

Effect of Super Bowl LIII Events on Atlanta Community 9-1-1 Medical Call Volume, Type, and Time Periodicity

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OBJECTIVE

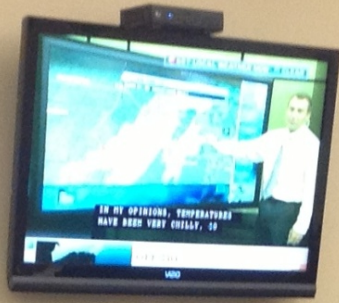
- To study the volume of those specific community 9-1-1 medical call types thought to be affected by the 9 days of Super Bowl LIII entertainment events
- To compare the call volumes & the following call types during the study period with the same 9-day periods before and after the study period:
 - Pre-, Study-, and Post- total call volumes
 - Medical Priority Dispatch System categories & subtypes chosen:
 - Cold Exposure (20)
 - Traffic / Transportation Incidents (29)
 - Stab / Gunshot / Penetrating Trauma (27) & Assault (4)
 - Hourly call volume frequencies in 1-hour periodicity for the three 9-day periods

Academy Code of Conduct

The Academy of Excellence is a public institution of higher learning. It is the responsibility of all members of the Academy community to uphold the highest standards of conduct and integrity. The following code of conduct is intended to guide the behavior of all students, faculty, and staff members.

- 1. All members of the Academy community must adhere to the highest standards of academic honesty and integrity. Plagiarism, cheating, and other forms of academic dishonesty are strictly prohibited.
- 2. All members of the Academy community must respect the rights and dignity of others. Harassment, discrimination, and other forms of misconduct are strictly prohibited.
- 3. All members of the Academy community must maintain a professional and courteous demeanor at all times.
- 4. All members of the Academy community must adhere to all applicable laws and regulations.
- 5. All members of the Academy community must maintain the confidentiality of all information entrusted to them.
- 6. All members of the Academy community must maintain the highest standards of personal conduct.
- 7. All members of the Academy community must adhere to all Academy policies and procedures.
- 8. All members of the Academy community must maintain the highest standards of attendance and punctuality.
- 9. All members of the Academy community must maintain the highest standards of communication and collaboration.
- 10. All members of the Academy community must maintain the highest standards of leadership and service.

Violations of this code of conduct may result in disciplinary action, including suspension or expulsion from the Academy.



Code of Ethics

The Code of Ethics is a set of principles and standards that guide the behavior of all members of the Academy community. It is intended to ensure that all members of the Academy community act with integrity, honesty, and respect for others.

- 1. All members of the Academy community must act with integrity and honesty.
- 2. All members of the Academy community must respect the rights and dignity of others.
- 3. All members of the Academy community must maintain the highest standards of professional conduct.
- 4. All members of the Academy community must adhere to all applicable laws and regulations.
- 5. All members of the Academy community must maintain the confidentiality of all information entrusted to them.
- 6. All members of the Academy community must maintain the highest standards of personal conduct.
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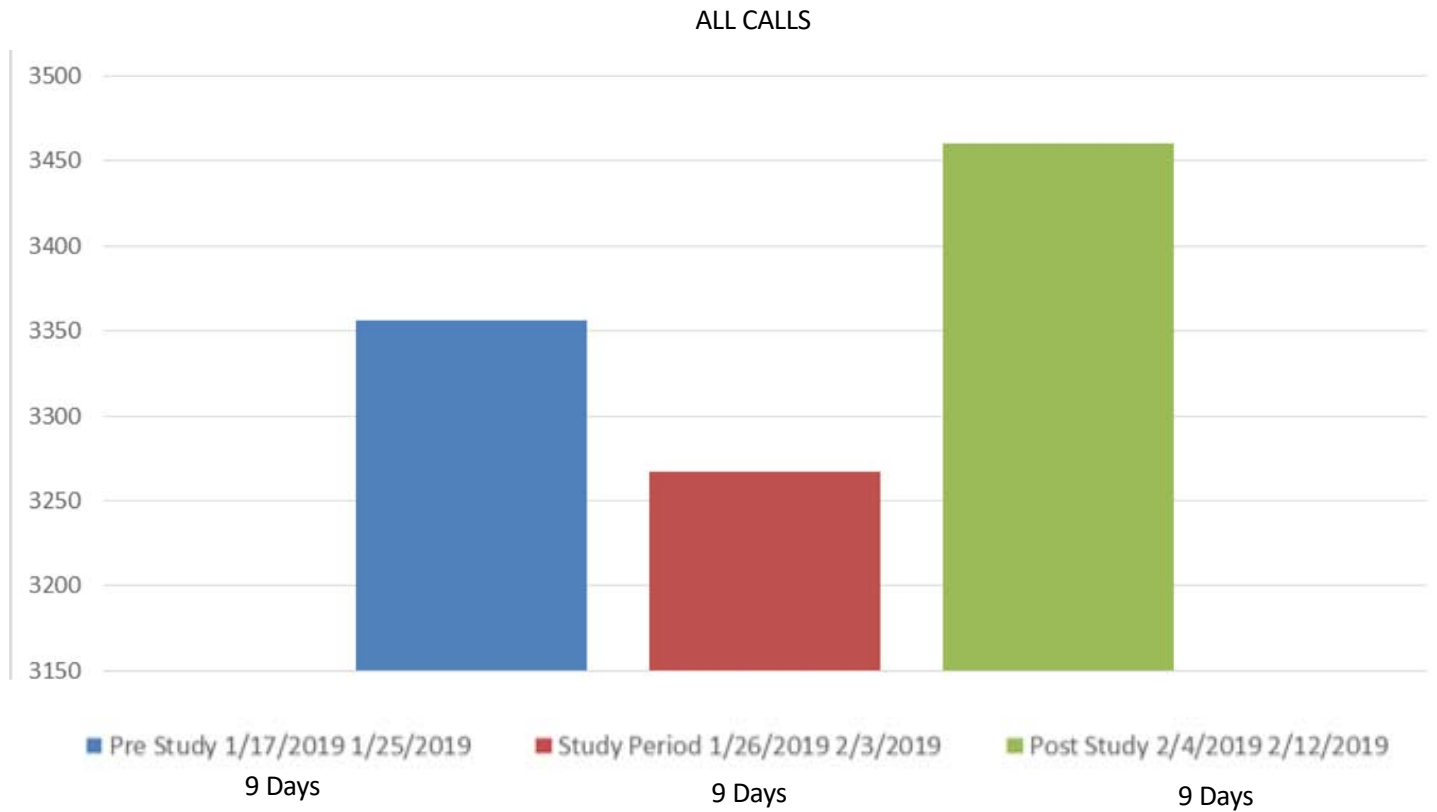


STUDY SETTING

- Contiguous municipality populations (2017) wherein Grady EMS processes and dispatches 9-1-1 medical calls:
 - City of Atlanta (pop. 486,000)
 - East Point (pop. 35,000)
 - College Park (pop. 19,000)
 - TOTAL: 540,000
- Est. yearly 9-1-1 medical call volumes (2018) into Grady EMS:
 - City of Atlanta (121,373)
 - East Point (7827)
 - College Park (3574)
 - TOTAL: 137,774
- Study Period Area temperature range:
 - 12-63 degrees F.
 - 3 night below 32 degrees F.

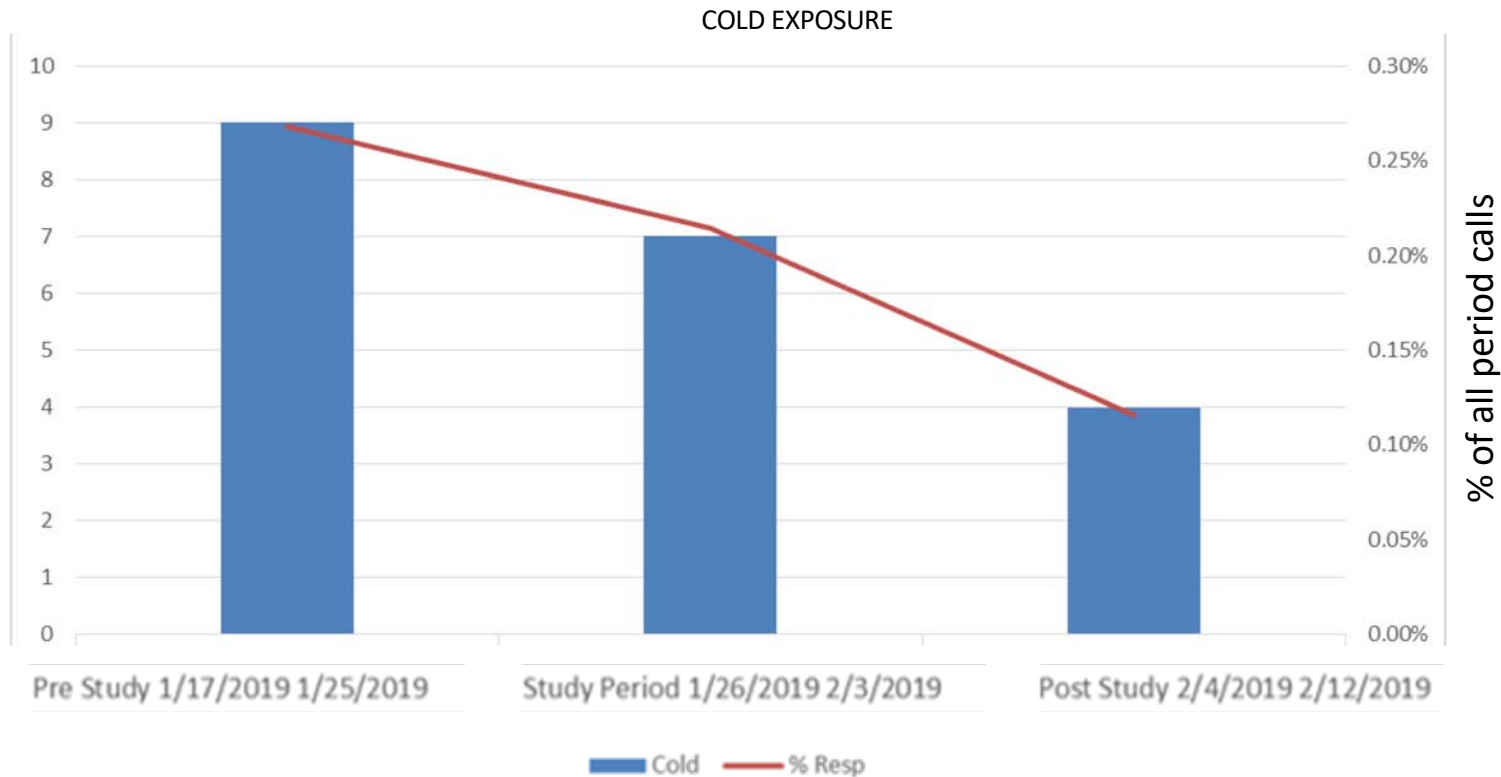
Community 9-1-1 Medical Total

| | Start | End | Responses |
|--------------|-----------|-----------|--------------|
| Pre Study | 1/17/2019 | 1/25/2019 | 3356 |
| Study Period | 1/26/2019 | 2/3/2019 | 3267 |
| Post Study | 2/4/2019 | 2/12/2019 | 3460 |
| Total | | | 10083 |



Community 9-1-1 Cold Exposure

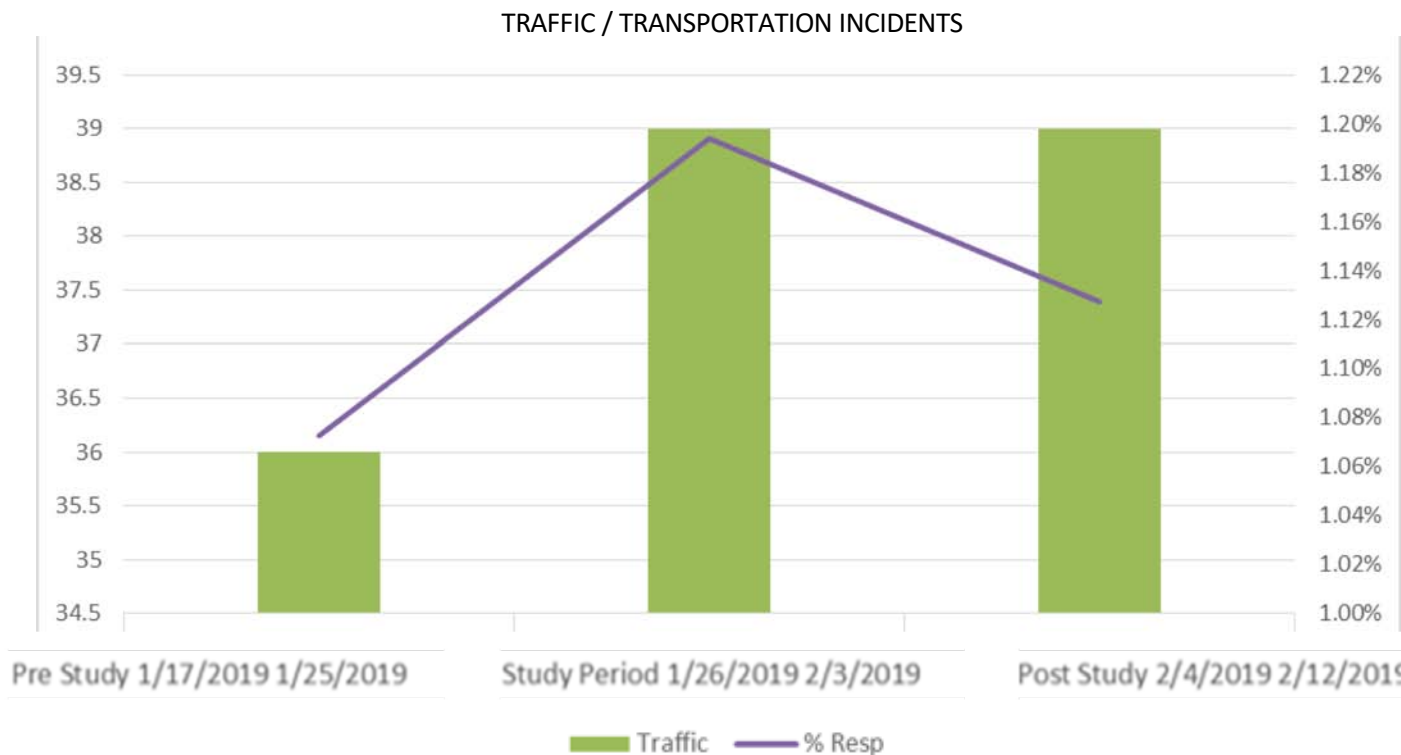
| | Start | End | Cold | % Resp |
|--------------|-----------|-----------|-----------|--------------|
| Pre Study | 1/17/2019 | 1/25/2019 | 9 | 0.27% |
| Study Period | 1/26/2019 | 2/3/2019 | 7 | 0.21% |
| Post Study | 2/4/2019 | 2/12/2019 | 4 | 0.12% |
| Total | | | 20 | 0.20% |



Traffic/Transportation Incidents

MPDS Protocol 29 Subtype DL & DM

| | Start | End | Traffic | % Resp |
|--------------|-----------|-----------|------------|--------------|
| Pre Study | 1/17/2019 | 1/25/2019 | 36 | 1.07% |
| Study Period | 1/26/2019 | 2/3/2019 | 39 | 1.19% |
| Post Study | 2/4/2019 | 2/12/2019 | 39 | 1.13% |
| Total | | | 114 | 1.13% |

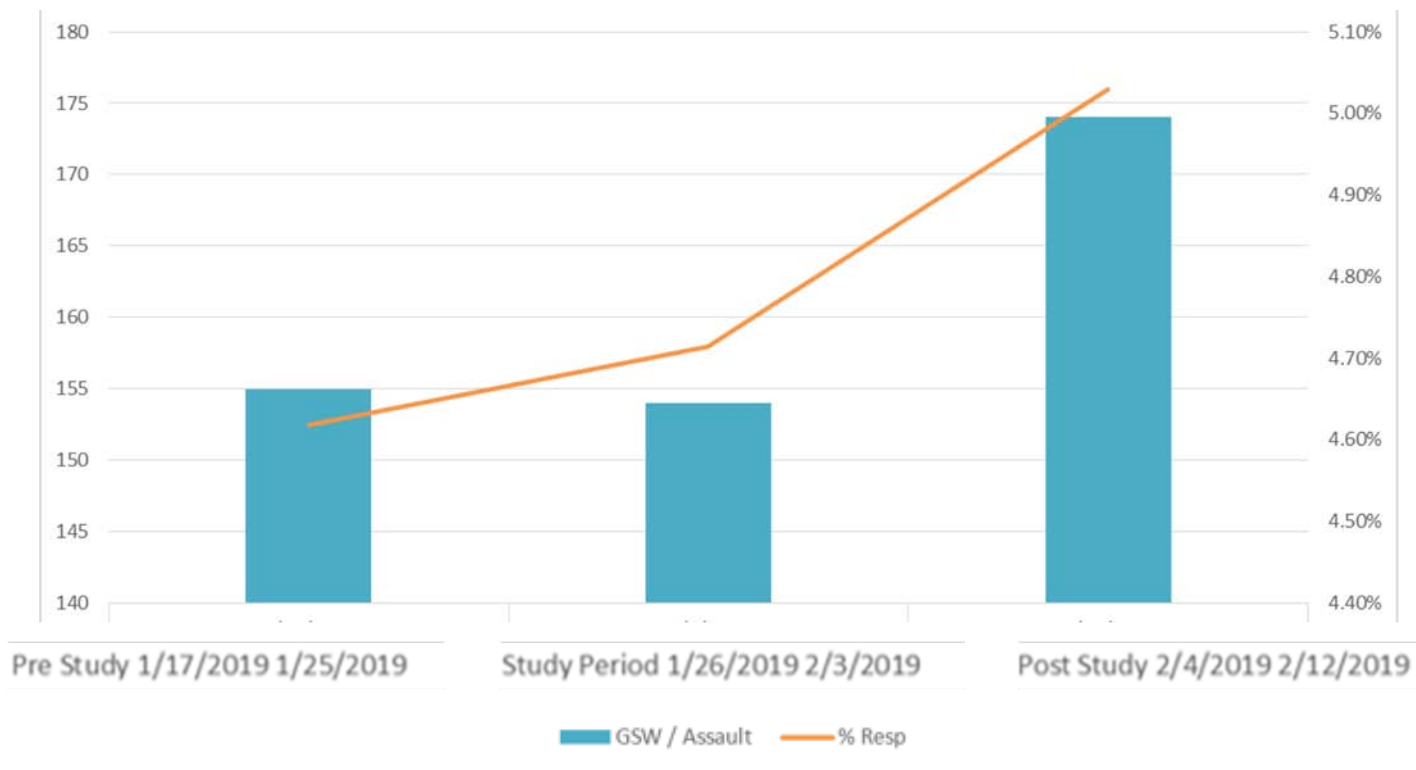


Violent Trauma

MPDS Protocol 27 Subtypes S, G, X, and Y

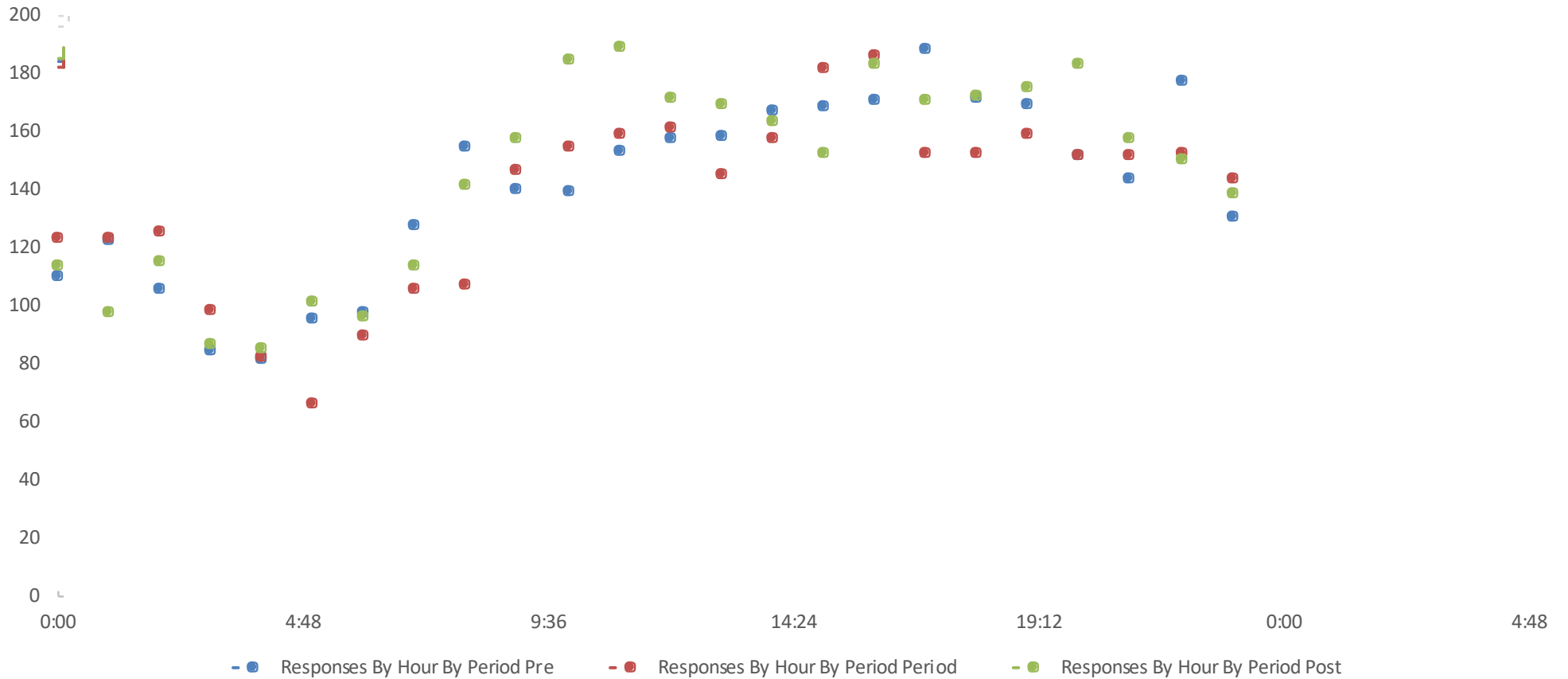
| | Start | End | GSW / Assault | % Resp |
|--------------|-----------|-----------|---------------|--------------|
| Pre Study | 1/17/2019 | 1/25/2019 | 155 | 4.62% |
| Study Period | 1/26/2019 | 2/3/2019 | 154 | 4.71% |
| Post Study | 2/4/2019 | 2/12/2019 | 174 | 5.03% |
| Total | | | 483 | 4.79% |

VIOLENT TRAUMA



Hourly Call Demand Frequency

Hourly Call Demand Frequency





CONCLUSIONS

- A system of analysis for discovery of epidemics associated with large multi-day events
 - Safety of public
 - Safety of first responders & EMS providers
- A basis for future system status management planning for EMS coverage in communities hosting large multi-day events