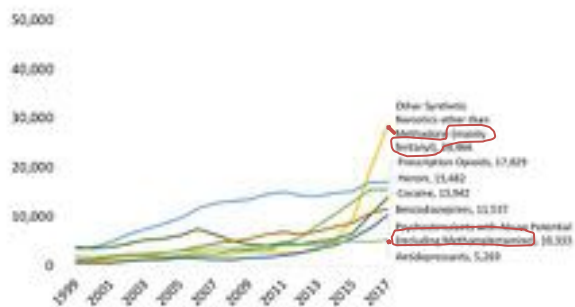


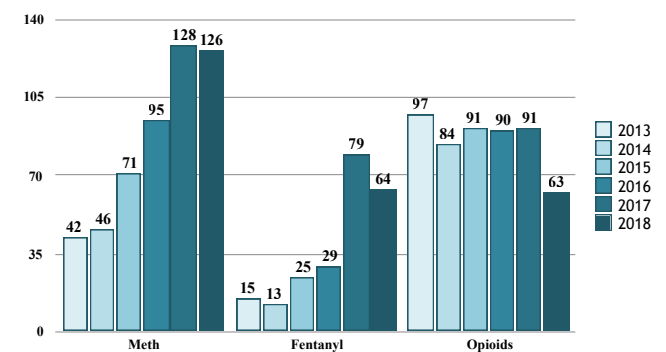
Figure 2. National Drug Overdose Deaths Number Among All Ages, 1999-2017



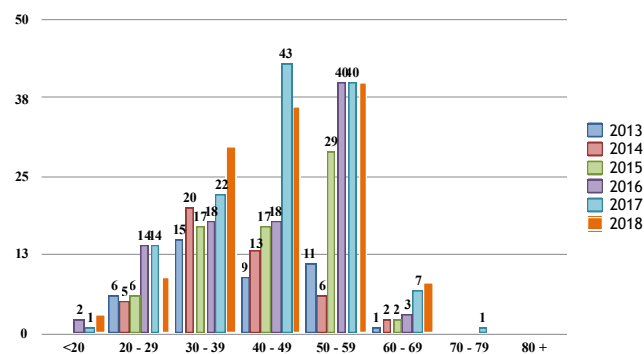
Source: U.S. Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple Cause of Death, 1999-2017 and CDC, National Drug Abuse Institute, November/December, 2018

## Meth, Fentanyl, Opioids

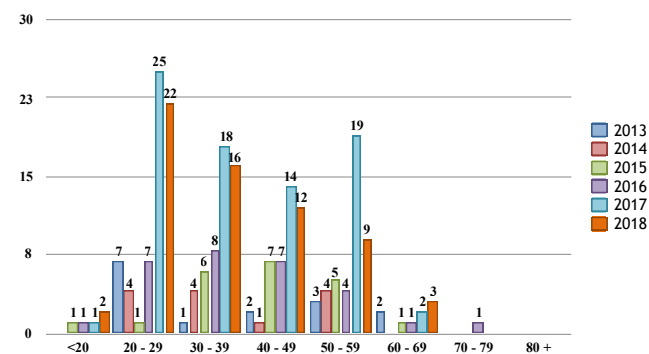
2013-2018 Reported to IOSME



## Meth Use by Age Group



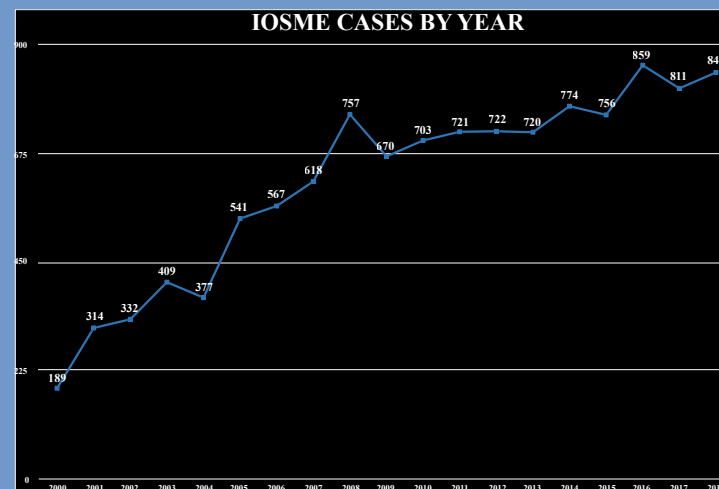
## Fentanyl Use by Age Group

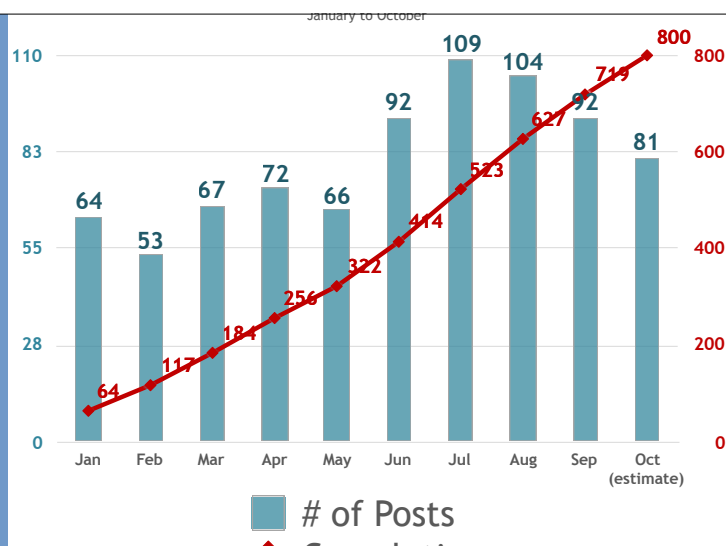


## Conclusions/Recommendations

- Opioids- leveling
  - Fentanyl and analogs continue to be seen
- Methamphetamine- Major Drug in Iowa
- Drug use and intoxication extending into 50's and 60's
  - Complex interpretation of Natural Disease and Toxicology
  - Increase index of suspicion in older age groups
  - Lower threshold for autopsy in 50-60 age group
  - Long  $T_{1/2}$  in Methamphetamine - may not see drug at scene

## IOSME CASES BY YEAR





## IOSME Staffing

### 12 Full Time

- 4 Forensic Pathologists
- 1 Medical Examiner Investigator
- 1 MEI liaison
- 3 Autopsy Technicians
- 3 Administrative Assistants
- 1 Radiology Technician

### 30 Part Time

- Autopsy technicians
- Morgue Attendants
- Administrative Assistants
- Investigators (2)

### Partnership

- 2 IDN Liaisons/investigators

## Challenges (Staffing)

### Recommended staffing by NAME (29-33 FTEs):

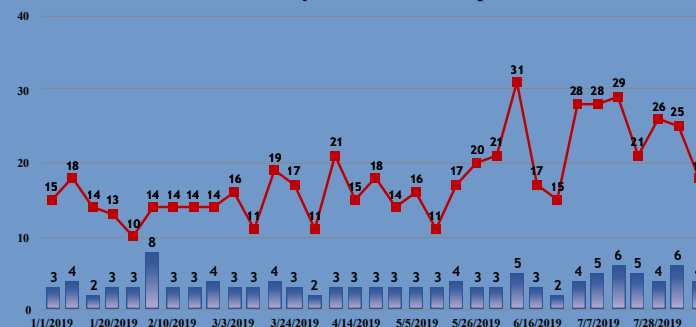
# autopsies	Pathologists	Technicians	Investigators	Admin/clerical	Attendants
800	4	5	6	8	6
1,000	6	5	7	9	6
1,200	7	6	7	9	6

# autopsies	Pathologists	Technicians	Investigators	Admin/clerical	Attendants
844	4	3	2	3	Part-time
1,000	4	3	2	3	Part-time

Current staffing at State ME Office (total 13 FTEs)

2018  
2019  
Proj

### Cases Received by Week Maximum Days Between Receipt and Post



■ MAX Rec'd to Post ◆ # Received



## Challenges

- NAME accreditation pathologist ratio <250/pathologist
- Call, testimony, and vacation coverage
- Surge and Mass Fatality Capacity
- Facility capacity

## Challenge slowly claimed Bodies

- Increase frequency of families with limited funds, taking up to 1 year
- Funding alternatives
  - Some counties "general assistance" funds help pay for cost of final arrangements
  - VA benefits- County and Department of VA Affairs
  - 35B.15 Expenses and audit: Burial expenses shall be paid by the county in which the person died.

## Strategies

- Pathologist coverage
  - Immediate- 2-3 part time pathologists
  - Long term- additional FTE for pathologist
- Investigator coverage
  - Immediate- 2 part time investigators
  - Long term- additional FTE for investigator
- Administrative coverage
  - Immediate- experienced Office manager
  - Immediate- evaluation for work flow efficiencies and IT solutions
  - Immediate- part time clerical staff
  - Long term- additional FTE for admin assistance

## Strategies

- Increase cooler capacity
  - Grant- high density racks and lifts for cooler
  - Legal- time limit on storage of unclaimed bodies
- Increase throughput efficiency
  - IT solutions to maximize efficiency scene to autopsy to report
  - Staggered full time technician scheduling for 7 day coverage
  - Training
  - Exercises

## ABMDI

- 9 awards to August 2019 St Louis course
  - Paul Coverdell National Forensic Science Improvement Act
- 42 Registry Diplomates in Iowa
  - 2019
    - Jullian Cooper (Polk), Susan Garrett (Muscatine), Richard Hines (Muscatine)
- 12 Board Certified Fellows in Iowa
  - 2019
    - Jessica Jessen (IOSME), Matt Lively (IOSME)

## 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

## Medicolegal Death Investigation Training

**Mark Your Calendar!**  
**1<sup>st</sup> Annual Midwest Death Investigation Course**  
July 13-16, 2020 | Ankeny, IA

Essential training for conducting death investigations through presentations and scenario based practices

Topics include:

- Coordinating and Conducting Death Investigations
- Investigative Roles, Responsibilities and Resources
- Determining Cause and Manner of Death

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

For more information visit [www.dmacc.edu/course](http://www.dmacc.edu/course)

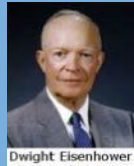
  

## Mass Fatality Planning

- Mass Fatality Response
  - County and State planning
  - IMORT Development
  - Leveraging existing services
    - 211
  - Exercise - Exercise - Exercise



“Plans are worthless,  
but planning is  
essential”



Dwight Eisenhower

## MASS FATALITY- Identified Gaps

- IMORT team members- NEED MORE
- Communications
- GPS equipment and training
- Field body transportation
- Cooling equipment
- Scene body and remains tracking system
- Media and Family management



## How do I volunteer for IMORT?

All volunteers for IMORT must be registered through the Iowa Statewide Emergency Registry of Volunteers (ISERV). Volunteers can register online and update their information 24/7/365.

In order to register on the I-SERV system, a volunteer must create an account at [www.iaserv.org](http://www.iaserv.org). Be sure to indicate a desire to join the “Iowa Volunteer For additional information about the team or for assistance in register

[IMORT@](mailto:IMORT@)



The Iowa Mortuary Operations Response Team (IMORT) is sponsored by:



Iowa Mortuary Operations Assistance Team (IMORT)



<https://www.iaserv.org/>

## IMORT Membership considerations

- ICS 100, 200, 700, BBP
- Scene
  - MEI
  - Scribe
  - Photographer
- Able to participate in meetings and exercises

## County Planning for Mass Fatality

- Know your county Emergency Management Coordinator
  - EMA must collaborate with local funeral homes, county medical examiners, IOSME, law enforcement, fire, EMS, public works, and elected officials
- Have a written Mass Fatality Plan
  - What defines a mass fatality
  - Who declares a mass fatality
- Family Assistance Center
- Temporary cool storage

## Death Certification Objectives

- Identify Decedent
- Obtain Information: Locations, Dates
- Determine Cause and Manner of Death

## Death Investigation System Objectives

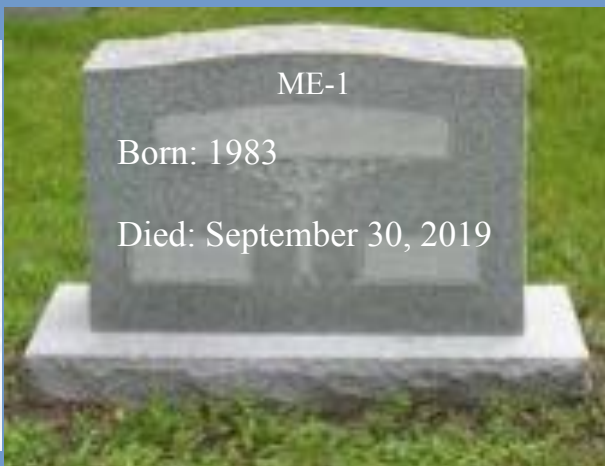
- Accurate and Timely Death Certification
- Efficient and Secure Communication
- Accurate and Useful Data

## System Goals

- **Death Reporting**
  - >20% of deaths reported to CME (NAME)
  - Reports completed in 14 days (Iowa Code)
- **Standardized Drug Intoxication Certifications**
  - Include specific drugs in COD statement
- **Comprehensive Drug Death Certifications**
  - Index of suspicion
  - Expand age range

## Why we do what we do

- Legal
- Humanitarian (Families want to know)
- Medical
  - Genetic implications
  - QA for medical system
- Good Data
  - Public Health
  - Public Safety

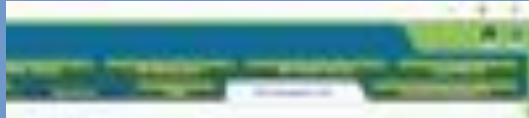


## Electronic Reporting

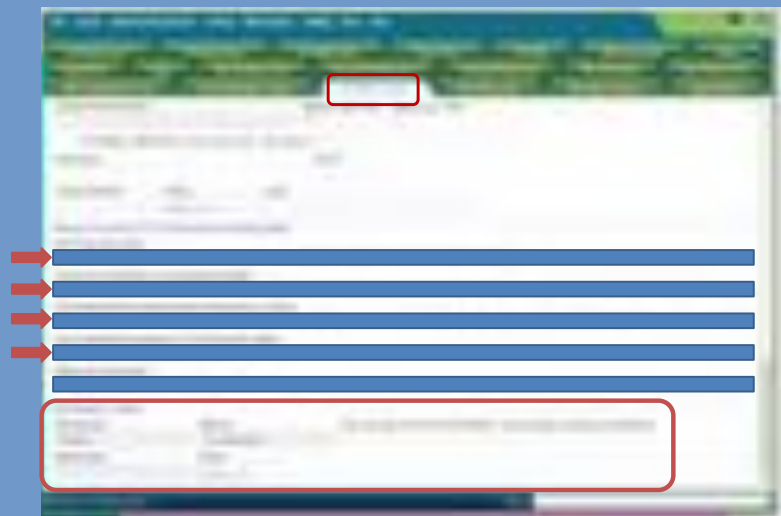
- Prelaunch training
  - 6 GovDelivery Bulletins
  - 88 Training classes held in 22 different locations
  - 5 virtual training sessions
    - 383 (61%) ME/MEIs
    - 98 counties had at least one individual receive training
- Pre and Post launch online materials (IOSME website)
  - 24 online videos
  - User manual
  - 3 Quick reference guides

## Reminders

- If appropriate indicate the “Means of Death”



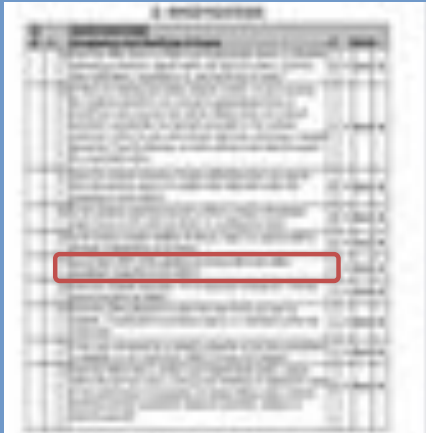
## Tabs for specific types of death



## EMER Reminder to sign



## Reporting ME Deaths



Population 3.12 M

Deaths 30,527

Deaths reported 5,547 (18%)

## Jurisdiction Definition:

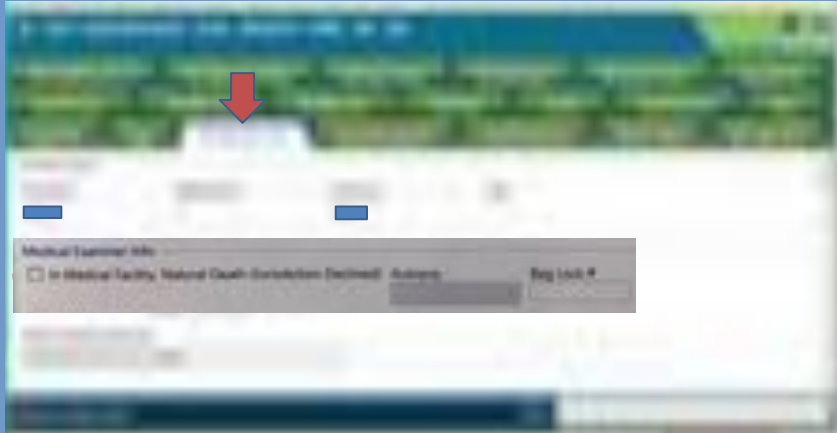
- The official power to make legal decisions and judgements
- The geographic area over which authority extends

## Jurisdiction


- 331.802 Deaths-reported and investigated
  - Submit report for deaths that affects public interest
    - Violent (homicidal, suicidal, accidental), thermal, chemical, electrical, radiation, criminal abortion, virulent, prison, jail, unclaimed, unknown identity, child under 2, terminal illness not seen by physician in past 30 d or hospice.
- Not ME Jurisdiction
  - In medical facility
  - Includes hospice
  - Dies only of natural disease

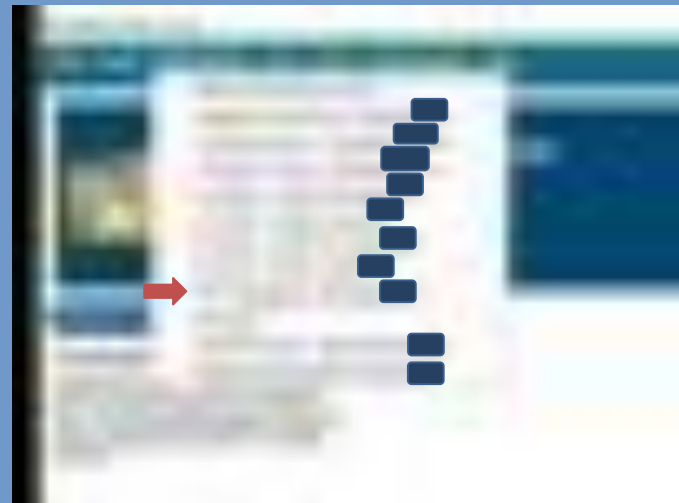
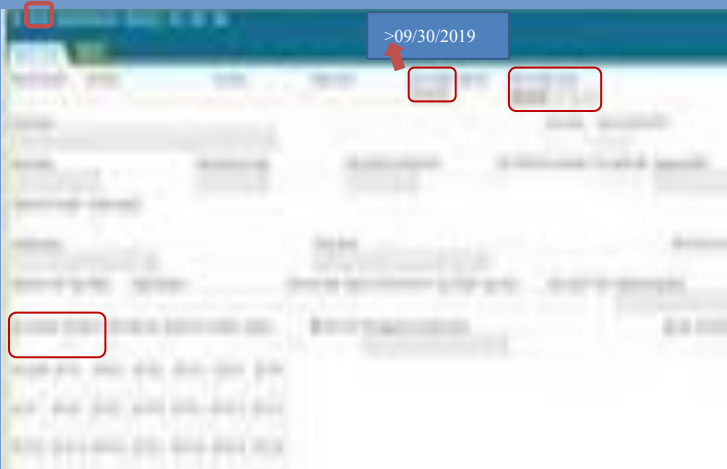
## Jurisdiction Decline “JD”

- What is a JD case?
  - ME is reported a death that does not fulfill 331.802
    - Violent (homicidal, suicidal, accidental), thermal, chemical, electrical, radiation, criminal abortion, virulent, prison, jail, unclaimed, unknown identity, child under 2, terminal illness not seen by physician in past 30 d or hospice.
  - Patient in hospital or NH dies of natural disease
- What is done about a call that does not fulfill 331.802?
  - Allow Funeral Director to initiate record in IVES
  - Document in EMER as a JD
  - Limited ME investigation and documentation



## Jurisdiction

- Why document “JD” cases
  - Helps with under reporting
    - Remember- Iowa 18 % reporting should be “at least 20%”
    - Documentation if death questioned
    - Documentation for compensation
-  “In medical facility, natural” (Jurisdiction Declined)





## Autopsy Rates

- 2018: 1,499 autopsies/30,369 deaths (4.9%)
  - Recommended: 10%
- Factors determining autopsy rates
  - Reporting of cases to ME
  - Investigation
  - Rules and practice guidelines
  - Judgement
  - Resources

## 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.
      - Interpretation
      - Prosecution
      - Sentinel novel drugs
- Genetic disorders- impact to living relatives (0-40's)
  - Anatomical
  - Molecular testing

## 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)

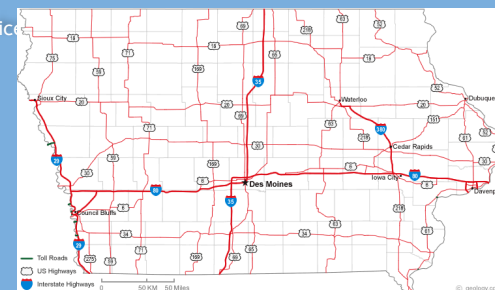


## Future

- More powerful reporting capabilities
- GIS mapping
- Electronic Autopsy Reports
  - Reminder Families must request autopsy reports
  - No charge for families (paper)

## Addressing Concerns

- Coverage and Budget
  - Cross jurisdictional (county) resource sharing
    - Experience
    - Timeliness and quality of service
    - Reduce costs



## Addressing Concerns

- Autopsy coverage
  - Expand service capability at IOSME
  - Review transportation



## Accomplishments

- NAME accreditation
  - Annual November 2018
  - Accredited for 2<sup>nd</sup> of four year cycle
- Opioid Overdose Crisis Supplemental Federal Grant (IDPH)
  - Advanced reporting
  - GIS mapping
  - Freezers, label printers
- Improving the Timeliness and Quality of Drug Mortality Data and the Interoperability of State Electronic Registration
  - IVES portal and integration with IOSME Case Management App
  - Training for CME's and MEI's