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
  - 90th Percentile

Record Exclusion Criteria

- 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) = (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).