A Deadly Pond

A Cold Water Rescue Case Study
Panel Members

- Moderator: James Levi, EMS Liaison, Children’s Minnesota
- Sergeant Bryan Kruelle, St. Louis Park Police Department
- Officer Aaron Trant, St. Louis Park Police Department
- Captain Paul Rosholt, St. Louis Park Fire Department
- Ross Chavez, Referral Source Liaison at Hennepin County Medical Center
- Lieutenant Tiffani Schweigart, Minnesota State Patrol
What Brought Us Together?

- Incident was widely reported
- Unique challenges presented by the situation
- Multi-jurisdictional response
- Majority of patients were children
- Connection with St. Louis Park Fire Department
- Initial presentation at Children’s Minnesota EMS Conference
- Request for Proposal for broader focus of the incident
Just How Big?

Agencies

- St Louis Park 911 Dispatch
- St Louis Park Police Department
- St Louis Park Fire Department
- HCMC EMS
- Golden Valley Police Department
- Minnesota State Patrol
- Hennepin County Sheriff’s Department
- Hennepin County Water Patrol
- Hennepin County Crime Lab
- Minneapolis Police Department

HCMC EMS resources committed to the scene response

- 4 dispatchers
- 4 supervisors
- 3 EMS physicians
- 14 paramedics
Format

- Chronological progression
- Initial response
- Rescue, resuscitation, and transport
- Reconstruction, investigation, and follow-up
Sergeant Bryan Kruelle

Officer Aaron Trant
Captain Paul Rosholt
Ross Chavez
Lieutenant Tiffani Schwiegart
What is ECMO?

- Extra Corporeal Membrane Oxygenation
- Rewarms body core efficiently and in a controlled manner while providing full cardiac and respiratory support when they are likely to be very unstable.
- "Gold Standard" treatment
- Lungs often are less than functional once they are warmed.
- Very specialized, very limited resource
  - 4-5 beds at Children’s Minnesota
  - 3-4 beds at University of Minnesota Masonic Children’s
  - Other ECMO programs located in Rochester and Sioux Falls, South Dakota
Questions?
Hwy 7/100
Cold Water Rescue

The Challenges of a Multi Agency Response
Objectives

- Understand the scene and the unique challenges as well as benefits it offered.

- The importance of resource management and deploying them correctly

- The aftermath. Managing the message, and the importance of responder mental health.
Setting the Stage

- Incident date: November 21, 2013
- Incident time: 0601
- Temperature 37.4 F
- One hour prior to sunrise and rush hour
The Crash

- The Car lost control on the ramp from MN Hwy 7 West to MN Hwy 100 North.
- The car proceeded into the retention pond coming to rest near the center
- Pond Size 225’ x 300’
- Water depth in the center was around 10 feet
- Water temperatures were extremely cold and no ice.
- Crash occurred without witnesses
Timeline

- A call was received by St Louis Park 911 Dispatch at approximately 0610. Bystander from a distance made a call when he heard screams for help.
- 0613 SLP PD on scene
- 0615 SLP FD on scene
- 0620 first ALS unit on scene
- 0625 EMS Supervisor on Scene

Following these initial units numerous additional units arrived including Fire, Police, Patrol, Sheriffs, EMS
SLP Police

- 2 Officers initially
- No water rescue equipment
- Made contact with woman and man standing in the middle of the water up to their waist.
- Determined they were standing on the vehicle and that there were still people inside.
- Made attempts to reach vehicle however cold water deterred their effort.
- Performed most of their duties standing in knee deep water
Police Response Gear

- No protection for face and neck
- Insulated jacket not waterproof
- Leather duty boots
- Non insulated/not waterproof pants
Water Rescue Suits

- One size fits all design
- Waterproof outer shell with insulated liner
- Encapsulated rubber boot
- Encapsulated rubber gloves

Avg. Donning Time 90 seconds
SLP Fire

- Engine 1, Utility 1 and Engine 4 - Total personnel 5
- Before the end of the event there would be 23 FD personnel involved in the event.
- Water rescue equipment is on each rig and U1 brought the Zodiac boat, water rope, additional cold water suits and PFD’s
- Bulk of the work rested on the shoulders of the initial response crews.
- Physical exertion of swimming in suits
The Rescue

- Suit Challenges
- Setting up rescue lines
- Advancing to the car location and determining orientation.
- Accessing interior of the vehicle in the dark without the use of hands or sight
- Quickly moving patients from water to shore.
- Initiating resuscitation once onshore using EMS and FD/PD staff
- Confusion on number of patients
- Returning for additional patients
Extraction

- Within 12 minutes of the first arriving fire unit the first patient was removed from the vehicle at 0627
- Patient 2 was out at 0629
- Patient 3 was out at 0633
- Picked up window punch tool
- Patient 4 was removed at 0636
- Returned back to the vehicle for fifth victim
- Patient 5 removed at 0642
Resource Intensive

- As quickly as fire staff arrived on scene they were deployed to waiting ambulance to assist with patient care.
- Each ambulance had two responders and 1 medic in the back.
- Multiple EMS units required early
- As resources were drawn to scene day to day city coverage needed to be dealt with.
- Staff required to pick up multiple staff now at HCMC
Interventions

- Challenges of pediatric patients in a non responsive full arrest state
- Lucas Device
- Getting ambulance staffed so they could leave
- Keeping a traffic plan in place so that more ambulances could get in
Potential Crime Scene

- Priorities
  - First aid/Rescue
  - Jurisdiction
  - Crime Scene
- Evidence Gathering
  - Physical Evidence
  - Interviews
  - Accident Reconstruction
  - 3 Law Enforcement Agencies presenting to:
- Hennepin County/City Attorney Review
Unified Command

- Beginning of the 3\textsuperscript{rd} day on the job
- ICS transfers of command weren’t practical until a Chief got on scene
- EMS and Fire were operating separately however in harmony. Day to day relationship aided in that.
- Law enforcement, fire and EMS finally unified at 0702
Reflections

- It is important to ramp up resources.
- Establish communications plan and patch ASAP.
- Stay in your roles and focus on the assignment.
- Get unified command established as soon as possible.
- Maintain perimeter security.
- Maintain a traffic plan for ingress and egress.
- Transfer or transition command when appropriate.
Media

- If you do not have a PIO find one
- Control the rumor mill
- Protect the victims
- Protect the responders
- Protect the investigation
- Keep information flowing, do not allow media to fill in the blanks with their idea of what happened
- Be available
Amani Coleman-Guerrido, 5, left, and Alarious Coleman-Guerrido, 7, right. Alarious died after the crash.
Returning to normal

- Preemptively update crews before messages become public
- Quickly correct inaccuracies
- Initiate PFA (psychological first aid) immediately
- Engage all responders including dispatch
- Set up a CISM event with trained professionals
- Follow up to ensure needs are met (EAP’s)
- Prepare for numerous public reiterations of the events and your efforts.
CRIMINAL INVESTIGATION & MEDIA

Summary of the investigative conclusions & role of the media
What did we have?

- **Potential homicide investigation**
  - Were the children all still in the vehicle?
  - Were the children deceased or assaulted prior to entering the water?
  - Was this an intentional act?
  - Besides our driver and children, who were the other key players?

- **Chaotic scene**
  - Different information elicited by the mother/driver
  - Investigators were responding for different agencies
  - Coordination of line officers
  - Agency leadership off-site
  - Media arriving at the scene
Multiple agencies on scene
Questions arose as to which agency was lead
Established a multi-agency approach
  - Utilize the strengths of each individual agency
  - Work collaboratively towards the same goal
  - Team interview approach
  - Division of duties based upon investigators and agency strengths
  - Meetings during the investigation process.
Initial interview of our driver & witness
  - Line officers to gather preliminary information

Formal interviews
  - Team approach (SLPD, MSP, HCSO)
  - Marion Guerrero
  - Julius Rennie
  - Oine
  - First responding fire personnel

Fluid testing
  - Consent blood test obtained
HSCO Crime Lab
- Gathering of all clothing at hospital
- Took possession of vehicle
  - Stored indoors at the Sheriff's office
  - Search warrant obtained for vehicle and Airbag Control Module (ACM)

HSCO Dive Team
- Assisted with secondary search the day of the crash
- Returned to the pond the following day to search for the cell phone—never located
Crime Scene

- Crash Reconstruction
  - Forensic road evidence collected
  - Due to damp roadway, floor dryers were brought out to dry the pavement and observe the tire marks
- Overall, once the scene was no longer in a rescue operation, the process at the scene became slow and methodical
The weather was calm
The road surface was damp
There were no roadway defects, construction or maintenance in the area.
The area was illuminated by street lamps
The vehicle’s ACM did not record data as their had not been a deployment
The blood results were negative and no impairment had been detected
The roadway had a slight grade, 2-3% traveling north to south.

The grassy area between the roadway and the pond had 15-17% grade.

Hennepin County Water Patrol assisted with measuring depth of the water and vehicle position in the water.

The came to rest in 7.5-8 feet deep water.

There were not enough restraints for all the children and the 1 child seat was not attached to the rear seat.
Criminal Investigation
Conclusions

- Speed was determined to be 19-24 mph when the vehicle hit the grass, from the asphalt.
- There were no medical conditions that affected Guerrido.
- Attributed to Marion Guerrido losing control of the vehicle due to improper steering input followed by over correction.
- Dominant factors: driver inexperience and lack of proper driver’s training
Criminal charges

- Submitted to Hennepin County Attorney
  - Declined Criminal Vehicular Homicide, as elements of the statute were not met

- Submitted to the St. Louis Park City Attorney
  - Formally charged with Instruction Permit violation; Uninsured motor vehicle; Child Passenger restraint violation.
  - Convicted of 2 misdemeanors and 1 petty misdemeanor
  - Supervised probation 1 year
  - 90 days in the Hennepin work house, with 60 days stayed, eligible for electronic home monitoring & work release
Initial news conference releasing response, rescue and initial details of information

Second news conference for rescuers to explain rescue operation

Family Attorney: Took all media inquires as to the status and condition of the children

Daily requests for additional information, much based upon updates on the children