Reported Workplace Violence Against the Seattle Fire Department: A Retrospective, Descriptive Study

Kimberly Machado

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Clarence Spigner

Catherine R. Counts

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Abstract

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Kimberly Machado

Chair of the Supervisory Committee:
Clarence Spigner
Health Systems and Population Health

Background
Workplace violence (WPV) against Emergency Medical Services (EMS) personnel is a significant issue with serious implications for their safety, mental health, and job satisfaction. This study investigates the prevalence, characteristics, and impacts of WPV on EMS personnel within the Seattle Fire Department (SFD).

Methods
This retrospective descriptive study analyzes WPV incident reports submitted by SFD personnel between March 1, 2022, and February 29, 2024. Data were sourced from internal incident reports, and the analysis focused on patterns and relationships between various factors, including the type of assailant, location of incidents, and actions taken by EMS personnel. 198 reports of workplace violence were studied. A comprehensive sampling method included all eligible reported incidents within the specified timeframe.

Results
The study included 198 reports of WPV, with the most common locations being non-encampment outdoor public spaces and the most frequent assailants being patients and single bystanders. Verbal abuse and threatening posture were the most reported types of assaults. A significant relationship was studied between the location of the incident and the type of threatening party. The study revealed a high prevalence of WPV, with EMS personnel frequently encountering violence while on duty.

Conclusion
The findings underscore the urgent need for standardized WPV surveillance systems and effective training programs to enhance the safety and well-being of EMS personnel. Future research should explore the impact of factors such as shift length, overtime, and specific circumstances of violent incidents to develop targeted prevention and intervention strategies. Addressing these could lead to improved safety protocols and a reduction in WPV incidents, ultimately benefiting both EMS personnel and the communities they serve.

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I. Introduction

i. Specification of the problem:

Significance:

Workplace violence encompasses a range of aggressive behaviors occurring in the workplace. The National Institute for Occupational Safety and Health (NIOSH) describes it as violent acts, including physical assaults and threats, directed at people while they are working.[1] The U.S. Department of Labor broadens this definition to include verbal, written, or physical aggression intended to control, cause harm, or potentially result in serious injury or property damage.[2] Workplace violence against Emergency Medical Service providers (EMS) is a significant issue with far-reaching implications. Globally, EMS providers face an elevated risk of experiencing violence while performing their duties compared to many other professions.[3] This violence can take various forms, including physical assaults, verbal abuse, threats, and even assaults with weapons.[3-8] The significance of this issue lies in its impact on the physical and psychological safety and well-being of EMS personnel, as well as its potential to compromise the delivery of emergency care to individuals in need.[9]

In the United States, workplace violence against EMS providers is increasingly recognized due to its widespread occurrence and harmful impact on the workforce. These violent incidents not only pose immediate dangers to the safety of EMS personnel but also lead to long-term physical and psychological issues, such as injuries, PTSD, and burnout.[7] Moreover, workplace violence can undermine the morale and job satisfaction of EMS providers, leading to decreased retention rates and recruitment challenges within the field.[10, 11]

Magnitude:

The magnitude of workplace violence against EMS providers is considerable, with a significant number of reported incidents occurring each year. Internationally, studies have documented high rates of violence directed towards EMS personnel, with some regions experiencing particularly elevated levels of risk due to socio-economic factors, political instability, or cultural norms.[8] Systematic reviews have found that emergency medical services (EMS) providers, including paramedics and firefighters, experience high rates of workplace violence (WPV) worldwide, with 21-93% reporting at least one incident of verbal or physical violence during their career.[8, 12]

In the US, data from national surveys and incident reports indicate that workplace violence is a prevalent and underreported issue within the EMS profession.[7, 13] While exact statistics may vary depending on the source and methodology used, research consistently demonstrates that EMS providers are at heightened risk of experiencing violence compared to workers in many other sectors. A study from 2020, spanning over 104 scientific articles, found that between 57-93% of fire and EMS responders experience an act of verbal and/or physical violence at least once in their career.[7] Research indicates that EMS personnel working in urban areas are more likely to encounter both physical and verbal violence.[4, 14]

Importance of the problem:

The importance of addressing workplace violence against EMS providers cannot be overstated, as it directly impacts the safety, health, and effectiveness of these essential frontline workers. Beyond the immediate physical and psychological harm inflicted on individual EMS personnel, workplace violence poses broader public health and safety risks by disrupting emergency medical services and hindering timely access to critical care for patients.[14]

ii. Research Questions Addressed:

Within the Seattle Fire Department:

a. Which dispatched units have the most reported incidences of WPV?

b. What are the most common types of locations where WPV against EMS providers occurs?

c. Is there a relationship between location and threatening party in incidents of WPV against EMS providers?

d. What are the primary categories and frequencies of the following:

1. Threatening parties involved in incidents of WPV against EMS providers (e.g., patients, single bystander, multiple bystanders, or coworkers)?
2. Types of assaults experienced by EMS providers (e.g., Verbal abuse, threatening posture, physical contact, weapons brandished, or weapons used)?
3. Actions taken by the threatened party (e.g. Diffused verbally and resolved or Withdrawal from the scene)

iii. Literature review:

1. Conceptual Model

Since 2017, California OSHA's Workplace Violence Prevention in Health Care standard mandates that healthcare providers, including EMS, maintain a violent incident log, implement a workplace violence prevention plan, conduct annual reviews of the plan, and train employees on it. However, there is no national uniform system to document verbal and physical violent incidents involving fire-based EMS responders. [13]

This study will utilize the framework provided by the World Health Organization's Violence Prevention Alliance (VPA).[15] The VPA applies public health principles to investigate and understand the causes and consequences of violence and to prevent its occurrence through primary prevention programs, policy

interventions, and advocacy. Guided by scientifically tested and proven principles outlined in the World Report on Violence and Health, this public health approach aims to enhance the health and safety of individuals by addressing underlying risk factors that increase the likelihood of becoming a victim or perpetrator of violence.

"The approach consists of four steps:

1. To define the problem through the systematic collection of information about the magnitude, scope, characteristics, and consequences of violence.
2. To establish why violence occurs using research to determine the causes and correlates of violence, the factors that increase or decrease the risk for violence, and the factors that could be modified through interventions.
3. To explore what works to prevent violence by designing, implementing, and evaluating interventions.
4. To implement effective and promising interventions in a wide range of settings. The effects of these interventions on risk factors and the target outcome should be monitored, and their impact and cost-effectiveness should be evaluated."[15]

This study will begin with the first step of data surveillance collection and analysis of the available data to establish a baseline of workplace violence against EMS providers employed by the Seattle Fire Department in Washington state. From the literature review important variables were identified that correlated with the current available data including the threatening party, nature of assault, assault location, and actions taken by the EMS provider(s).[3-6]

The Social Ecological Framework was also used to guide this study and identify the risk factors associated with WPV. As seen in Figure 1., this model observed the interaction between risk factors at the different levels and established equal importance to the influence of factors within a single level.[16] From the literature review:

- **Individual:** Risk factors included high levels of stress and burnout among EMS personnel. In addition, younger workers experienced more assaults than older workers.[3, 5-6]
- **Interpersonal**: Risk factors included the behavior by EMS personnel did not utilize de-escalation techniques during interactions with a threatening party.[14]
- **Organizational level:** Risk factors associated with WPV included lack of EMS agency policies and trainings on WPV prevention.[6]
- **Policy Level**: Risk factors associated with WPV included lack of legal protections of EMS personnel and the absence of effective procedures by police to recommend the prosecution of assailants.[14]

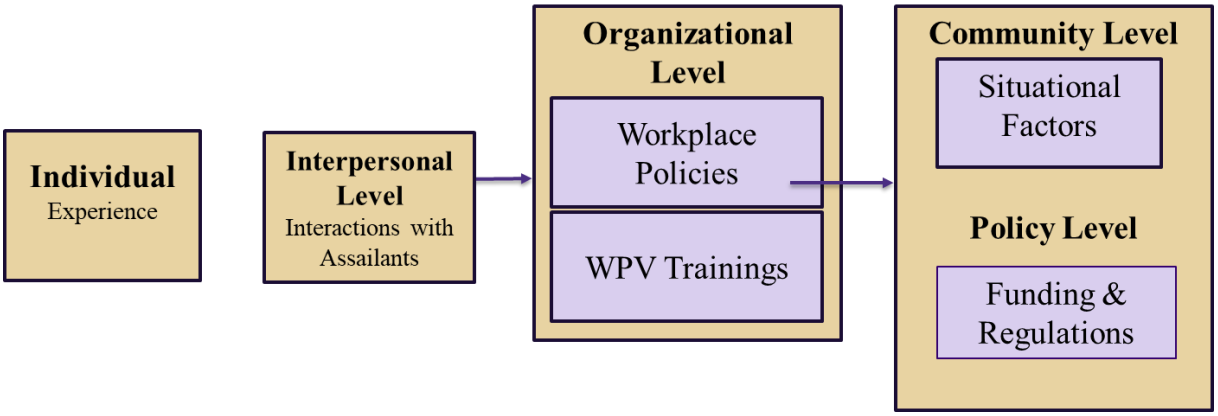

Figure 1. The Social Ecological Model Observation of Risk Factors Associated With WPV In EMS Agencies

WPV is widely recognized as a common issue in medical professions, with statistics showing that 70-80% of doctors, nurses, emergency medical personnel, and public service workers experience violence annually.[8] However, violence in the prehospital emergency setting receives less attention, leading to an incomplete understanding of its incidence and a lack of specific recommendations for professional communities.[9] EMS personnel, who provide critical care and transport for injured or ill individuals, often face threats and violent reactions in unpredictable environments.[8] Studies have highlighted the high prevalence of WPV among EMS workers, underscoring the severity of the issue.

In the United States, national data shows that the occupational assault rate for EMS personnel is 5.2 cases per 10,000 workers per year.[6] However, research using data from specific agencies indicates a much higher rate of 60 cases per 10,000 workers per year.[6] Victims of WPV show varied characteristics throughout the literature. Some studies indicate men and those with extensive work experience are more exposed, while others find less experienced workers more at risk.[4-6] Women often encounter sexual assault.[4] Bodily injuries from WPV were reported in 44% of studies, with injuries ranging from minor to serious.[8] Psychological injuries, including stress, anxiety, and mental exhaustion, were reported in 45% of studies in a systemic literature review.[8] Organizational damages, such as threatened job safety, increased sick leave, decreased job satisfaction, and burnout, were highlighted in 44% of those studies.[8] WPV negatively impacts patient-EMS personnel relationships and care quality in 80% of cases.[8]

Studies indicate that perpetrators of workplace violence against EMS personnel are often patients and around 6% of such incidents also involve the patient's friends or family members.[3-6, 8] Additionally, about 4% of physical assaults are committed by colleagues, and bystanders are also responsible for some cases.[6] Several studies show high rates of verbal abuse, observed that violence occurred in 8.5% of patient encounters.[3-6] EMS respondents in multiple surveys considered on-scene violence to be somewhat to very frequent.[3, 9] Taylor identified assaults as the most common near-miss events.[14] A commonly cited limitation in both academic and industry literature is the belief that violence is an inherent part of the EMS profession.[7, 13] WPV is frequently underreported due to fear of negative judgment, the perception that reporting is useless, and fear of revenge, and reporting mechanisms for ambulance missions.[7] For instance, a study of 1,500 medical providers in New Mexico found that 56 percent of EMS survey respondents considered violence to be "just a part of the job."[7] Additionally, 40 percent believed that there was no need to report incidents if no one was injured.[7]

Lack of formal education on handling WPV is a significant factor, with the majority of employees lacking adequate training among multiple EMS agencies.[8] In a systematic review of the literature, studies indicated the absence of specific protocols for managing WPV, delayed emergency response, substance abuse, psychological disorders, unexpected illness or death, insufficient safety measures, and lack of law enforcement presence are also key factors leading to violence escalation.[8]

II. Methods

i. Study Setting

Seattle, Washington

In Seattle, the significance of workplace violence against EMS providers is particularly pertinent given the unique characteristics of the city and its EMS system.[11] As a major urban center, Seattle experiences its share of societal challenges, including substance abuse, mental health crises, and homelessness, which can escalate the risk of violence against first responders.[5, 14]

Seattle, Washington is 143 square miles and has a population density of 8,444 people per square mile in 2018.[17] Since the 2010 census, Seattle's population density has increased by nearly 10%. In 2014, it was ranked as the 10th most densely populated major city in the United States, with 7,962 people per square mile.[17] As a major urban center, Seattle faces challenges associated with its vulnerable populations, including individuals experiencing homelessness. According to the 2023 Annual Homeless Assessment Report, Seattle/King County reported 14,149 people experiencing homelessness.[18] The violent crime rate in the City of Seattle rose from 729 per 100,000 in 2021 to 736 per 100,000 in 2022, reaching a 15-year high.[19] Property crime rates also saw a slight increase, from 5,730 to 5,784 per 100,000 in 2022.[19] In 2022, there were 196 shootings with 219 victims identified at the time of the events, representing a five percent (10) increase in victims from 2021, a 43% (66) increase from 2020,

and a 101% (110) increase from 2019. [19] In 2022, shootings and shots fired incidents reached an all-time high, surpassing the previous records set in 2021 and 2020. [19] There were 739 verified criminal shootings and shots fired citywide, marking a 19% (119 incidents) increase from 2021, a 69% (303 incidents) increase from 2020, and a 125% (410 incidents) increase from pre-pandemic levels in 2019. [19] In 2019 the Seattle Police Department (SPD) had 1,200 authorized/funded FTE sworn officers, and 800,527 calls 911 calls.[20] Since 2020, Seattle has experienced a loss of 612 police officers due to the COVID-19 pandemic and the Black Lives Matter protests, while only hiring 257 new officers. This results in a net loss of 355 officers over the four-year period.[21]

The Seattle Fire Department (SFD) has seen the number of dispatched responses exceed 100,000, a 12.3% increase since 2021.[21] The Seattle Annual Report for 2022 noted a 14.9% jump in the number of aid calls, with a rise in calls related to substance use. [22] Between 2021 and 2023, Seattle Fire responses to all suspected drug use calls rose from 3,216 to 6,538 incidents. Of those, 3,806 in 2023 were suspected to be from opioid use. [23] In 2023 SFD responded to 111,319 responses in 2023, a five percent increase over the prior year. [23] The importance of addressing workplace violence against SFD EMS providers lies in its potential to enhance public safety, improve the quality of emergency medical care, and promote a culture of respect and support for frontline healthcare workers. By prioritizing the safety and well-being of EMS personnel, Seattle can strengthen its emergency response capabilities and foster a healthier and more resilient community for all residents. Due to the limited comprehensive WPV data for the Seattle Fire Department, which relies mainly on anecdotal evidence and self-reporting, it is essential to establish a baseline understanding of the scope of WPV against EMS providers to develop and implement improved prevention strategies and policies.

The Seattle Fire Department reports there is currently no formal training for WPV and that prior to March 2022 WPV incidents were self-reported by members via an email sent to an administrator. The current WPV questionnaire has been active since March 2022 and was developed by Safety Chiefs and the legal

administrator. Additionally, SFD is currently under negotiations with the Seattle Fire Fighters Union, Local 27 to implement a Workplace Violence Training course. This course incorporates the Systems-Level Checklist to Address Stress and Violence in Fire-Based Emergency Medical Services Responders. [7, 24]

Study Parameters

This study is exploratory and descriptive in nature, focusing on identifying patterns and relationships rather than establishing cause-and-effect relationships. The study was conducted within the Seattle Fire Department, which provides emergency medical services and fire protection to the city of Seattle, WA. The study analyzed reported incidents of assaults and threatening behavior from March 1, 2022, to February 29, 2024.

ii. Selection of Study Subjects

This study examined the reported WPV submitted by employed SFD members during the timeframe. In 2022, the SFD employed 1005 uniformed personnel and 83 civilian personnel and 995 uniformed personnel and 85 civilian personnel in 2023. The number of employed SFD members in 2024 will not be published until 2025.[22-23]

1. Source

Data was sourced from internal SFD incident reports, specifically focusing on documented cases of assault and threatening behavior. From the ‘Seattle Fire Department Assault or Threatening Behavior (ATB) Report Form’ questionnaire five key variable responses were extracted out of a thirty-one question set.

2. Sampling method/recruitment

This study utilized a comprehensive sampling method where all eligible reported incidents of workplace violence within the specified time frame were included. There was no active recruitment of participants as the study relied on preexisting data from incident reports filed by SFD personnel.

3. Criteria for eligibility/exclusion of cases

The exposure was defined as Seattle Fire Department units that were dispatched during this time frame. Only reports of assault and threatening behavior directed at SFD personnel were included. A report without an identifiable incident number was excluded, this includes WPV reports in which the perpetrator was a coworker, but the reported behavior occurred outside of a dispatched response. The submitted forms were reviewed by SFD Safety Chiefs and the legal administrator. Not all reports received follow up, therefore, only the original report is included in this study to maintain consistency.

iii. Data collection

1. Source

The primary source of data was the Seattle Fire Department's internal incident reports specifically focused on workplace violence, including assaults and threatening behaviors. Incident reports were collected using a standardized Microsoft Forms questionnaire titled 'Seattle Fire Department Assault or Threatening Behavior (ATB) Report Form.' Completed forms were exported and stored using Microsoft SharePoint List for further analysis. Patient care record data was also reviewed to confirm categories were appropriately designated. In addition, data on dispatched units that arrived on scene were collected from the SFD CAD system.

2. Protocol for typical subject

Upon experiencing or witnessing an incident of workplace violence, SFD personnel were encouraged to complete the 'ATB Report Form' via Microsoft Forms. The form included fields for the incident date, time, location, description of the incident, individuals involved, nature of the threat or assault, and actions taken as well as other responses. Submitted forms were reviewed by the SFD Safety Chiefs and the legal administrator. Follow-up was conducted at the discretion of these to gather further information about the event and track status of legal proceedings.

3. Steps taken to assess and assure data quality

Data cleaning was performed using STATA software Version 16.1 (STATA Corp, College Station, Texas, USA) to identify and correct any inconsistencies, duplicates, or errors in the dataset. A manual cross-referencing process was conducted using the EMS provider patient chart (ESO Solutions, Austin, Texas, USA) narrative for incidents where the incident number was missing, duplicative, or mistyped. This ensured the accuracy and completeness of the data. Free text responses in the fields for location, threatening party, nature of assault, and actions taken were reviewed and categorized as 'other' when they did not fit predefined categories, ensuring comprehensive data classification.

iv. Analysis Plan

1. Hypothesis testing/generation

- Hypothesis: There is no association between the type of threatening party and the location of workplace violence.
- Data: A chi-square ($\chi 2$) test was performed on threatening party categories and location type categories to look for patterns between these two variables as the literature review suggests a correlation between the two variables.

2. Definition of key analysis variables

- **Threatening Party:** Categorical variable describing who the aggressor was with the option to select all that apply (patient, single bystander, multiple bystanders, Co-worker, Other).
- **Location Type:** Categorical variable indicating where the incident took place (Interior private space, ex. home, apartment, Interior public space, ex. business, courthouse, hospital, encampment, Other non-encampment outdoor public space ex. sidewalk, park, transit, Designated High Risk Environment (HRE), Within 2 blocks of Designated High Risk Environment, Fire Station, Other)

    - Designated High Risk Environment are addresses that were designated to require SPD escort.

- **Nature of Assault:** Categorical variable describing the type of assault with the option to select all that apply (verbal, threatening posture, physical contact, weapons brandished, weapons used).
- **Actions Taken:** Categorical variable indicating actions taken by member in response to the assault or threatening behavior (Diffused verbally and resolved, withdrawal from scene, retreated to area of refuge at the scene, physical contact with assailant, threatening party/assailant left the scene, worked with law enforcement already on scene, requested additional SFD units, requested law enforcement).
- **Unit Assigned:** Categorical variable indicating the specific unit or team of the personnel involved.

3. Power considerations

198 reports of WPV met the study criteria. Given the exploratory nature of this descriptive study, a formal power calculation was not conducted. However, the study aimed to include a comprehensive dataset of all reported incidents to maximize the robustness of the findings.

4. Statistical methods

Quantitative data analysis was generated using STATA. Threatening party, location type, unit assigned, and the nature of assault questions were analyzed descriptively. A chi-square ($\chi 2$) test was used to analyze the categorical variables: location type and threatening party relationship. These variables were selected through review of the literature.

III. Results

i. Characteristics of study respondents, including the number of subjects and the response rate.

During the study period from March 1, 2023 through February 29, 2024 there were 251 reports of WPV submitted by SFD members. Forty reports were excluded due to the assault being witnessed, one report

was excluded because it involved a coworker as the perpetrator, and 12 reports were dropped that did not include an incident number. The number of eligible reports included in the study were 116 reports in Year 1 (March 1, 2022 - February 28, 2023) and 82 reports in Year 2 for a total of 198 reports. (March 1, 2023 - February 29, 2024)

ii. Tables

Table 1. Tabulation of Location During Year 1 ; N = 116

Location Type	Freq.	Percent
Other non encampment outdoor public space ex, sidewalk , park, transit	73	62.93
Encampment	7	6.03
Interior private space, ex home, apartment	16	13.79
Interior public space, ex business, courthouse, hospital	15	12.93
Fire Station	3	2.59
Other	2	1.72
Designated HRE	1	0.86
Within 2 blocks of Designated HRE	1	0.86
Total	116	100

**Designated HRE are designated high risk environments*

Table 2. Tabulation of Location During Year 2 ; N = 82

Location Type	Freq.	Percent
Other non encampment outdoor public space ex, sidewalk , park, transit	51	60.98
Encampment	3	3.66
Interior private space, ex home, apartment	14	17.07
Interior public space, ex business, courthouse, hospital	6	7.31
Fire Station	1	1.22
Other	3	3.66
Designated HRE	2	2.44
Within 2 blocks of Designated HRE	2	2.44
Total	82	100

**Designated HRE are designated high risk environments*

Table 3. Tabulation of Location and Threatening Party March 1, 2022 – February 29, 2024

Location Type	Patient	Single bystander	Multiple bystanders	Unknown	Total
Outdoor Spaces					
Other non encampment outdoor public space ex, sidewalk , park, transit	41	35	4	0	80
Outside public space ex, sidewalk , park, transit	22	19	1	0	42
Encampment	2	4	4	0	10
Indoor Spaces					
Interior private space, ex home, apartment	18	11	0	0	30
Interior public space, ex business, courthouse, hospital	13	6	1	0	20

Interior public space and outside same public space	1	0	0	0	1
Fire Station	1	1	1	0	4
Other Spaces					
Designated HRE	1	2	0	0	3
Within 2 blocks of Designated HRE	1	2	0	0	3
Other	3	2	0	0	5
Total		103	82	11	198
Pearson Chi2 = 60.39 Prob = 0.0002					

**Designated HRE are designated high risk environments*

Table 4. Tabulation of Threatening Party During Year 1 ; N= 116

Threatening Party	Freq.	Percent
Patient	64	55.17
Single bystander	41	35.34
Multiple bystanders	9	7.76
Unknown	2	1.72
Total	116	100

Table 5. Tabulation of Threatening Party During Year 2 ; N= 82

Threatening Party	Freq.	Percent
Single bystander	41	50
Patient	39	47.56
Multiple bystanders	2	2.44
Unknown	0	0
Total	82	100

Table 6. Tabulation of Assault Type During Year 1 ; N = 116 Reports

Assault Type	Freq.	Percent of type of assault experienced	Percent of Reports including this type of violence
Verbal	78	37.32	67.24
Threatening posture	77	36.84	66.38
Physical contact	38	18.18	32.76
Weapons brandished	11	5.26	9.48
Weapons used	5	2.39	4.31
Total	209	100	180.17

Table 7. Tabulation of Assault Type During Year 2 ; N = 82 Reports

Assault Type	Freq.	Percent of type of assault experienced	Percent of Reports including this type of violence
Threatening posture	60	38.71	73.17
Verbal	60	38.71	73.17

Physical contact	21	13.55	25.61
Weapons brandished	10	6.45	12.20
Weapons used	4	2.58	4.88
Total	155	100	189.02

Table 8. Tabulation of Actions Taken by SFD Member During Year 1 ; N = 116

Actions Taken	Freq.	Percent of type of action taken	Percent of reports including this type of action
Requested Law Enforcement	43	19.82	37.07
Withdrawal from the scene	35	16.13	30.17
Diffused verbally and resolved	34	15.67	29.31
Threatening party/assailant left the scene	26	11.98	22.41
Worked with Law Enforcement already on scene	22	10.14	18.97
Retreated to area of refuge at the scene	16	7.37	13.79
Physical contact with assailant	14	6.45	12.07
Requested additional SFD units	14	6.45	12.07
Other	13	5.99	11.21
Total	217	100	187.07

Table 9. Tabulation of Type of Actions Taken by SFD Member During Year 2 ; N = 82

Actions Taken	Freq.	Percent of type of action taken	Percent of reports including this type of action
Requested Law Enforcement	40	28.78	48.78
Diffused verbally and resolved	18	12.95	21.95
Withdrawal from the scene	18	12.95	21.95
Retreated to area of refuge at the scene	14	10.07	17.07
Threatening party/assailant left the scene	14	10.07	17.07
Worked with Law Enforcement already on scene	10	7.19	12.20
Requested additional SFD units	8	5.76	9.76
Physical contact with assailant	5	3.6	6.10
Other	12	8.63	14.63
Total	139	100	169.51

iii. Research Questions Answered:

a. Which dispatched units have the most reported incidences of workplace violence (WPV)?

During the study period the units with the highest risk of exposure to WPV were units A25, A2, A10, and E17 (Supplemental Table 1). During Year 1, 54 units reported involvement in the 116 WPV incidents

including A10 on 13% of the submissions, A5 on 11% of submissions and E17 on 9% of submissions (Supplemental Table 2.) During Year 2, 51 units were reported involvement in the 82 WPV incidents. Including A10 on 18% of submissions, E30 on 12% of submissions, and E17 on 7% of submissions. (Supplemental Table 3).

b. What are the most common types of locations where workplace violence against EMS providers occurs?

During Year 1 63% of the 116 reports defined the location of the WPV as another *non-encampment outdoor public space* (Table1). This did not change in Year 2, with 62% of the 82 submitted reports occurring in the same type of location (Table 2).

c. Is there a relationship between location and threatening party in incidents of workplace violence against EMS providers?

There was a significant association ($p < 0.05$) between location and threatening party (Table 3).

d. What are the primary categories and frequencies of the following:

    1. Threatening parties involved in incidents of workplace violence against EMS providers (e.g., patients, single bystander, or multiple bystanders)?

In Year 1 55% of the submitted 116 reports categorized the assailant as the patient and 35.3% of reports categorized the assailant as a single bystander (Table 4). Year 2 followed with the assailant as a single bystander in 50% of submissions and the patient as the assailant in 48% of the 2 submitted reports (Table 5).

    2. Types of assaults experienced by EMS providers (e.g., Verbal abuse, threatening posture, physical contact, weapons brandished, or weapons used)?

In Year 1, of the 116 reports, 67% of submissions reported verbal abuse, 66% reported threatening posture, and 33% as physical contact (Table 6). In Year 2, of the 82 reports, 73% reported verbal abuse, 73% reported threatening posture, while physical contact was only reported in in 26% of submissions (Table 7).

3. Actions taken by the Seattle Fire Department Member (e.g. Diffused verbally and resolved or Withdrawal from the scene)

In Year 1, of the 116 reports, 37% requested law enforcement, 30% stated they withdrew from the scene, and 29% reported diffusing the incident verbally (Table 8). In Year 2, of the 82 submissions, 49% of members reported that they requested law enforcement and 22% of submission reported both diffusing the incident verbally and withdrawing from the scene (Table 9).

IV. Discussion

i. Study Strengths and Limitations

This study, which examined frequency of factors associated with assaults and threatening behavior against EMS personnel, may contribute to future studies on WPV prevention. Specific focus on Seattle adds relevance and context, highlighting unique challenges in urban settings that may exacerbate WPV risks. A limitation of this study was the potential for recall bias as the data was collected retrospectively and self-reported. Participants may have been unwilling to share, had difficulty recalling, or ignored less serious WPV events. Also some individual members may be more willing to engage and to report incidents of WPV than others. In addition, the ATB questionnaire instrument has not been validated for use within this study population. However, the administrators did utilize the Drexel University Workplace Violence to help inform the ATB questionnaire.[7, 24] This study is also limited in that demographic information of the reporting member or the threatening party was not collected. A final limitation of this study was that final outcomes were not collected and the order of events of actions taken by SFD members and the threatening party were not analyzed.

ii. Key Findings Comparison with Previous Work

Our study observed that both years of observations reported over 50% of assailants were patients. Although this is lower than found in the literature (between 75-90%), our study aligns with the current trend that patients are the most reported perpetrator.[3-6] This study also showed a higher prevalence of verbal abuse during both Years 1 and 2, similar to previous research where verbal abuse is often the most

common type of reported WPV.[3-6] Similar to several other studies, our results showed WPV occurred mostly in public outdoor spaces over 60% of the time in both years.[14]

According to the CAD dispatch data the units exposed to the highest risk of WPV were A25, A2, A5, A10, and E17, each with over 7,000 exposures for the entire study period. High exposure risk led to more reports during Year 1, for A10, which had the highest ratio of reported exposure to WPV incidents (13% of reports), A5 was second (11% of reports) and third was E17 at (9% of reports) (Supplemental Table 2.) This was similar in Year 2, with A10 included on 18% of submissions, E30 on 12%, and E17 on 7% (Supplemental Table 3.). Other risk factors beyond exposure (or arrival on scene) may include location of where units are stationed, the types of calls units are dispatched to respond, and the individual personnel assigned to the unit. [4]

iii. Implications of Findings

1. Conceptual Implications

The Social-Ecological Model, which involves interventions at multiple levels, is valuable for planning prevention efforts in healthcare settings. Implementing changes at the individual and relationship levels can swiftly improve the safety of healthcare workers. [25]

This study observed risk factors associated with WPV at an interpersonal level which included a high prevalence of members requesting law enforcement to the scene. Studies indicate that law enforcement presence can sometimes escalate aggressive behavior by the threatening party.[6] The most reported action taken by SFD members was to diffused the incidence verbally during both years of observation (Table 6). Members may be more willing to verbally diffuse the situation, however at the organizational level, have not received formal education on WPV topics. Washington State recently passed a statue that labeled any incidents of a person interfering and having aggressive contact with a firefighter, law enforcement officer,

or another specific public servant as a third-degree assault and Class C felony.[26] However, an assailant would not be prosecuted unless law enforcement on scene referred the case to the court system.

2. Implications for Public Health Practitioners

A standardized system for EMS agency surveillance of workplace violence (WPV) is necessary to enhance our understanding of this issue. Currently, there are no standards or evaluations for the effectiveness of departmental WPV training programs. Moreover, academic literature suggests that protocols should be developed to improve community safety and that training should be provided to increase confidence and competency in handling violent situations.[7]

1. **Policy Development and Advocacy**:
    - Public health practitioners can advocate for policies and regulations that protect EMS providers from workplace violence. This includes lobbying for stronger legal protections, mandatory reporting of incidents, and stricter penalties for offenders.
2. **Training and Education**:
    - Providing EMS personnel with training on de-escalation techniques, self-defense, and how to recognize potential threats can help mitigate risks. These practitioners can also develop and implement these training programs.
3. **Mental Health Support**:
    - Exposure to violence can lead to significant mental health issues, such as PTSD, anxiety, and depression among EMS providers. Public health practitioners should ensure access to mental health resources, support systems, and counseling services.
4. **Data Collection and Research**:
    - Conducting research to understand the prevalence, causes, and consequences of workplace violence in EMS settings is crucial. Public health practitioners can design and carry out studies to gather data that informs interventions and policy changes.
5. **Development of Interventions**:

- Public health practitioners can develop and implement interventions at various levels (individual, organizational, and societal) to prevent workplace violence. This can include creating awareness campaigns in the community and fostering a culture of safety within EMS agencies.

6. **Collaboration and Partnerships**:
    - Collaborating with EMS agencies, law enforcement, healthcare facilities, and community organizations can help create a comprehensive approach to addressing workplace violence. Public health practitioners can facilitate these partnerships to ensure a coordinated response.
7. **Monitoring and Evaluation**:
    - Continuous monitoring and evaluation of workplace violence prevention programs are essential to assess their effectiveness. Public health practitioners can establish metrics for success and make data-driven adjustments to improve outcomes.
8. **Advocacy for Resources**:
    - Public health practitioners can advocate for the allocation of resources to support violence prevention programs, training, mental health services, and research initiatives aimed at protecting EMS providers.

Conclusion

This study found that over 50% of assailants were patients, which, although lower than the 75-90% reported in the literature, aligns with the trend that patients are the most reported perpetrators. Additionally, verbal abuse was the most prevalent type of workplace violence (WPV) in both years, consistent with previous research. WPV incidents predominantly occurred on the street or in outdoor locations, accounting for over 60% of cases each year. Units A25, A2, A5, A10, and E17 faced the highest WPV risks, with A10 having the highest reported incidences of WPV in Year 1 and maintaining a high ratio in Year 2. Addressing workplace violence against EMS providers requires a multifaceted approach involving policy advocacy, education, mental health support, research, and community

engagement. Public health practitioners play a vital role in developing and implementing strategies to ensure the safety and well-being of EMS personnel. By taking proactive measures, public health practitioners can help create safer work environments and enhance the overall effectiveness and resilience of EMS providers.

3. Implications For Future Research

In Seattle, the magnitude of workplace violence (WPV) against EMS providers may be influenced by factors such as population density, demographic trends, and the availability of healthcare services. Future research should explore these variables to understand better how they impact the frequency and severity of WPV incidents. Current data do not capture shift length, a potentially crucial factor in WPV risk. Studies have found that mandatory overtime increased the risk of assault among nursing assistants.[14] It is plausible that similar conditions could elevate violence risks for EMS personnel. Future studies should investigate how overtime and different shift configurations affect WPV risk among EMS workers.

The dispatch/911 center is the first point of contact for the community when reporting medical emergencies. Future research should examine how the nature of initial calls influences the likelihood and nature of WPV incidents. Understanding this relationship could help develop better training and protocols for dispatchers to anticipate and mitigate potential WPV scenarios. In addition, studies should also identify specific circumstances or contexts (e.g., psychiatric emergencies, substance abuse incidents) that are associated with certain types of threatening parties. Understanding these contexts can help tailor prevention and intervention strategies to reduce the incidence of WPV in these high-risk situations.

By addressing these areas, future research can provide a more comprehensive understanding of WPV against EMS providers and inform the development of effective prevention and intervention strategies.

While workplace and societal interventions take longer to implement, they are expected to significantly reduce and prevent workplace violence. Further research is necessary to evaluate the effectiveness of interventions at the individual, relationship, workplace (community), and societal levels in promoting a violence-free workplace.

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VI. Appendix

Appendix A.

Supplemental Tables

Supplemental Table 1. Tabulation of Dispatched Units That Arrived On Scene March 1, 2022 - February 29, 2024

Dispatched Unit	Freq.	Percent
A25	12288	4.24
A2	10970	3.78
A5	10842	3.74
A10	10824	3.73
E17	7512	2.59
E25	7510	2.59
E2	7432	2.56
E28	7155	2.47
E31	6865	2.37
E10	6566	2.26
A4	6473	2.23
E30	6449	2.22
E24	6447	2.22
E6	6379	2.2
E5	6337	2.19
E39	6218	2.14
M1	5953	2.05
M10	5774	1.99
E18	5391	1.86
L4	5258	1.81
E33	5173	1.78
L10	5028	1.73
E37	4641	1.6
L9	4520	1.56
L1	4494	1.55
E13	4492	1.55

E9	4392	1.51
E16	4380	1.51
E38	4107	1.42
E32	3937	1.36
L5	3873	1.34
E8	3863	1.33
A31	3829	1.32
M31	3774	1.3
E11	3682	1.27
E21	3658	1.26
E35	3648	1.26
M17	3551	1.22
E40	3382	1.17
L3	3287	1.13
E29	3185	1.1
L12	3181	1.1
E20	3118	1.08
M28	2998	1.03
L8	2685	0.93
M32	2601	0.9
E22	2573	0.89
E27	2521	0.87
E36	2363	0.82
E26	2200	0.76
M18	2188	0.75
L11	2118	0.73
E34	2087	0.72
R1	2043	0.7
A14	2010	0.69
L13	1980	0.68
E41	1852	0.64
B2	1801	0.62
L6	1531	0.53
M44	1400	0.48
B6	1199	0.41
B5	1195	0.41
H1	1173	0.4
M26	1034	0.36
H2	809	0.28
SAFT2	738	0.25

05-Mar	675	0.23
B4	634	0.22
B7	538	0.19
A26	439	0.15
STAF10	433	0.15
DEP1	409	0.14
AIR10	398	0.14
EVENT13	327	0.11
EVENT12	322	0.11
H99	284	0.1
EVENT11	265	0.09
A86	249	0.09
A18	196	0.07
H3	194	0.07
REHAB1	171	0.06
PIO	98	0.03
HAZ1	78	0.03
EVENT10	75	0.03
EVENT14	73	0.03
FB2	68	0.02
FIREBOAT	60	0.02
CHAP5	52	0.02
A17	45	0.02
CHAP7	45	0.02
EVENT15	43	0.01
FAC	43	0.01
RB5	42	0.01
FB1	38	0.01
AIR260	37	0.01
P25	36	0.01
MAB1	33	0.01
HAZ80	30	0.01
MRN1	30	0.01
TRNB6	30	0.01
MVU1	29	0.01
TRNB2	29	0.01
TRNB4	28	0.01
PTRL4	27	0.01
FB4	25	0.01
TRNB5	25	0.01

TRNB7	24	0.01
MIH	23	0.01
AIR26	21	0.01
E91	21	0.01
SQ14	20	0.01
VAULT1	17	0.01
CHAP6	14	0
FAC1	14	0
CHAP4	11	0
E90	11	0
FB3	11	0
TRNB3	11	0
A87	10	0
ENERGY1	9	0
AIR240	8	0
B55	8	0
A84	7	0
A1	6	0
Mar-50	5	0
SQ10	5	0
AIR 240-260	4	0
DECON1	4	0
EVENT4	4	0
PIO2	4	0
TRN02	4	0
TRN06	4	0
COMVAN	3	0
FAC6	3	0
HUSKY1	3	0
TRN01	3	0
TRN05	3	0
B66	2	0
B77	2	0
DEP2	2	0
EVENT1	2	0
EVENT20	2	0
L81	2	0
MCI1	2	0
SQ40	2	0
TRN04	2	0

TRN07	2	0
A83	1	0
B44	1	0
B4591	1	0
CHAP8	1	0
DEP11	1	0
E80	1	0
E85	1	0
EVENT16	1	0
EVENT19	1	0
EVENT2	1	0
HOSE18	1	0
L83	1	0
M45	1	0
M4731	1	0
Mar-99	1	0
MIS1	1	0
MRN80	1	0
PIO3	1	0
R80	1	0
SQ51	1	0
TRN03	1	0
Total	289926	100

Supplemental Table 2. Tabulation of Units Involved in WPV During Year 1; N = 116 Reports

Dispatched Unit	Freq.	Percent of specific unit number on scene	Percent of Reports including this unit number
A10	15	10.2	12.93
A5	13	8.84	11.21
E17	10	6.8	8.62
E10	7	4.76	6.03
E30	7	4.76	6.03
M1	7	4.76	6.03
E6	6	4.08	5.17
A2	4	2.72	3.45

E33	4	2.72	3.45
E38	4	2.72	3.45
E5	4	2.72	3.45
A25	3	2.04	2.59
E24	3	2.04	2.59
E31	3	2.04	2.59
E40	3	2.04	2.59
L5	3	2.04	2.59
M17	2	1.36	1.72
A31	2	1.36	1.72
E11	2	1.36	1.72
E16	2	1.36	1.72
E18	2	1.36	1.72
E22	2	1.36	1.72
E39	2	1.36	1.72
E8	2	1.36	1.72
L1	2	1.36	1.72
L12	2	1.36	1.72
L4	2	1.36	1.72
L9	2	1.36	1.72
M17	2	1.36	1.72
AIR10	1	0.68	0.86
B2	1	0.68	0.86
B6	1	0.68	0.86
E10	1	0.68	0.86
E16	1	0.68	0.86
E25	1	0.68	0.86
E28	1	0.68	0.86
L1	1	0.68	0.86
L5	1	0.68	0.86
M1	1	0.68	0.86
E2	1	0.68	0.86
E21	1	0.68	0.86
E25	1	0.68	0.86
E26	1	0.68	0.86
E28	1	0.68	0.86
E3	1	0.68	0.86
E34	1	0.68	0.86
E35	1	0.68	0.86
E36	1	0.68	0.86

E37	1	0.68	0.86
H1	1	0.68	0.86
L13	1	0.68	0.86
L8	1	0.68	0.86
M10	1	0.68	0.86
M32	1	0.68	0.86
Total	147	100	126.72

Supplemental Table 3. Tabulation of Units Involved in WPV During Year 2; N = 82 Reports

Dispatched Unit	Freq.	Percent of specific unit number on scene	Percent of reports including this unit number
A10	15	13.64	18.29
E30	10	9.09	12.20
E17	6	5.45	7.32
E10	5	4.55	6.10
M10	4	3.64	4.88
A5	4	3.64	4.88
E8	4	3.64	4.88
A25	3	2.73	3.66
E31	3	2.73	3.66
E5	3	2.73	3.66
E9	3	2.73	3.66
B2	2	1.82	2.44
B7	2	1.82	2.44
E10	2	1.82	2.44
L1	2	1.82	2.44
M1	2	1.82	2.44
A2	2	1.82	2.44
E11	2	1.82	2.44
E18	2	1.82	2.44
E28	2	1.82	2.44
E38	2	1.82	2.44
A5	1	0.91	1.22
AIR10	1	0.91	1.22
B4	1	0.91	1.22

B5	1	0.91	1.22
B6	1	0.91	1.22
E25	1	0.91	1.22
E32	1	0.91	1.22
L12	1	0.91	1.22
L13	1	0.91	1.22
L3	1	0.91	1.22
L5	1	0.91	1.22
L9	1	0.91	1.22
M17	1	0.91	1.22
M28	1	0.91	1.22
A4	1	0.91	1.22
E13	1	0.91	1.22
E24	1	0.91	1.22
E25	1	0.91	1.22
E29	1	0.91	1.22
E35	1	0.91	1.22
E39	1	0.91	1.22
H1	1	0.91	1.22
H2	1	0.91	1.22
H99	1	0.91	1.22
L1	1	0.91	1.22
L11	1	0.91	1.22
L4	1	0.91	1.22
M1	1	0.91	1.22
M17	1	0.91	1.22
M26	1	0.91	1.22
Total	110	100	134.15

Appendex B.

Assault and Threatening Bevahavior Reporting Form and Questionnaire

Seattle Fire Department Assault or Threatening Behavior (ATB) Report Form

Use this form to report any incidents where you have been subjected to (or witnessed) assault or threatening behavior.
IT tip * Please use Chrome:
If there is an image, document to attach, please title it with your name if possible.
After completion of form, you will be notified via email that is was received.

Once submitted, your name, email address, and responding form data will be sent to the Health and Safety Office, and Human Resources if applicable.

* Required

* This form will record your name, please fill your name.

1. Is this submission regarding a real ATB event or is it a test submission? *

- ◯ Test submission
- ◯ Real event

2. Date of the assault or threatening behavior *

3. What Unit/s (if any) were Involved in this Incident? *Please enter in the following format: E26, L9, Aid10, M18, or other (please specify)* *

4. What was the location of this incident (i.e address or closest intersection or other identifying location)?

5. Was the Assault *

- ◯ Directed at SFD personnel
- ◯ Witnessed, but not directed at SFD personnel

6. Provide a short synopsis of what was witnessed/Actions taken (Longer statement? Please attach to upload question)

7. Did this occur during an Incident? *

- ◯ Yes (CAD) URL: https://sfdwweb105/CADTools/CadView/Map
- ◯ No

8. Enter or copy the CAD number in this exact format (Example: F140019137): CAD number can be found here: https://sfdwweb105/CADTools/CadView/Map *

9. Provide a brief 2 to 3 sentence description of the assault or threatening behavior (Longer statement? Please attach to upload question) *

10. Upload any documents, ESO narrative screen shots, videos, or pictures related to assault or threatening behavior if available (Please title documents with your name and date)

Upload file

File number limit: 10 Single file size limit: 1GB Allowed file types: Word, Excel, PPT, PDF, Image, Video, Audio

11. Location type (select one) *

- ◯ Interior private space, ex home, apartment
- ◯ Interior public space, ex business, courthouse, hospital
- ◯ Encampment
- ◯ Other non encampment outdoor public space ex, sidewalk , park, transit
- ◯ Designated High Risk Environment (HRE)
- ◯ Within 2 blocks of Designated HRE
- ◯ Fire Station
- ◯ Other

12. Threatening party (check all that apply) *

- ☐ Patient
- ☐ Single bystander
- ☐ Multiple bystanders
- ☐ Co-worker
- ☐ Other

13. Provide name or description of threatening party (parties) if known, or N/A if not known

14. Did you select that the threatening party was a co-worker? *

- ◯ Yes
- ◯ No

15. Threatening party known to have prior threatening behavior incidents? *

- ◯ Yes
- ◯ No
- ◯ Unknown

16. Please provide any prior knowledge you have of threatening party or prior incidents *

17. Nature of assault (check all that apply) *

- ☐ Verbal
- ☐ Threatening posture
- ☐ Physical contact
- ☐ Weapons brandished
- ☐ Weapons used

18. Were there witnesses? (select one) *

- ◯ Yes
- ◯ No

19. If yes to witnesses, provide name(s) if known, or description, or name(s) of other SFD members involved

20. Action(s) taken: (check all that apply) *

- [ ] Diffused verbally and resolved
- [ ] Withdrawal from the scene
- [ ] Retreated to area of refuge at the scene
- [ ] Physical contact with assailant
- [ ] Threatening party/assailant left the scene
- [ ] Worked with Law Enforcement already on scene
- [ ] Requested additional SFD units
- [ ] Requested Law Enforcement
- [ ] Other

21. Did you select "Requested Law Enforcement" as an Action taken? *

- ◯ Yes
- ◯ No

22. How was Law Enforcement requested? (Check all that apply)

- [ ] Direct call to 911
- [ ] Non-expedited request through FAC
- [ ] Expedite
- [ ] Fast Back Up
- [ ] Help the FF
- [ ] Other

23. Estimated time before Law Enforcement arrived on the scene? *

- ◯ LE already there
- ◯ LE arrived in less than 5 minutes
- ◯ LE arrived after 5 minutes
- ◯ LE request was cancelled
- ◯ LE did not arrive
- ◯ Other

24. Intervention/Action taken by Law Enforcement (Check all that apply) *

- ☐ Threatening party/assailant(s) interviewed
- ☐ Threatening party/assailant(s) restrained
- ☐ Threatening party/assailant(s) arrested
- ☐ Law Enforcement Action unknown
- ☐ No Law Enforcement Action taken
- ☐ Threatening party/assailant(s) left scene prior to Law Enforcement Action
- ☐ Other

25. Law Enforcement Incident Number If Known

26. Was Any Member Injured? *

- ◯ Yes
- ◯ No

27. Did you complete Form 78? Link to form found here: https://seattlegov.sharepoint.com/sites/SFD_Hub/Lists/Forms%20List/DispForm.aspx?ID=54&e=dDWryf

28. Member injury status (Check all that apply) *

- [ ] Transported to hospital for evaluation
- [ ] Other medical eval
- [ ] Laid off/Time loss
- [ ] Not laid off/No time loss

29. WAS F78 submitted with assault box checked? *

- ◯ Yes
- ◯ No

Appendex C.

STATA Code Log

```
-------------------------------------------------------------------------------------------------
      name:  <unnamed>
       log:  C:\Users\machadk\OneDrive - City of
Seattle\Desktop\SFDQA\Personal\MPH\Practicum\Stata
> \atb.log
  log type:  text
 opened on:   6 Jun 2024, 12:05:47

. import delimited "C:\Users\machadk\OneDrive - City of
Seattle\Desktop\SFDQA\Personal\MPH\Practicu
> m\Excel\submitted_members.csv", encoding(UTF-8)
Note: Unmatched quote while processing row 2; this can be due to a formatting problem in the
file
    or because a quoted data element spans multiple lines. You should carefully inspect your data
    after importing. Consider using option bindquote(strict) if quoted data spans multiple lines
    or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 491; this can be due to a formatting problem in the
    file or because a quoted data element spans multiple lines. You should carefully inspect your
    data after importing. Consider using option bindquote(strict) if quoted data spans multiple
    lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 492; this can be due to a formatting problem in the
    file or because a quoted data element spans multiple lines. You should carefully inspect your
    data after importing. Consider using option bindquote(strict) if quoted data spans multiple
    lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 515; this can be due to a formatting problem in the
    file or because a quoted data element spans multiple lines. You should carefully inspect your
    data after importing. Consider using option bindquote(strict) if quoted data spans multiple
    lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 516; this can be due to a formatting problem in the
    file or because a quoted data element spans multiple lines. You should carefully inspect your
    data after importing. Consider using option bindquote(strict) if quoted data spans multiple
    lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 532; this can be due to a formatting problem in the
    file or because a quoted data element spans multiple lines. You should carefully inspect your
    data after importing. Consider using option bindquote(strict) if quoted data spans multiple
    lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 533; this can be due to a formatting problem in the
    file or because a quoted data element spans multiple lines. You should carefully inspect your
    data after importing. Consider using option bindquote(strict) if quoted data spans multiple
    lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 535; this can be due to a formatting problem in the
    file or because a quoted data element spans multiple lines. You should carefully inspect your
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    data after importing. Consider using option bindquote(strict) if quoted data spans multiple
    lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 536; this can be due to a formatting problem in the
    file or because a quoted data element spans multiple lines. You should carefully inspect your
    data after importing. Consider using option bindquote(strict) if quoted data spans multiple
    lines or option bindquote(nobind) if quotes are not used for binding data.
(46 vars, 525 obs)

.
. keep email testsuborrealsub dateofassaultorthreateningbehavi

.
. drop if missing(dateofassaultorthreateningbehavi)
(106 observations deleted)

.
. drop if strpos(testsuborrealsub, "Real event") == 0
(117 observations deleted)

.
. drop if missing(ino)
ino not found
r(111);

.
. *302 -->255 remaining cases

.
. save "C:\Users\machadk\OneDrive - City of
Seattle\Desktop\SFDQA\Personal\MPH\Practicum\Stata\ATB
> Submissions\ATB_Master.dta, replace
file C:\Users\machadk\OneDrive - City of
Seattle\Desktop\SFDQA\Personal\MPH\Practicum\Stata\ATB
    Submissions\ATB_Master.dta, replace already exists
r(602);

. clear all

.
.
.
. ****************************************

.
. *Excluded
```

.
. import delimited "C:\Users\machadk\OneDrive - City of
Seattle\Desktop\SFDQA\Personal\MPH\Practicu
> m\Excel\submitted_members.csv", encoding(UTF-8)
Note: Unmatched quote while processing row 2; this can be due to a formatting problem in the file
    or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 4; this can be due to a formatting problem in the file
    or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 5; this can be due to a formatting problem in the file
    or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 7; this can be due to a formatting problem in the file
    or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 15; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 16; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 18; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 21; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 25; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 28; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your

data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 29; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 31; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 34; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 46; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 47; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 50; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 52; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 53; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 69; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 76; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 77; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.

Note: Unmatched quote while processing row 79; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 83; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 85; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 87; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 88; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 100; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 102; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 103; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 104; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 106; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 107; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 109; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your

data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 110; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 114; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 116; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 119; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 121; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 124; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 125; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 129; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 132; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 134; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 135; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.

Note: Unmatched quote while processing row 157; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 161; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 163; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 168; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 170; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 171; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 178; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 179; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 181; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 182; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 185; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 191; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your

data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 198; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 199; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 207; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 209; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 217; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 219; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 224; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 225; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 235; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 236; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 237; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.

Note: Unmatched quote while processing row 239; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 240; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 241; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 243; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 245; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 260; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 261; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 264; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 275; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 279; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 291; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 299; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your

data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 300; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 301; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 307; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 322; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 323; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 328; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 329; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 333; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 336; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 346; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 347; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.

Note: Unmatched quote while processing row 363; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 364; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 368; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 371; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 403; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 405; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 410; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 411; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 420; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 424; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 425; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 426; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your

data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 429; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 430; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 434; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 435; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 467; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 469; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 479; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 485; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 491; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 492; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 515; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.

Note: Unmatched quote while processing row 516; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 532; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 533; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 535; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
Note: Unmatched quote while processing row 536; this can be due to a formatting problem in the file or because a quoted data element spans multiple lines. You should carefully inspect your data after importing. Consider using option bindquote(strict) if quoted data spans multiple lines or option bindquote(nobind) if quotes are not used for binding data.
(46 vars, 525 obs)

.
.
.
. Rename
command Rename not defined by Rename.ado
r(199);

.
. rename name id

.
. rename cadnumber ino

.
. rename dateofassaultorthreateningbehavi incidate

.
. rename locationtypeselectone location
variable location already defined
r(110);

.
. rename pleaseprovideanypriorknowledgeyo assault_category

```
.
. rename weretherewitnessesselectone actions

.
. replace unit = upper(unit)
(74 real changes made)

.
. order ino

.
. replace ino = upper(ino)
(19 real changes made)

.
. gen date = date(incidate , "MDY")
(131 missing values generated)

.
. format date %td

.
. sort date

.
. drop if strpos(testsuborrealsub, "Real event") == 0
(223 observations deleted)

.
. drop starttime completiontime provideashort2to3sentencesynopsi
provideabrief2to3sentencedescrip p
> rovidenameordescriptionofthreat ornaifnotknown threateningpartyknowntohaveprior
didyouselectthatt
> hethreateningpa natureofassaultcheckallthatapply pleasecompletefield ifyestowitnesses
providename
> sifknown ordescription ornamesofothersfdmembersinvolved
didyouselectrequestedlawenforcem howwasla
> wenforcementrequested actionstaken estimatedtimebeforelawenforcemen
interventionactiontakenbylawe
> nfo lawenforcementincidentnumberifkn wasanymemberinjured form78 memberinjurystatus
wasf78submitte
> dwithassaultboxche describetheassaultorthreateningb createdby reporter courtcasenumber
courtcases
> tatus legalfollowup safetydivisionfollowup attachments created

.
```

```
.
.
. drop if strpos(wastheassault, "Directed at SFD personnel") == 0
(40 observations deleted)

. save "C:\Users\machadk\OneDrive - City of
Seattle\Desktop\SFDQA\Personal\MPH\Practicum\Stata\ATB
> Submissions\ATB_dropped.dta"
file C:\Users\machadk\OneDrive - City of
Seattle\Desktop\SFDQA\Personal\MPH\Practicum\Stata\ATB Sub
> missions\ATB_dropped.dta saved

. use "C:\Users\machadk\OneDrive - City of
Seattle\Desktop\SFDQA\Personal\MPH\Practicum\Stata\ATB S
> ubmissions\ATB_Master.dta"

.
.
.
. *Drop variables

.
. drop starttime completiontime provideashort2to3sentencesynopsi
provideabrief2to3sentencedescrip p
> rovidenameordescriptionofthreat ornaifnotknown threateningpartyknowntohaveprior
didyouselectthatt
> hethreateningpa natureofassaultcheckallthatapply pleasecompletefield ifyestowitnesses
providename
> sifknown ordescription ornamesofothersfdmembersinvolved
didyouselectrequestedlawenforcem howwasla
> wenforcementrequested actionstaken estimatedtimebeforelawenforcemen
interventionactiontakenbylawe
> nfo lawenforcementincidentnumberifkn wasanymemberinjured form78 memberinjurystatus
wasf78submitte
> dwithassaultboxche describetheassaultorthreateningb createdby reporter courtcasenumber
courtcases
> tatus legalfollowup safetydivisionfollowup attachments created

.
.
.
. *Rename

.
. *rename name id
```

```
.
. *rename cadnumber ino

.
. rename dateofassaultorthreateningbehavi incidate

.
. rename locationtypeselectone location
variable location already defined
r(110);

.
. rename pleaseprovideanypriorknowledgeyo assault_category

.
. rename weretherewitnessesselectone actions

.
. replace unit = upper(unit)
(38 real changes made)

.
. order ino

.
. replace ino = upper(ino)
(7 real changes made)

.
. gen date = date(incidate , "MDY")

.
. format date %td

.
. sort date

.
. *dropping 1/24-3/24 -->keep if date >= td(03/01/2022) & date <= td(03/01/2024)

.
. drop if _n >= 245
(11 observations deleted)

.
. *244 observations
```

.
.
.
. **MANUAL FIXES ino, unit***

.
. replace ino = "F220027567" in 1
(1 real change made)

.
. replace ino = "F220040600" in 4
(1 real change made)

.
. replace ino = "F220042286" in 5
(1 real change made)

.
. replace ino = "F220050034" in 20
(1 real change made)

.
. replace ino = "F220064638" in 26
(1 real change made)

.
. replace ino = "F220076726" in 31
(1 real change made)

.
. replace ino = "2220086260" in 41
(1 real change made)

.
. replace ino = "F220086260" in 41
(1 real change made)

.
. replace ino = "F220093899" in 54
(1 real change made)

.
. replace unit = "E10, B2" in 54
(1 real change made)

.
. replace ino = "F220098991" in 59
(1 real change made)

.
. replace ino = "F220097612" in 58
(1 real change made)

.
. replace ino = "UNKNOWN" in 60
(1 real change made)

.
. replace unit = "E8" in 60
(1 real change made)

.
. replace ino = "F220111797" in 70
(1 real change made)

.
. replace ino = "F220125363" in 85
(1 real change made)

.
. replace ino = "F220128845" in 92
(0 real changes made)

.
. replace ino = "F220132608" in 97
(1 real change made)

.
. replace ino = "F220133861" in 99
(1 real change made)

.
. replace ino = "F220144496" in 112
(0 real changes made)

.
. replace ino = "F220145597" in 114
(1 real change made)

.
. replace ino = "F230009429" in 131

(1 real change made)

.
. replace ino = "F230017412" in 136
(1 real change made)

.
. replace ino = "F230036635" in 150
(1 real change made)

.
. replace ino = "F230052037" in 163
(1 real change made)

.
. replace ino = "F230065536" in 168
(1 real change made)

.
. replace ino = "F230068265" in 172
(1 real change made)

.
. replace ino = "F230090653" in 180
(1 real change made)

.
. replace ino = "F230091948" in 181
(1 real change made)

.
. replace ino = "F230092755" in 182
(1 real change made)

.
. replace ino = "F230096227" in 184
(1 real change made)

.
. replace ino = "F230096887" in 188
(1 real change made)

.
. replace ino = "F230113784" in 197
(1 real change made)

.
. replace ino = "F230116008" in 199
(1 real change made)

.
. replace ino = "UNKOWN" in 203
(1 real change made)

.
. replace ino = "F230168349" in 231
(1 real change made)

.
. replace ino = "F240013848" in 240
(1 real change made)

.
.
.
. replace unit = "A10" in 216
(1 real change made)

.
. replace unit = "A5" in 218
(1 real change made)

.
. replace unit = "L11, E32, B7" in 221
(1 real change made)

.
. replace unit = "A10" in 225
(1 real change made)

.
. replace unit = "A10, M10" in 67
(1 real change made)

.
. replace unit = "A10" in 76
(1 real change made)

.
. replace unit = "A5, AIR10" in 85
(1 real change made)

.
. replace unit = "E30" in 91
(1 real change made)

.
. replace unit = "E30" in 92
(1 real change made)

.
. replace unit = "E17, B6" in 93
(1 real change made)

.
. replace unit = "L1, E10" in 96
(1 real change made)

.
. replace unit = "A2" in 98
(1 real change made)

.
. replace unit = "E31, L5" in 99
(1 real change made)

.
. replace unit = "A10 " in 102
(1 real change made)

.
. replace unit = "A5" in 105
(1 real change made)

.
. replace unit = "A5" in 106
(1 real change made)

.
. replace unit = "E18" in 109
(1 real change made)

.
. replace unit = "A10" in 113
(0 real changes made)

.
. replace unit = "A5" in 115

(1 real change made)

.
. replace unit = "H1" in 120
(1 real change made)

.
. replace unit = "A5" in 125
(1 real change made)

.
. replace unit = "A10" in 126
(1 real change made)

.
. replace unit = "E35" in 129
(1 real change made)

.
. replace unit = "L1, E10" in 134
(1 real change made)

.
. replace unit = "L1, E2" in 145
(1 real change made)

.
. replace unit = "E31, L5" in 150
(1 real change made)

.
. replace unit = "E38, M17, L9" in 151
(1 real change made)

.
. replace unit = "E13, B5, A5" in 156
(1 real change made)

.
. replace unit = "A10" in 157
(1 real change made)

.
. replace unit = "A2" in 162
(1 real change made)

.
. replace unit = "A5, L1" in 164
(1 real change made)

.
. replace unit = "E30" in 167
(1 real change made)

.
. replace unit = "AID10" in 168
(1 real change made)

.
. replace unit = "A10" in 168
(1 real change made)

.
. replace unit = "E10, M10" in 169
(1 real change made)

.
. replace unit = "E8" in 178
(1 real change made)

.
. replace unit = "A10" in 179
(1 real change made)

.
. replace unit = "L3, E30" in 184
(1 real change made)

.
. replace unit = "A10, AIR10" in 188
(1 real change made)

.
. replace unit = "A10" in 190
(1 real change made)

.
. replace unit = "A10, M10" in 192
(1 real change made)

.
. replace unit = "A5" in 195

(1 real change made)

.
. replace unit = "M1, E10" in 198
(1 real change made)

.
. replace unit = "E24" in 199
(1 real change made)

.
. replace unit = "E29, B7" in 204
(1 real change made)

.
. replace unit = "E11" in 209
(1 real change made)

.
. replace unit = "A10, M1, E10, B2" in 211
(1 real change made)

.
. replace unit = "E18" in 214
(0 real changes made)

.
. replace unit = "A25, M1, B2" in 228
(1 real change made)

.
. replace unit = "A25, M1, B2" in 229
(1 real change made)

.
. replace unit = "A10" in 232
(1 real change made)

.
. replace unit = "E31" in 233
(1 real change made)

.
. replace unit = "E9, B4" in 242
(1 real change made)

```
.
.
.
.
.
. *244 OBSERVATIONS

.
.
.
. save "C:\Users\machadk\OneDrive - City of
Seattle\Desktop\SFDQA\Personal\MPH\Practicum\Stata\ATB
> Submissions\ATB_real.dta", replace
file C:\Users\machadk\OneDrive - City of
Seattle\Desktop\SFDQA\Personal\MPH\Practicum\Stata\ATB Sub
> missions\ATB_real.dta saved

. lear all
command lear is unrecognized
r(199);

.
. ***Variables ino, dateofassaultorthreateningbehavi, directed at, unit, email, nature of assault**
> **

.
. use "C:\Users\machadk\OneDrive - City of
Seattle\Desktop\SFDQA\Personal\MPH\Practicum\Stata\ATB S
> ubmissions\ATB_real.dta"

.
. drop if missing(ino)
(0 observations deleted)

.
.
.
. *40 observations with no INO

.
. keep if strpos(wastheassault, "Witnessed") == 0
(32 observations deleted)

.
. drop if strpos(didthisoccurduringanincident, "No") == 1
(0 observations deleted)
```

.
.
.
. **212 incidents 3/1/22-3/1/24***

.
. sort ino

.
. duplicates list ino

Duplicates in terms of ino

group:	obs:	ino
1	43	F220090601
1	44	F220090601
2	63	F220111797
2	64	F220111797
3	90	F220135275
3	91	F220135275
4	93	F220137094
4	94	F220137094
5	118	F230018396
5	119	F230018396
5	120	F230018396
6	132	F230044665
6	133	F230044665
6	134	F230044665
7	159	F230096227
7	160	F230096227
8	184	F230138251
8	185	F230138251
9	192	F230160750
9	193	F230160750
10	197	F230166812
10	198	F230166812

.

```
. duplicates tag ino, generate(dup_flag)

Duplicates in terms of ino

.
. *12 duplicate incidents

.
.
.
. save C:\Users\machadk\OneDrive - City of
Seattle\Desktop\SFDQA\Personal\MPH\Practicum\Stata\ATB_f
> inal.dta", replace
invalid '-'
r(198);

.
.
.
. export excel ino unit incidate location threateningparty assault_category actions date using
"ATB
> _cleanog", firstrow(variables)
file ATB_cleanog.xls saved

. clear all

.
.
.
.
.
. ***csv cleaned

.
.
.
. use "C:\Users\machadk\OneDrive - City of
Seattle\Desktop\SFDQA\Personal\MPH\Practicum\Stata\ATB_f
> inal.dta"

.
.
.
. *chi2

.
```

```
. use "C:\Users\machadk\OneDrive - City of
Seattle\Desktop\SFDQA\Personal\MPH\Practicum\Stata\ATB_f
> inal.dta"

.
. preserve

.
. tabulate location threateningparty

                    |            threateningparty
           location | Multipl..    Patient  Single ..    Unknown |     Total
--------------------+-------------------------------------------+----------
Designated High Ris.. |         0          1          2          0 |         3
         Encampment |         4          2          4          0 |        10
        Fire Station |         1          1          1          1 |         4
Interior private sp.. |         0         18         11          1 |        30
Interior public spa.. |         1         13          6          0 |        20
              Other |         0          3          2          0 |         5
Other non encampmen.. |         4         41         35          0 |        80
Outside public spac.. |         1         22         19          0 |        42
Within 2 blocks of .. |         0          1          2          0 |         3
interior public spa.. |         0          1          0          0 |         1
--------------------+-------------------------------------------+----------
              Total |        11        103         82          2 |       198

.
. tabulate location threateningparty, chi2

                    |            threateningparty
           location | Multipl..    Patient  Single ..    Unknown |     Total
--------------------+-------------------------------------------+----------
Designated High Ris.. |         0          1          2          0 |         3
         Encampment |         4          2          4          0 |        10
        Fire Station |         1          1          1          1 |         4
Interior private sp.. |         0         18         11          1 |        30
Interior public spa.. |         1         13          6          0 |        20
              Other |         0          3          2          0 |         5
Other non encampmen.. |         4         41         35          0 |        80
Outside public spac.. |         1         22         19          0 |        42
Within 2 blocks of .. |         0          1          2          0 |         3
interior public spa.. |         0          1          0          0 |         1
--------------------+-------------------------------------------+----------
              Total |        11        103         82          2 |       198

          Pearson chi2(27) =  60.3942   Pr = 0.000
```

```
.
. asdoc tabulate location threateningparty, chi2
(File Myfile.doc already exists, option append was assumed)

                    |                __000001
           __000000 | Multiple     Patient  Single by    Unknown |     Total
--------------------+-------------------------------------------+----------
Designated High Risk  |         0          1          2          0 |         3
          Encampment |         4          2          4          0 |        10
         Fire Station |         1          1          1          1 |         4
Interior private spac |         0         18         11          1 |        30
Interior public space |         1         13          6          0 |        20
                Other |         0          3          2          0 |         5
Other non encampment  |         4         41         35          0 |        80
Outside public space  |         1         22         19          0 |        42
Within 2 blocks of De |         0          1          2          0 |         3
interior public space |         0          1          0          0 |         1
--------------------+-------------------------------------------+----------
                Total |        11        103         82          2 |       198

         Pearson chi2(27) =  60.3942   Pr = 0.000
Click to Open File:  Myfile.doc

.
.
.
. *Descriptive Stats Tables

.
. *year1

.
. import delimited "C:\Users\machadk\OneDrive - City of
Seattle\Desktop\SFDQA\Personal\MPH\Practicu
> m\Stata\year1.csv", varnames(1) encoding(UTF-8)
no; data in memory would be lost
r(4);

.
.
.
. save "C:\Users\machadk\OneDrive - City of
Seattle\Desktop\SFDQA\Personal\MPH\Practicum\Stata\year
> 1.dta", replace
```

```
file C:\Users\machadk\OneDrive - City of
Seattle\Desktop\SFDQA\Personal\MPH\Practicum\Stata\year1.d
> ta saved

.
.
.
. *year2

.
.
.
. import delimited "C:\Users\machadk\OneDrive - City of
Seattle\Desktop\SFDQA\Personal\MPH\Practicu
> m\Stata\year2.csv", varnames(1) encoding(UTF-8)
no; data in memory would be lost
r(4);

.
.
.
. save "C:\Users\machadk\OneDrive - City of
Seattle\Desktop\SFDQA\Personal\MPH\Practicum\Stata\year
> 2.dta", replace
file C:\Users\machadk\OneDrive - City of
Seattle\Desktop\SFDQA\Personal\MPH\Practicum\Stata\year2.d
> ta saved

.
.
.
. clear all

.
. use "C:\Users\machadk\OneDrive - City of
Seattle\Desktop\SFDQA\Personal\MPH\Practicum\Stata\year1
> .dta", replace

.
. preserve
already preserved
r(621);

.
.
.
```

```
. *OR

.
. clear all

.
. use "C:\Users\machadk\OneDrive - City of
Seattle\Desktop\SFDQA\Personal\MPH\Practicum\Stata\year2
> .dta"

.
. preserve
already preserved
r(621);

. clear all

. **BY YEAR

.
. *unit

.
. drop unitcombined
no variables defined
r(111);

.
. drop unit4
no variables defined
r(111);

.
. reshape long unit, i(ino) j(unit_number)
no variables defined
r(111);

.
. tabulate unit_number, sort
no variables defined
r(111);

.
. bysort unit: gen freq_unit = _N
no variables defined
r(111);
```

```
.
. sort freq_unit unit
no variables defined
r(111);

.
. asdoc tabulate unit, sort
(File Myfile.doc already exists, option append was assumed)
no variables defined
r(111);

.
.
.
. restore

.
. preserve

.
.
.
. *assault*

.
. drop assault5

.
. reshape long assault, i(ino) j(assault_number)
(note: j = 1 2 3 4)

Data                               wide   ->   long
-----------------------------------------------------------------------------
Number of obs.                      198   ->     792
Number of variables                  19   ->      17
j variable (4 values)                     ->   assault_number
xij variables:
        assault1 assault2 ... assault4   ->   assault
-----------------------------------------------------------------------------


.
. tabulate assault_number, sort

assault_num |
       ber |      Freq.     Percent        Cum.
```

```
------------+-----------------------------------
          1 |        198       25.00       25.00
          2 |        198       25.00       50.00
          3 |        198       25.00       75.00
          4 |        198       25.00      100.00
------------+-----------------------------------
      Total |        792      100.00
```

```
. 
. bysort assault: gen freq_assault = _N

. 
. sort freq_assault assault

. 
. asdoc tabulate assault, sort
(File Myfile.doc already exists, option append was assumed)

          __000000 |      Freq.     Percent        Cum.
-------------------+-----------------------------------
   Physical contact |         59       16.21       16.21
Threatening posture |        137       37.64       53.85
            Verbal |        138       37.91       91.76
 Weapons brandished |         21        5.77       97.53
      Weapons used |          9        2.47      100.00
-------------------+-----------------------------------
             Total |        364      100.00
Click to Open File:  Myfile.doc

. 
. 
. 
. restore

. 
. preserve

. 
. 
. 
. *actions

. 
. reshape long actions, i(ino) j(actions_number)
(note: j = 1 2 3 4 5)
```

```
Data                               wide   ->   long
-----------------------------------------------------------------------------
Number of obs.                      198   ->    990
Number of variables                  20   ->     17
j variable (5 values)                     ->   actions_number
xij variables:
        actions1 actions2 ... actions5   ->   actions
-----------------------------------------------------------------------------


. 
. tabulate actions_number, sort

actions_num |
       ber |      Freq.     Percent        Cum.
-----------+-----------------------------------
         1 |        198       20.00       20.00
         2 |        198       20.00       40.00
         3 |        198       20.00       60.00
         4 |        198       20.00       80.00
         5 |        198       20.00      100.00
-----------+-----------------------------------
     Total |        990      100.00

. 
. bysort actions: gen freq_actions = _N

. 
. sort freq_actions actions

. 
. asdoc tabulate actions, sort
(File Myfile.doc already exists, option append was assumed)

                          __000000 |      Freq.     Percent        Cum.
-----------------------------------+-----------------------------------
                Aggressor walked away |          1        0.28        0.28
Assisted staff in herding the individua |          1        0.28        0.55
         Attempted to diffuse verbally |          2        0.55        1.11
                             B7 and H3 |          1        0.28        1.39
Bystander shoved person out of the way  |          1        0.28        1.66
Camp members verbally threatened man an |          1        0.28        1.94
Continued driving Code Red to our MED6  |          1        0.28        2.22
               Continued driving away |          1        0.28        2.49
Continued driving away from scene, SPD  |          1        0.28        2.77
                Continued on response |          1        0.28        3.05
        Diffused verbally and resolved |         51       14.13       17.17
```

```
          Diffused verbally initially |          1        0.28       17.45
E25 heard the radio transmission reques |          1        0.28       17.73
              Fast Backup requested |          1        0.28       18.01
               HELP THE FIREFIGHTER |          1        0.28       18.28
    Law Enforcement already on scene. |          1        0.28       18.56
Other bystanders came to verbal and phy |          1        0.28       18.84
                  PT Restrained  |          1        0.28       19.11
     Physical contact with assailant |         19        5.26       24.38
  Put a spit sock on the patients head |          1        0.28       24.65
    Put out the rubbish fire and left. |          1        0.28       24.93
Refrained from further interview, PT pe |          1        0.28       25.21
          Requested Law Enforcement |         83       22.99       48.20
     Requested additional SFD units  |         22        6.09       54.29
Requested scene secure prior to arrival |          1        0.28       54.57
               Restrained Patient |          1        0.28       54.85
Retreated to area of refuge at the scen |         29        8.03       62.88
SPD was on scene and they walked him aw |          1        0.28       63.16
SPD was on scene for another person tha |          1        0.28       63.43
Separated security guard, talked pt dow |          1        0.28       63.71
    Theft, reported to PD - 23-324564 |          1        0.28       63.99
Threatening party/assailant left the sc |         40       11.08       75.07
          Tried to talk to civilian |          1        0.28       75.35
Was de-escalated then second party esca |          1        0.28       75.62
          Withdrawal from the scene |         53       14.68       90.30
Worked with Law Enforcement already on  |         30        8.31       98.61
application of full restraints and spit |          1        0.28       98.89
   chemically restrained with sedative |          1        0.28       99.17
requested expedite SPD, maintained dist |          1        0.28       99.45
stayed in apt. until we determined, No  |          1        0.28       99.72
we let them rob him so they would let u |          1        0.28      100.00
----------------------------------------+-----------------------------------
                          Total |        361      100.00
Click to Open File:  Myfile.doc

.
.
.
. restore

.
. preserve

.
.
.
. *location
```

```
.
. tabulate location, sort

                          location |      Freq.     Percent        Cum.
-----------------------------------+-----------------------------------
Other non encampment outdoor public s.. |         80       40.40       40.40
Outside public space ex, sidewalk , p.. |         42       21.21       61.62
Interior private space, ex home, apar.. |         30       15.15       76.77
Interior public space, ex business, c.. |         20       10.10       86.87
                       Encampment |         10        5.05       91.92
                            Other |          5        2.53       94.44
                      Fire Station |          4        2.02       96.46
 Designated High Risk Environment (HRE) |          3        1.52       97.98
     Within 2 blocks of Designated HRE |          3        1.52       99.49
interior public space and outside sam.. |          1        0.51      100.00
-----------------------------------+-----------------------------------
                            Total |        198      100.00

.
. bysort location: gen freq_location = _N

.
. sort freq_location location

.
. asdoc tabulate location, sort
(File Myfile.doc already exists, option append was assumed)

                         __000000 |      Freq.     Percent        Cum.
-----------------------------------+-----------------------------------
 Designated High Risk Environment (HRE) |          3        1.52        1.52
                       Encampment |         10        5.05        6.57
                      Fire Station |          4        2.02        8.59
Interior private space, ex home, apartm |         30       15.15       23.74
Interior public space, ex business, cou |         20       10.10       33.84
                            Other |          5        2.53       36.36
Other non encampment outdoor public spa |         80       40.40       76.77
Outside public space ex, sidewalk , par |         42       21.21       97.98
     Within 2 blocks of Designated HRE |          3        1.52       99.49
interior public space and outside same  |          1        0.51      100.00
-----------------------------------+-----------------------------------
                            Total |        198      100.00
Click to Open File:  Myfile.doc

.
```

```
.
.
. restore

.
. preserve

.
.
.
. *threateningparty

.
. tabulate threateningparty, sort

  threateningparty |      Freq.     Percent        Cum.
-------------------+-----------------------------------
           Patient |        103       52.02       52.02
  Single bystander |         82       41.41       93.43
Multiple bystanders |         11        5.56       98.99
           Unknown |          2        1.01      100.00
-------------------+-----------------------------------
             Total |        198      100.00

.
. bysort threateningparty: gen freq_threateningparty = _N

.
. sort freq_threateningparty threateningparty

.
. asdoc tabulate threateningparty, sort
(File Myfile.doc already exists, option append was assumed)

         __000000 |      Freq.     Percent        Cum.
-------------------+-----------------------------------
Multiple bystanders |         11        5.56        5.56
           Patient |        103       52.02       57.58
  Single bystander |         82       41.41       98.99
           Unknown |          2        1.01      100.00
-------------------+-----------------------------------
             Total |        198      100.00
Click to Open File:  Myfile.doc

.
.
```

```
. restore

.
. preserve

.
. . use "C:\Users\machadk\OneDrive - City of
Seattle\Desktop\SFDQA\Personal\MPH\Practicum\Stata\ATB_
> final.dta"

.
. preserve

.
. tabulate location threateningparty

                    |            threateningparty
           location | Multipl..    Patient  Single ..    Unknown |     Total
--------------------+----------------------------------------+----------
Designated High Ris.. |         0          1          2          0 |         3
          Encampment |         4          2          4          0 |        10
        Fire Station |         1          1          1          1 |         4
Interior private sp.. |         0         18         11          1 |        30
Interior public spa.. |         1         13          6          0 |        20
               Other |         0          3          2          0 |         5
Other non encampmen.. |         4         41         35          0 |        80
Outside public spac.. |         1         22         19          0 |        42
Within 2 blocks of .. |         0          1          2          0 |         3
interior public spa.. |         0          1          0          0 |         1
--------------------+----------------------------------------+----------
               Total |        11        103         82          2 |       198

.
. tabulate location threateningparty, chi2

                    |            threateningparty
           location | Multipl..    Patient  Single ..    Unknown |     Total
--------------------+----------------------------------------+----------
Designated High Ris.. |         0          1          2          0 |         3
          Encampment |         4          2          4          0 |        10
        Fire Station |         1          1          1          1 |         4
Interior private sp.. |         0         18         11          1 |        30
Interior public spa.. |         1         13          6          0 |        20
               Other |         0          3          2          0 |         5
Other non encampmen.. |         4         41         35          0 |        80
Outside public spac.. |         1         22         19          0 |        42
```

```
Within 2 blocks of .. |         0          1          2          0 |         3
interior public spa.. |         0          1          0          0 |         1
----------------------+----------------------------------------+----------
                Total |        11        103         82          2 |       198

          Pearson chi2(27) =  60.3942   Pr = 0.0002

.
. asdoc tabulate location threateningparty, chi2
(File Myfile.doc already exists, option append was assumed)

                      |                __000001
             __000000 | Multiple     Patient  Single by    Unknown |     Total
----------------------+----------------------------------------+----------
Designated High Risk  |         0          1          2          0 |         3
           Encampment |         4          2          4          0 |        10
          Fire Station |         1          1          1          1 |         4
Interior private spac |         0         18         11          1 |        30
Interior public space |         1         13          6          0 |        20
                Other |         0          3          2          0 |         5
Other non encampment  |         4         41         35          0 |        80
Outside public space  |         1         22         19          0 |        42
Within 2 blocks of De |         0          1          2          0 |         3
interior public space |         0          1          0          0 |         1
----------------------+----------------------------------------+----------
                Total |        11        103         82          2 |       198

          Pearson chi2(27) =  60.3942   Pr = 0.0002
Click to Open File:  Myfile.doc

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*************************************************************************
*

.
.
.
. *unit

.
. reshape long unit, i(ino) j(unit_number)
```

(note: j = 1 2 3 4)

```
Data                               wide   ->   long
-----------------------------------------------------------------------------
Number of obs.                      198   ->     792
Number of variables                  20   ->      18
j variable (4 values)                     ->   unit_number
xij variables:
                unit1 unit2 ... unit4   ->   unit
-----------------------------------------------------------------------------
```

```
.
. tabulate unit, sort

      unit |      Freq.     Percent        Cum.
-----------+-----------------------------------
       A10 |         30       11.63       11.63
        A5 |         17        6.59       18.22
       E30 |         17        6.59       24.81
       E17 |         16        6.20       31.01
       E10 |         12        4.65       35.66
        M1 |          8        3.10       38.76
        E5 |          7        2.71       41.47
        A2 |          6        2.33       43.80
       A25 |          6        2.33       46.12
       E31 |          6        2.33       48.45
       E38 |          6        2.33       50.78
        E6 |          6        2.33       53.10
        E8 |          6        2.33       55.43
        B2 |          4        1.55       56.98
       M10 |          4        1.55       58.53
       E11 |          4        1.55       60.08
       E18 |          4        1.55       61.63
       E24 |          4        1.55       63.18
       E33 |          4        1.55       64.73
       E10 |          3        1.16       65.89
        L1 |          3        1.16       67.05
        M1 |          3        1.16       68.22
       M17 |          3        1.16       69.38
       E28 |          3        1.16       70.54
       E39 |          3        1.16       71.71
       E40 |          3        1.16       72.87
        E9 |          3        1.16       74.03
        L1 |          3        1.16       75.19
        L4 |          3        1.16       76.36
        L5 |          3        1.16       77.52
```

M17	3	1.16	78.68
AIR10	2	0.78	79.46
B6	2	0.78	80.23
B7	2	0.78	81.01
E25	2	0.78	81.78
L5	2	0.78	82.56
A31	2	0.78	83.33
E16	2	0.78	84.11
E22	2	0.78	84.88
E25	2	0.78	85.66
E35	2	0.78	86.43
H1	2	0.78	87.21
L12	2	0.78	87.98
L9	2	0.78	88.76
A5	1	0.39	89.15
B4	1	0.39	89.53
B5	1	0.39	89.92
E16	1	0.39	90.31
E28	1	0.39	90.70
E32	1	0.39	91.09
L12	1	0.39	91.47
L13	1	0.39	91.86
L3	1	0.39	92.25
L9	1	0.39	92.64
M28	1	0.39	93.02
A4	1	0.39	93.41
E13	1	0.39	93.80
E2	1	0.39	94.19
E21	1	0.39	94.57
E26	1	0.39	94.96
E29	1	0.39	95.35
E3	1	0.39	95.74
E34	1	0.39	96.12
E36	1	0.39	96.51
E37	1	0.39	96.90
H2	1	0.39	97.29
H99	1	0.39	97.67
L11	1	0.39	98.06
L13	1	0.39	98.45
L8	1	0.39	98.84
M10	1	0.39	99.22
M26	1	0.39	99.61
M32	1	0.39	100.00
Total	258	100.00	

```
.
. bysort unit: gen freq = _N

.
. sort freq unit

.
. *collapse (first) freq, by(unit)

.
. save "C:\Users\machadk\OneDrive - City of
Seattle\Desktop\SFDQA\Personal\MPH\Practicum\Stata\unit
> _frequency.dta", replace
file C:\Users\machadk\OneDrive - City of
Seattle\Desktop\SFDQA\Personal\MPH\Practicum\Stata\unit_fr
> equency.dta saved

.
. export excel unit freq using "unit_frequencies.xlsx", firstrow(variables) replace
file unit_frequencies.xlsx saved

.
.
.
. restore

.
. preserve

.
.
.
. *assault_category

.
. reshape long assault, i(ino) j(assault_number)
(note: j = 1 2 3 4 5)

Data                               wide   ->   long
-----------------------------------------------------------------------------
Number of obs.                     198   ->     990
Number of variables                 20   ->      17
j variable (5 values)                   ->   assault_number
xij variables:
        assault1 assault2 ... assault5   ->   assault
-----------------------------------------------------------------------------
```

```
.
. tabulate assault_number, sort

assault_num |
       ber |      Freq.     Percent        Cum.
-----------+-----------------------------------
         1 |        198       20.00       20.00
         2 |        198       20.00       40.00
         3 |        198       20.00       60.00
         4 |        198       20.00       80.00
         5 |        198       20.00      100.00
-----------+-----------------------------------
     Total |        990      100.00

.
. bysort assault: gen freq = _N

.
. sort freq assault

.
. asdoc tabulate assault, sort
(File Myfile.doc already exists, option append was assumed)

          __000000 |      Freq.     Percent        Cum.
-------------------+-----------------------------------
   Physical contact |         59       16.16       16.16
Threatening posture |        137       37.53       53.70
            Verbal |        138       37.81       91.51
 Weapons brandished |         21        5.75       97.26
      Weapons used |         10        2.74      100.00
-------------------+-----------------------------------
             Total |        365      100.00
Click to Open File:  Myfile.doc

.
.
.
. *collapse (first) freq, by(assault)

.
. save "C:\Users\machadk\OneDrive - City of
Seattle\Desktop\SFDQA\Personal\MPH\Practicum\Stata\assa
> ult_frequency.dta", replace
```

```
file C:\Users\machadk\OneDrive - City of
Seattle\Desktop\SFDQA\Personal\MPH\Practicum\Stata\assault
> _frequency.dta saved

.
. export excel assault freq using "assault_frequencies.xlsx", firstrow(variables) replace
file assault_frequencies.xlsx saved

.
.
.
. restore

.
. preserve

.
.
.
. *actions

.
. reshape long actions, i(ino) j(actions_number)
(note: j = 1 2 3 4 5)

Data                               wide   ->   long
-----------------------------------------------------------------------------
Number of obs.                     198   ->     990
Number of variables                 20   ->      17
j variable (5 values)                   ->   actions_number
xij variables:
        actions1 actions2 ... actions5   ->   actions
-----------------------------------------------------------------------------

.
. tabulate actions_number, sort

actions_num |
       ber |      Freq.     Percent        Cum.
------------+-----------------------------------
         1 |        198       20.00       20.00
         2 |        198       20.00       40.00
         3 |        198       20.00       60.00
         4 |        198       20.00       80.00
         5 |        198       20.00      100.00
------------+-----------------------------------
```

```
      Total |        990      100.00

.
. bysort actions: gen freq = _N

.
. sort freq actions

.
. collapse (first) freq, by(actions)

.
. save "C:\Users\machadk\OneDrive - City of
Seattle\Desktop\SFDQA\Personal\MPH\Practicum\Stata\acti
> ons_frequency.dta", replace
file C:\Users\machadk\OneDrive - City of
Seattle\Desktop\SFDQA\Personal\MPH\Practicum\Stata\actions
> _frequency.dta saved

.
. export excel actions freq using "actions_frequencies.xlsx", firstrow(variables) replace
file actions_frequencies.xlsx saved

.
.
.
. restore

.
. preserve

.
.
.
. *location

.
. tabulate location, sort

                           location |      Freq.     Percent        Cum.
------------------------------------+-----------------------------------
Other non encampment outdoor public s.. |         80       40.40       40.40
Outside public space ex, sidewalk , p.. |         42       21.21       61.62
Interior private space, ex home, apar.. |         30       15.15       76.77
Interior public space, ex business, c.. |         20       10.10       86.87
                         Encampment |         10        5.05       91.92
```

```
                            Other |          5        2.53       94.44
                       Fire Station |          4        2.02       96.46
 Designated High Risk Environment (HRE) |          3        1.52       97.98
     Within 2 blocks of Designated HRE |          3        1.52       99.49
interior public space and outside sam.. |          1        0.51      100.00
----------------------------------------+-----------------------------------
                            Total |        198      100.00

.
. bysort location: gen freq = _N

.
. sort freq location

.
. collapse (first) freq, by(location)

.
. save "C:\Users\machadk\OneDrive - City of
Seattle\Desktop\SFDQA\Personal\MPH\Practicum\Stata\loca
> tion_frequency.dta", replace
file C:\Users\machadk\OneDrive - City of
Seattle\Desktop\SFDQA\Personal\MPH\Practicum\Stata\locatio
> n_frequency.dta saved

.
. export excel location freq using "location_frequencies.xlsx", firstrow(variables) replace
file location_frequencies.xlsx saved

.
.
.
. restore

.
. preserve

.
.
.
. *threateningparty

.
. tabulate threateningparty, sort

   threateningparty |      Freq.     Percent        Cum.
```

```
--------------------+-----------------------------------
           Patient |        103       52.02       52.02
   Single bystander |         82       41.41       93.43
Multiple bystanders |         11        5.56       98.99
           Unknown |          2        1.01      100.00
--------------------+-----------------------------------
             Total |        198      100.00

.
. bysort threateningparty: gen freq = _N

.
. sort freq threateningparty

.
. collapse (first) freq, by(threateningparty)

.
. save "C:\Users\machadk\OneDrive - City of
Seattle\Desktop\SFDQA\Personal\MPH\Practicum\Stata\thre
> ateningparty_frequency.dta", replace
file C:\Users\machadk\OneDrive - City of
Seattle\Desktop\SFDQA\Personal\MPH\Practicum\Stata\threate
> ningparty_frequency.dta saved

.
. export excel threateningparty freq using "threateningparty_frequencies.xlsx",
firstrow(variables)
>  replace
file threateningparty_frequencies.xlsx saved

.
.
.
. restore

.
. preserve

. restore

. clear all

. *CAD - Exposure Ratios

.
```

```
.
.
. use "C:\Users\machadk\OneDrive - City of
Seattle\Desktop\SFDQA\Personal\MPH\Practicum\Stata\CAD V
> ehicles (2017-2024).dta"

.
. gen double arrival = clock(time_arrivedatscene, "MDYhms")
(264,987 missing values generated)

.
. format arrival %tc

.
. sort arrival

.
.
.
. drop if _n >= 1200864
(311,790 observations deleted)

.
. keep if _n >= 886637
(886,636 observations deleted)

.
.
.
. keep master_incident_number radio_name arrival

.
. drop if arrival == .
(0 observations deleted)

.
. duplicates drop

Duplicates in terms of all variables

(24,300 observations deleted)

.
. tab radio

 Radio_Name |      Freq.     Percent        Cum.
```

A1	6	0.00	0.00
A10	10,824	3.73	3.74
A14	2,010	0.69	4.43
A17	45	0.02	4.44
A18	196	0.07	4.51
A2	10,970	3.78	8.30
A25	12,288	4.24	12.53
A26	439	0.15	12.69
A31	3,829	1.32	14.01
A4	6,473	2.23	16.24
A5	10,842	3.74	19.98
A83	1	0.00	19.98
A84	7	0.00	19.98
A86	249	0.09	20.07
A87	10	0.00	20.07
AIR 240-260	4	0.00	20.07
AIR10	398	0.14	20.21
AIR240	8	0.00	20.21
AIR26	21	0.01	20.22
AIR260	37	0.01	20.23
B2	1,801	0.62	20.85
B4	634	0.22	21.07
B44	1	0.00	21.07
B4591	1	0.00	21.07
B5	1,195	0.41	21.48
B55	8	0.00	21.49
B6	1,199	0.41	21.90
B66	2	0.00	21.90
B7	538	0.19	22.09
B77	2	0.00	22.09
CHAP4	11	0.00	22.09
CHAP5	52	0.02	22.11
CHAP6	14	0.00	22.11
CHAP7	45	0.02	22.13
CHAP8	1	0.00	22.13
COMVAN	3	0.00	22.13
DECON1	4	0.00	22.13
DEP1	409	0.14	22.27
DEP11	1	0.00	22.27
DEP2	2	0.00	22.27
E10	6,566	2.26	24.54
E11	3,682	1.27	25.81
E13	4,492	1.55	27.36
E16	4,380	1.51	28.87
E17	7,512	2.59	31.46

E18	5,391	1.86	33.32
E2	7,432	2.56	35.88
E20	3,118	1.08	36.96
E21	3,658	1.26	38.22
E22	2,573	0.89	39.11
E24	6,447	2.22	41.33
E25	7,510	2.59	43.92
E26	2,200	0.76	44.68
E27	2,521	0.87	45.55
E28	7,155	2.47	48.02
E29	3,185	1.10	49.12
E30	6,449	2.22	51.34
E31	6,865	2.37	53.71
E32	3,937	1.36	55.07
E33	5,173	1.78	56.85
E34	2,087	0.72	57.57
E35	3,648	1.26	58.83
E36	2,363	0.82	59.64
E37	4,641	1.60	61.24
E38	4,107	1.42	62.66
E39	6,218	2.14	64.81
E40	3,382	1.17	65.97
E41	1,852	0.64	66.61
E5	6,337	2.19	68.80
E6	6,379	2.20	71.00
E8	3,863	1.33	72.33
E80	1	0.00	72.33
E85	1	0.00	72.33
E9	4,392	1.51	73.85
E90	11	0.00	73.85
E91	21	0.01	73.86
ENERGY1	9	0.00	73.86
EVENT1	2	0.00	73.86
EVENT10	75	0.03	73.89
EVENT11	265	0.09	73.98
EVENT12	322	0.11	74.09
EVENT13	327	0.11	74.20
EVENT14	73	0.03	74.23
EVENT15	43	0.01	74.24
EVENT16	1	0.00	74.24
EVENT19	1	0.00	74.24
EVENT2	1	0.00	74.24
EVENT20	2	0.00	74.24
EVENT4	4	0.00	74.24
FAC	43	0.01	74.26
FAC1	14	0.00	74.26

FAC6	3	0.00	74.26
FB1	38	0.01	74.28
FB2	68	0.02	74.30
FB3	11	0.00	74.31
FB4	25	0.01	74.31
FIREBOAT	60	0.02	74.33
H1	1,173	0.40	74.74
H2	809	0.28	75.02
H3	194	0.07	75.09
H99	284	0.10	75.18
HAZ1	78	0.03	75.21
HAZ80	30	0.01	75.22
HOSE18	1	0.00	75.22
HUSKY1	3	0.00	75.22
L1	4,495	1.55	76.77
L10	5,028	1.73	78.51
L11	2,118	0.73	79.24
L12	3,181	1.10	80.33
L13	1,980	0.68	81.02
L3	3,287	1.13	82.15
L4	5,258	1.81	83.96
L5	3,873	1.34	85.30
L6	1,531	0.53	85.83
L8	2,685	0.93	86.75
L81	2	0.00	86.75
L83	1	0.00	86.76
L9	4,520	1.56	88.31
M1	5,953	2.05	90.37
M10	5,774	1.99	92.36
M17	3,551	1.22	93.58
M18	2,188	0.75	94.34
M26	1,034	0.36	94.70
M28	2,998	1.03	95.73
M31	3,774	1.30	97.03
M32	2,601	0.90	97.93
M44	1,400	0.48	98.41
M45	1	0.00	98.41
M4731	1	0.00	98.41
MAB1	33	0.01	98.42
MAR5	675	0.23	98.66
MAR50	5	0.00	98.66
MAR99	1	0.00	98.66
MCI1	2	0.00	98.66
MIH	23	0.01	98.67
MIS1	1	0.00	98.67
MRN1	30	0.01	98.68

MRN80	1	0.00	98.68
MVU1	29	0.01	98.69
P25	36	0.01	98.70
PIO	98	0.03	98.73
PIO2	4	0.00	98.74
PIO3	1	0.00	98.74
PTRL4	27	0.01	98.74
R1	2,043	0.70	99.45
R80	1	0.00	99.45
RB5	42	0.01	99.46
REHAB1	171	0.06	99.52
SAFT2	738	0.25	99.78
SQ10	5	0.00	99.78
SQ14	20	0.01	99.79
SQ40	2	0.00	99.79
SQ51	1	0.00	99.79
STAF10	433	0.15	99.94
TRN01	3	0.00	99.94
TRN02	4	0.00	99.94
TRN03	1	0.00	99.94
TRN04	2	0.00	99.94
TRN05	3	0.00	99.94
TRN06	4	0.00	99.94
TRN07	2	0.00	99.94
TRNB2	29	0.01	99.95
TRNB3	11	0.00	99.96
TRNB4	28	0.01	99.97
TRNB5	25	0.01	99.98
TRNB6	30	0.01	99.99
TRNB7	24	0.01	99.99
VAULT1	17	0.01	100.00
Total	289,927	100.00	

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. asdoc tabulate radio_name
(File Myfile.doc already exists, option append was assumed)

Radio_Name	Freq.	Percent	Cum.
A1	6	0.00	0.00
A10	10,824	3.73	3.74
A14	2,010	0.69	4.43
A17	45	0.02	4.44
A18	196	0.07	4.51
A2	10,970	3.78	8.30

A25	12,288	4.24	12.53
A26	439	0.15	12.69
A31	3,829	1.32	14.01
A4	6,473	2.23	16.24
A5	10,842	3.74	19.98
A83	1	0.00	19.98
A84	7	0.00	19.98
A86	249	0.09	20.07
A87	10	0.00	20.07
AIR 240-260	4	0.00	20.07
AIR10	398	0.14	20.21
AIR240	8	0.00	20.21
AIR26	21	0.01	20.22
AIR260	37	0.01	20.23
B2	1,801	0.62	20.85
B4	634	0.22	21.07
B44	1	0.00	21.07
B4591	1	0.00	21.07
B5	1,195	0.41	21.48
B55	8	0.00	21.49
B6	1,199	0.41	21.90
B66	2	0.00	21.90
B7	538	0.19	22.09
B77	2	0.00	22.09
CHAP4	11	0.00	22.09
CHAP5	52	0.02	22.11
CHAP6	14	0.00	22.11
CHAP7	45	0.02	22.13
CHAP8	1	0.00	22.13
COMVAN	3	0.00	22.13
DECON1	4	0.00	22.13
DEP1	409	0.14	22.27
DEP11	1	0.00	22.27
DEP2	2	0.00	22.27
E10	6,566	2.26	24.54
E11	3,682	1.27	25.81
E13	4,492	1.55	27.36
E16	4,380	1.51	28.87
E17	7,512	2.59	31.46
E18	5,391	1.86	33.32
E2	7,432	2.56	35.88
E20	3,118	1.08	36.96
E21	3,658	1.26	38.22
E22	2,573	0.89	39.11
E24	6,447	2.22	41.33
E25	7,510	2.59	43.92

E26	2,200	0.76	44.68
E27	2,521	0.87	45.55
E28	7,155	2.47	48.02
E29	3,185	1.10	49.12
E30	6,449	2.22	51.34
E31	6,865	2.37	53.71
E32	3,937	1.36	55.07
E33	5,173	1.78	56.85
E34	2,087	0.72	57.57
E35	3,648	1.26	58.83
E36	2,363	0.82	59.64
E37	4,641	1.60	61.24
E38	4,107	1.42	62.66
E39	6,218	2.14	64.81
E40	3,382	1.17	65.97
E41	1,852	0.64	66.61
E5	6,337	2.19	68.80
E6	6,379	2.20	71.00
E8	3,863	1.33	72.33
E80	1	0.00	72.33
E85	1	0.00	72.33
E9	4,392	1.51	73.85
E90	11	0.00	73.85
E91	21	0.01	73.86
ENERGY1	9	0.00	73.86
EVENT1	2	0.00	73.86
EVENT10	75	0.03	73.89
EVENT11	265	0.09	73.98
EVENT12	322	0.11	74.09
EVENT13	327	0.11	74.20
EVENT14	73	0.03	74.23
EVENT15	43	0.01	74.24
EVENT16	1	0.00	74.24
EVENT19	1	0.00	74.24
EVENT2	1	0.00	74.24
EVENT20	2	0.00	74.24
EVENT4	4	0.00	74.24
FAC	43	0.01	74.26
FAC1	14	0.00	74.26
FAC6	3	0.00	74.26
FB1	38	0.01	74.28
FB2	68	0.02	74.30
FB3	11	0.00	74.31
FB4	25	0.01	74.31
FIREBOAT	60	0.02	74.33
H1	1,173	0.40	74.74

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L12	3,181	1.10	80.33
L13	1,980	0.68	81.02
L3	3,287	1.13	82.15
L4	5,258	1.81	83.96
L5	3,873	1.34	85.30
L6	1,531	0.53	85.83
L8	2,685	0.93	86.75
L81	2	0.00	86.75
L83	1	0.00	86.76
L9	4,520	1.56	88.31
M1	5,953	2.05	90.37
M10	5,774	1.99	92.36
M17	3,551	1.22	93.58
M18	2,188	0.75	94.34
M26	1,034	0.36	94.70
M28	2,998	1.03	95.73
M31	3,774	1.30	97.03
M32	2,601	0.90	97.93
M44	1,400	0.48	98.41
M45	1	0.00	98.41
M4731	1	0.00	98.41
MAB1	33	0.01	98.42
MAR5	675	0.23	98.66
MAR50	5	0.00	98.66
MAR99	1	0.00	98.66
MCI1	2	0.00	98.66
MIH	23	0.01	98.67
MIS1	1	0.00	98.67
MRN1	30	0.01	98.68
MRN80	1	0.00	98.68
MVU1	29	0.01	98.69
P25	36	0.01	98.70
PIO	98	0.03	98.73
PIO2	4	0.00	98.74
PIO3	1	0.00	98.74
PTRL4	27	0.01	98.74

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        R1 |      2,043        0.70       99.45
       R80 |          1        0.00       99.45
       RB5 |         42        0.01       99.46
     REHAB1 |        171        0.06       99.52
      SAFT2 |        738        0.25       99.78
       SQ10 |          5        0.00       99.78
       SQ14 |         20        0.01       99.79
       SQ40 |          2        0.00       99.79
       SQ51 |          1        0.00       99.79
     STAF10 |        433        0.15       99.94
      TRN01 |          3        0.00       99.94
      TRN02 |          4        0.00       99.94
      TRN03 |          1        0.00       99.94
      TRN04 |          2        0.00       99.94
      TRN05 |          3        0.00       99.94
      TRN06 |          4        0.00       99.94
      TRN07 |          2        0.00       99.94
      TRNB2 |         29        0.01       99.95
      TRNB3 |         11        0.00       99.96
      TRNB4 |         28        0.01       99.97
      TRNB5 |         25        0.01       99.98
      TRNB6 |         30        0.01       99.99
      TRNB7 |         24        0.01       99.99
     VAULT1 |         17        0.01      100.00
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      Total |    289,927      100.00
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. *289,926 total observations

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