NEMSIS Report Elements

• Total number of Calls received by 911 Agencies in NJ by County:
  Variables=eScene.21, eTime.03

• Call Types with less than 100 calls per month in October, 2017:
  Variables= eDispatch.01, eTime.03

• Call Types by County for October, 2017:
  Variables= eDispatch.01, eTime.03, eScene.21

• Response Times (minutes, seconds) by County:
  • Mean
  • Standard Deviation
  • Median
  • 90\textsuperscript{th} Percentile
The following records types have been excluded from the reports:

- **Missing/Blanks:** Any variable with missing or blanks.
- **Dates:** Any events not occurring October 1 through October 31, 2017.
- **Records:** Any record missing key elements such as incident date.
- **Incident types:** The following incidents types reported by dispatch as they do not represent pre-hospital emergency direct patient care (eDispatch.01):
  - Transfer/Interfacility/Palliative care
  - No Other Appropriate Choice
  - Standby
  - Carbon Monoxide/hazmat/Inhalation/CBRN
  - Well Person Check
  - Fire
  - Industrial accident/Inaccessible incident/Other Entrapments (non-vehicle)
  - Z-Assist other Agency
  - Healthcare Professional/Admission
  - Medical transport
  - Medevac/HEMS Transport
- **Missing, or blank Counties:** County fields containing two or more names have been combined into one, e.g. Atlantic and Atlantic County were combined to Atlantic (eScene.21)(County names).
- **Non-emergency calls:** Agencies designated as non-emergency transport.
- **Response time:** Outliers defined as less than and equal to zero and greater than 60 minutes as being determined to be statistically likely to be incorrect (2 standard deviations).
- **Duplicate records:** Any dates/times and agency names that are repeated have been identified using Proc Sort (nodupkey option) in SAS. Variables considered were dAgency.03, eScene.21, eDispatch.01, eTimes.03 (Incident_Unit_Notified_By_Dispatch) and eTimes.06 (Incident_Unit_Arrived_On_Scene_Date_Time).
- **Call Types:** Categories with fewer than 100 complaints were made have been combined into category “Other.”
90th Percentile Methodology

- Suppose, there is data for 10 values (sorted from lowest to highest) n=10
  - E.g. 10,12,14,18,20,23,27,29,31,35
- Average (Mean) = \( \frac{10+12+14+18+20+23+27+29+31+35}{10} = 21.9 \)
- Median is the middle value (50th Percentile): Since there is an even number, the average of 20+23/2 = 21.5 is taken
- 90th Percentile=10*0.9 = 9 (since this is a whole number, the average of 9th and 10th value in the data is taken)
- Look for the 9th value in the data, it is 31. Since the answer is 9 (a whole number for the 90th percentile) the average of 9th and 10th value is taken, which is 31+35/2=33
  - 33 is the 90th Percentile
- If the 90th percentile is not a whole number, the number is rounded up.

Example:
- There were 2,932 calls for Atlantic County in Oct, 2017
- 90th Percentile is 2,932*0.9=2,638.8, since the number is in decimals, it is rounded up to 2,639
- If the Atlantic county has a response time of 13 minutes and 20 seconds at 2,639th call, that would be the 90th percentile (13:20 secs)
- Response time is calculated by subtracting (eTime.06-eTime.03).