

# Summary of Master's Thesis on 110 Bodies Found in Confined Water Spaces

By

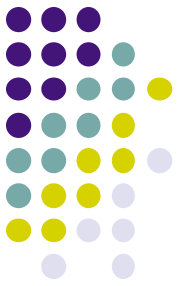
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May, 2008

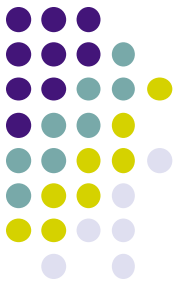
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# INTRODUCTION



- The assumption on scene is that the incident is a “tragic accident”.
- This can skew the mind-set which can lead to evidence being missed.
- The purpose of this study was to identify common errors that are made when investigating bodies found in water.

# METHODS



Retrospective Descriptive Case Analysis performed through review of:

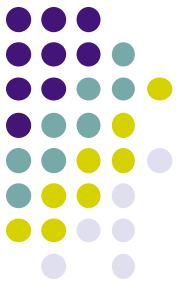
- **Autopsy Reports**
- **C/ME (coroner/medical examiner) Reports**
- **Death Certificates & in some cases**
- **LEA reports**
- **Both Confined and open water cases were collected but study only included confined space cases.**



# Methods: Data Base

- Created in Microsoft ACCESS 2000
  - 230 cases entered
  - Using SPSS 16.0 statistical software package and Microsoft Excel.
- 
- **89 Did not meet inclusion criteria due to: poor documentation, position or depth not documented or open water.**
  - **110 Confined Space cases used.**

# METHODS - CASES



## From:

St. Louis Medical Examiner's Office (112 total  
1/91-3/07)

Las Vegas Coroner's Office (115 total 1/02-8/07)

+ 3 from the Summit County Office of the Coroner  
in CO (1-'03, 1-'04, 1-'05)

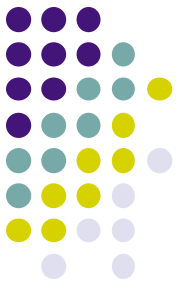
# CONFINED WATER SPACE

## Types



<b>Confined Water Space Case Characteristics</b>		
	<b>N=110</b>	<b>Percent</b>
<b>Water Type</b>		
<b>Pool</b>	<b>62</b>	<b>56.4%</b>
<b>Bath Tub</b>	<b>30</b>	<b>27.3%</b>
<b>Pond</b>	<b>7</b>	<b>6.4%</b>
<b>Hot Tub</b>	<b>8</b>	<b>7.3%</b>
<b>Sink</b>	<b>1</b>	<b>0.9%</b>
<b>Toilet</b>	<b>1</b>	<b>0.9%</b>
<b>Well</b>	<b>1</b>	<b>0.9%</b>

# POSITION FOUND RESULTS



<b>Body Position</b>	<b>N= 110 #</b>	<b>%</b>
<b>Prone</b>	<b>62</b>	<b>56.4%</b>
<b>Supine</b>	<b>24</b>	<b>21.8%</b>
<b>Left Side</b>	<b>6</b>	<b>10.0%</b>
<b>Right Side</b>	<b>7</b>	<b>5.5%</b>
<b>Face, Vertical Body Position FP/VBP</b>	<b>11</b>	<b>6.4%</b>



FP/VBP



PRONE



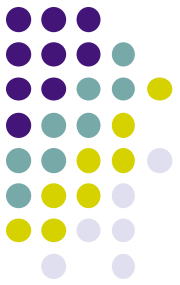


# MANNER - Results



MANNER	# Cases	%	n=110
● Accidental	101	91.8	
● Suicide	4	3.6	
● Natural	1	.09	
● Undetermined	4	3.6	
● Homicide	0??		

# Incomplete Documentation Results



## Incomplete Case Description Variables

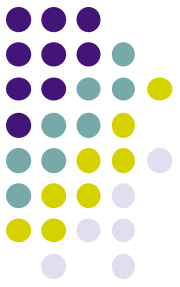
	<b>N = 110</b>
<b>Water Temperature</b>	<b>62.7% not recorded</b>
<b>Clothing</b>	<b>57.3% present</b>
<b>Drugs or Alcohol</b>	<b>20.1% present</b>
<b>Swimmer</b>	<b>42.7% not recorded</b>
<b>Not Autopsied</b>	<b>10.9% not autopsied</b>
<b>Dimensions + Depth</b>	<b>48.2% measured both</b>

# RED FLAG TRENDS



<b>Social Services Involved</b>	<b>7</b>
<b>Co-Bathing</b>	<b>4</b>
<b>Unexplained Trauma, Bruising, Abrasions</b>	<b>12</b>
<b>Staged &amp; Inconsistent Stories</b>	<b>15</b>
<b>Neglect</b>	<b>14</b>

# RED FLAG CASES Frequency Results



<b>Red Flag Confined Water Space Type N = 22</b>		
<b>Type</b>	<b>Frequency</b>	<b>Percent</b>
<b>Bathtub</b>	<b>10</b>	<b>45.5%</b>
<b>Pool</b>	<b>7</b>	<b>31.8%</b>
<b>Hot Tub</b>	<b>2</b>	<b>9.1%</b>
<b>Pond</b>	<b>1</b>	<b>4.5%</b>
<b>Sink</b>	<b>1</b>	<b>4.5%</b>
<b>Toilet</b>	<b>1</b>	<b>4.5%</b>

# DISCUSSION:

## RED FLAG INDICATORS



How do you explain the position found?

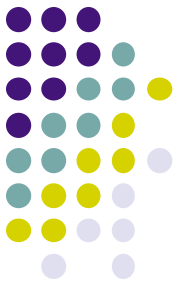
Does it make sense?

Any bruising? (may be seen at autopsy or after refrigeration, communicate with pathologist or be present at autopsy)

Was person left alone by caregiver? Refer to prosecutor for possible neglect.

Known to Social Services or LEA prior to incident?

Statement Analysis



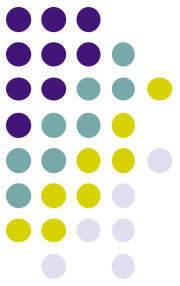
# DISCUSSION: Red Flag' s

- Age of decedent (high risk population?)
- Co-bathing with siblings (aggressive tendencies)
- Position found
- Age Appropriate development (could child hold head up?)
- Temperature of water
- Plausibility of caregiver' s story
- Seizure history
- Prone with head towards faucet
- Feet outside of tub



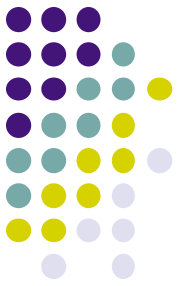
# CONCLUSIONS

## Significance Overlooked



- Dunking (as a form of abuse)
- Bruising locations
- Scene Staging
- Co Bathing
- Witness statements
- Circumstances don't make sense
- The neglect factor
- Physical ability (age dependent)

# CONCLUSIONS



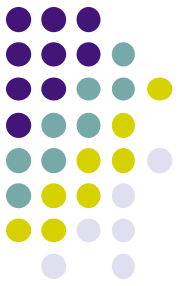
- More than one suspicious indicator for each red flag case.
  - Known to DSS
  - Police called for domestic situations
  - Story did not make sense
  - Position did not make sense
  - High risk group
  - Neglect



# CONCLUSIONS

- Lack of communication between LEA' S, MLDI' s, Pathologists, Social Services, Prosecutors
- Allowing sympathy to skew truth
- Lack of consistent terminology
- Not picking up red flags
- Poor Scene Documentation

# CONCLUSION & RECOMMENDATIONS



- Standard terminology
- Utilizing a form for adults and children
- Documentation should include both:

Primary scene (incident)

Secondary scene (hospital)

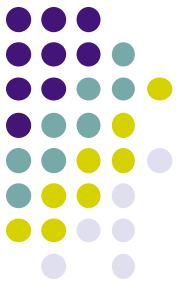
Dimensions, depth, water temperature

Sketches

Background check

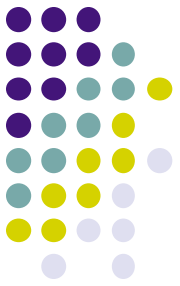
Explaining position found

# CONCLUSION & RECOMMENDATIONS

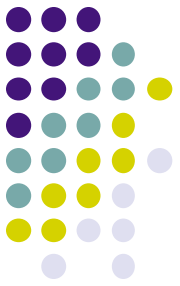


- Re-enactments with mannequins or dolls can help prove plausibility of statement or scene staging
  - “**Show me**” reenactment
- Timeline of events with caregiver going through motions of what they did
- Statement analysis

# SUMMARY



- As a result of this study, it was found that position found can be helpful in explaining the scene plausibility. (Tub, pool)
- It was learned that there were more Red Flag cases than expected.
- Communication btwn C/ME, LEA, DSS, DA was lacking.
- An adult and child form was developed for use in confined space water deaths.



# ACKNOWLEDGEMENTS

- Dr. Mary Case – St. Louis MEO
- Dr. Mike Murphy – Former, Las Vegas Coroner
- For a copy of the checklists, email me: [coroinv@gmail.com](mailto:coroinv@gmail.com).