

Emergency Responder Suicidality: An Analysis by Field and Emergency Medical Services Credential

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Abstract

The purpose of this study is to assess the levels of suicidal ideation, planning, access to means, and attempts of emergency responders. Survey requests were sent to all individuals credentialed at any level of emergency medical service provider in the State of Minnesota. Of 29,501 requests, 1,832 surveys were completed for an overall confidence level of 99% with a $\pm 3\%$ margin of error. Analysis was performed taking field of practice and medical credential into account through a series of onesample *t* tests and multiple linear regressions. Results indicate a significantly elevated instance of ideation and planning among all responders regardless of field or credential. Attempt rate analysis produced mixed results. Responders with a suicide plan were significantly more likely to have an increased number of suicidal thoughts, but not attempts. Findings affirm the need to be more vigilant in screening responders for ideation and to recognize an articulated plan may indicate higher risk for psychological distress and suicide.

Key words: *Emergency medical services; Firefighter; Law enforcement; Emergency responder; Suicide*

There were 47,143 suicide deaths in the U.S. in 2017, which makes suicide the tenth leading cause of death in the country (Centers for Disease Control and Prevention, 2020). Suicide rates have been steadily increasing for decades with 50% of states having suicide rate increases by 30% (Stone et al. 2018). Emergency responders are both a part of and a microcosm of our society.

Emergency responders are the safety net the public depends on for saving lives and property and reducing morbidity of injury and illness. Saving responders is akin to an aircraft emergency where putting one's own oxygen mask on before helping the person next to you is essential. The emergency responder community has recognized their need to help themselves in order to help others

with calls for action to prevent suicide among responders. These calls were made by the International Association of Police Chiefs (National Action Alliance for Suicide Prevention, 2014), National Fallen Firefighters Foundation (United States Fire Administration, 2014), and the National EMS Managers Association (Heightman, 2017, 2018). In Minnesota, the location of this study, the Minnesota Ambulance Association also began supporting suicide prevention initiatives among EMS Personnel in 2014.

The research to date has mainly focused on the emergency responder disciplines of the fire service and law enforcement, with single-role (nonfire and nonpolice) emergency medical services (EMS) clinicians and the impact of EMS credential level being relegated to

a lesser amount of study. The majority of the studies to date have been conducted on large urban emergency response agencies with full-time employees. In ascending order, the levels of EMS credential and associated educational preparation and skill level are emergency medical responder (EMR), emergency medical technician (EMT), advanced EMT (AEMT), and paramedic.

Our purpose in conducting this research is account for suicidality among single-role EMS (EMS Only) providers and the impact of EMS credential level. As firefighters and law enforcement officers are an integral part of our EMS system, we keep our sister professions in the analysis.

Method

This quantitative research project began with a social media (Facebook and LinkedIn) campaign soliciting survey participation on October 13, 2017. On October 18, 2017, an e-mail with a request to participate in a voluntary survey on suicidality was sent. The e-mail included a link to an anonymous online survey created on the Eastern Kentucky University (EKU) server and housed on their protected network (see Appendix). Approval for the study and methodology was obtained from the EKU Internal Review Board.

Sample

We e-mailed 29,501 requests for survey participation. Email addresses were obtained from an Emergency Medical Services Regulatory Board (EMS RB) list of individuals credentialed as any level of EMS provider in the State of Minnesota. Of the e-mail requests, 1,167 emails were rejected as being non-existent, leaving 28,334 valid survey deliveries. Three recipients requested removal from the "list" while 1,832 were successfully completed by the end date of December 14, 2017.

Measures

Sociodemographic Variables: The sociodemographic variables we assess include age range, EMS credential level, field of practice, years of experience range, employment status, education level, and military service history.

Suicidality Variables: The suicide-related variables we focus on include presence of ideation during the lifetime, number of ideations, lifetime suicide attempts, number of attempts, presence of a plan, and access to means. There are variables we collected that we are electing to publish in a separate paper. These variables for future publication include presence and number of peer suicide attempts,

presence and number of peer suicide deaths, and a yes/no response as to whether the participant talked to anyone about suicidality—either their own or their peers.

Analysis Methods: We used SPSS version 25 of the IBM statistics software to provide data in terms of counts, means, and standard deviations. We also used this same software to perform one-sample t tests and multiple linear regressions.

Results

Survey Accuracy

Considering the population size ($n = 1,832$, $N = 29,603$), the overall survey has a p -value of 0.01 with a $\pm 3\%$ margin of error. If population sizes by EMS credential level and field of practice are accounted for, the EMR ($n = 637$, $N = 16,749$), EMT ($n = 707$, $N = 9,840$), and paramedic ($n = 443$, $N = 2,957$), portions of the survey each have a p -value of 0.05 with a $\pm 5\%$ margin of error with the AEMT ($n = 57$, $N = 45$) responses having a p -value of 0.05 with a $\pm 7\%$ margin of error. The firefighter ($n = 705$, $N = 15,389$) and law enforcement ($n = 247$, $N = 10,763$) components have a p -value of 0.01 with a $\pm 5\%$ margin of error. The population size of single-role EMS workers (EMS Only) and those working in another unspecified field (Other) cannot be determined due to uncertainty as to where these respondents work, so no survey sample size calculations can be made on those groups.

Participant Demographics: The majority of respondents are age 35-44 with an associate or bachelor's degree and no military service. The majority are credentialed as EMTs, have 20+ years of experience, work in single-role EMS or fire service, and are employed full-time (see Table 1).

Characteristic	<i>n</i>	<i>n%</i>	<i>SD</i>
Age Group			
18 - 24	151	8.2	.275
25 - 34	416	22.8	.419
35 - 44	541	29.5	.456
45 - 54	470	25.7	.437
55 - 64	222	12.1	.326
65+	30	1.6	.127
EMS Credential			
Emergency Medical Responder	637	34.7	.476
Emergency Medical Technician	707	38.6	.487

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Advanced Emergency Medical Technician	45	2.4	.155
Paramedic	443	24.2	.428
Field			
EMS Only	685	37.4	.484
Fire Service	705	38.5	.487
Police	247	13.5	.344
Other	195	10.6	.308
Experience (Years)			
< 1	43	2.4	.151
1 – 3	270	14.7	.355
4 – 7	315	17.2	.377
8 – 10	273	14.9	.356
11 – 15	291	15.9	.366
16 – 20	221	12.1	.326
20+	419	22.9	.420
Employment Status			
Full-time	856	46.7	.499
Part-time	156	8.5	.279
Paid-on-call	317	17.3	.378
Volunteer	503	27.5	.446
Education			
High School	70	3.8	.192
Some College	445	24.3	.429
Associate's	568	31.0	.463
Bachelor's	578	31.6	.465
Master's	143	7.8	.268
Doctorate	28	1.5	.123
Military Service			
Yes	212	11.6	.320
No	1620	88.4	.320

Table 1: Descriptive Statistics for Sample of Emergency Responders ($N = 1,832$).

Suicidality Characteristics: Those credentialed as AEMTs or paramedics have the highest rates of suicidal ideation, planning, and access to means. EMTs have the greatest number of suicide attempts. In regard to field of practice, singlerole EMS (EMS only) and those in the Other category have the highest rates of ideation and planning. Police and Other has the greatest access to their means. Other and singlerole EMS have the greatest number of attempts.

Ideation: A series of onesample t tests were conducted on ideation averages among the sample overall and by EMS credential level and field against the U.S. general population ideation rate of 5.6 to 13.5% (Nock et al., 2008a, 2008b). When analyzed against the lower and higher thresholds of general population ideation, the mean number of ideations (27.8%) reported by emergency responders ($n = 510$) was significantly higher than that of the general population. When analysis by credential level and field was conducted, we found that all credential levels and fields had a significantly higher instance of reported ideation (see Table 3).

Multiple linear regression analysis was used to test if each of the characteristics (see Table 4) significantly predicted the reported number of ideations of emergency responders. The number of reported ideations per responder with ideation ranged from one to five ($M = 3.92$, $SD = 1.412$), with a value of five indicating five or greater ideations in a lifetime. Number of reported ideations was non-normally distributed (Shapiro-Wilks test $p < 0.05$), with moderate skewness of -0.772 ($SE = 0.277$) and platykurtic kurtosis of -1.06 ($SE = 0.548$). The preliminary analysis revealed no violations of the assumption of linearity or homoscedasticity as verified by P-P plot, Q-Q Plot, histogram, and tests of collinearity. The results of the regression indicated that of the three remaining variables used in Model 2, only having a suicide plan is predictive of the number of reported ideations. Having a plan explained 28.9% of the variance ($R^2 = .083$, $F(6.981, 6) = 0.00$, $p = .001$) and significant predicted the number of ideations reported by responders ($\beta = .866$, $p = .001$). Thus, with the exception of having a suicide plan, we reject the alternative hypothesis that a specific list of emergency responder characteristics (see Table 4) is predictive of the number of reported suicidal ideations among responders and accept the null hypothesis that none of the characteristics, except having a plan, predict emergency responder's reported number of suicide attempts.

Plan: Another series of onesample t tests were conducted on the average of number of suicide plans made by respondents (see Table 5). This analysis was again conducted by comparing the mean of those planning overall and by EMS credential level and field against the U.S. general population planning rate of 3.1 to 4% (Nock et al., 2008a, 2008b; Piscopo, Liprari, Cooney, & Glasheen, 2016). When analyzed against the lower and higher thresholds of general population reporting suicide plans, the mean number of plans (12%) reported by emergency responders ($n = 220$) was significantly higher

than that of the general population. When analysis by credential level and field was conducted, we found that all credential levels and fields had a significantly higher instance of reporting having made a suicide plan.

Type	Ideation Plan Means Access Attempts							
	n (%)	SD	n (%)	SD	n (%)	SD	n (%)	SD
Overall	510 (27.8)	.010	220 (12)	.022	303 (16.5)	.012	83 (4.5)	.005
EMS Credential								
EMR	139 (21.8)	.016	50 (7.9)	.041	91 (14.3)	.000	23 (3.7)	.008
EMT	123 (27.8)	.016	84 (11.9)	.037	104 (14.7)	.000	34 (4.8)	.009
AEMT	19 (42.2)	.074	11 (24.4)	.114	10 (22.2)	.114	2 (4.4)	.038
Paramedic	179 (40.4)	.023	75 (16.9)	.038	98 (22.1)	.000	24 (5.4)	.011
Field								
EMS Only	245 (35.8)	.018	109 (15.9)	.032	129 (18.3)	.010	39 (5.7)	.010
Fire	148 (21)	.015	67 (9.5)	.040	96 (13.6)	.019	23 (3.2)	.007
Police	53 (21.5)	.026	11 (4.5)	.057	54 (21.9)	.000	3 (1.2)	.007
Other	64 (32.8)	.034	32 (16.4)	.063	41 (21)	.000	18 (9.2)	.023

Note: EMR = Emergency Medical Responder, EMT = Emergency Medical Technician, AEMT = Advanced Emergency Medical Technician.

Table 2: Descriptive Statistics for Sample of Emergency Responders with Ideation, Plan, Means, and Attempt History.

Type	Lower Range (5.6%)				Upper Range (13.5%)		
	t	M Diff.	95% CI	df*	t	M Diff.	95% CI
Overall	21.231	.222	[.20, .24]	1831	21.231	.143	[.20, .24]
EMS Credential							
EMR	9.904	.162	[.13, .19]	636	9.904	.083	[.13, .19]
EMT	11.662	.189	[.16, .22]	706	11.662	.110	[.16, .22]
AEMT	4.918	.366	[.22, .52]	44	4.918	.287	[.22, .52]
Paramedic	14.912	.348	[.30, .39]	442	14.912	.269	[.30, .39]
Field							
EMS Only	16.460	.302	[.27, .34]	684	16.460	.223	[.27, .34]
Fire	10.029	.154	[.12, .18]	704	10.029	.075	[.12, .18]
Police	6.058	.159	[.11, .21]	246	6.058	.080	[.11, .21]
Other	8.074	.272	[.21, .34]	194	8.074	.193	[.21, .34]

Note: EMR = Emergency Medical Responder, EMT = Emergency Medical Technician, AEMT = Advanced Emergency Medical Technician. *df same for both tests.

Table 3: One-Sample t Test Emergency Responder Reported Ideation Compared to General Population.

Variable	B	SEB	β	B	SEB	β
Suicidality						
Plan	.692 ^a	.226 ^a	.215 ^a	.866 ^a	.146 ^a	.266 ^a
Means	.275	.229	.084			
EMS Credential						
EMR	-.344	.331	-.095			
EMT	-.318	.250				
AEMT	-.994 ^a	.453 ^a		-.674	.407	-.074
Paramedic	^b	^b	^b			
Field						
EMS Only	^b	^b	^b			
Fire Service	.280	.226	.080			
Police	.063	.403	.011			
Other	.052	.323	.010			
Age Group						
18-24	2.291 ^a	1.165 ^a	.517	-.215	.318	-.047
25-34	2.453 ^a	1.148 ^a	.653	-.104	.292	-.028
35-44	2.451 ^a	1.160 ^a	.709	-.338	.283	-.099
45-54	2.670 ^a	1.165 ^a	.679	.045	.297	.012
55-64	2.904 ^a	1.202 ^a	.462			
65+	2.616	1.630	.115			
Experience (Years)						
< 1	1.021	.617	.089			
1 – 3	^b	^b	^b			
4 – 7	-.023	.287	-.005			
8 – 10	-.067	.319	-.015			
11 – 15	-.082	-.082	-.019			
16 – 20	-.500	.362	-.108			
20+	-.016	.395	-.004			
Employment Status						
Full-time	^b	^b	^b			
Part-time	.224	.296	.042			
Paid-on-call	.011	.289	.002			
Volunteer	-.074	.256	-.019			
Education						
High School	-.273	.442	-.032			
Some College	.306	.217	.086			

Associate's	^b	^b	^b			
Bachelor's	.145	.209	.041			
Master's	-.128	.397	-.017			
Doctorate	.563	.674	.043			
Military Service						
Yes	^b	^b	^b			
No	.205	.235	.044			

Note: EMR = Emergency Medical Responder, EMT = Emergency Medical Technician, AEMT = Advanced Emergency Medical Technician. ^a*p* < .05. ^bVariables excluded by SPSS.

Model 1 (*R*² = .134, *F* = 1.980) Model 2 (*R*² = .083, *F* = 6.891)

Table 4: Multiple Linear Regression Analysis for Variable Predicting Number of Suicidal Ideations

Type	Lower Range (3.1%)			df*	Upper Range (4%)		
	<i>t</i>	<i>M Diff.</i>	95% CI		<i>t</i>	<i>M Diff.</i>	95% CI
Overall	18.159	.398	[.36, .44]	509	17.749	.398	[.35, .43]
EMS Credential							
EMR	8.046	.329	[.25, .41]	138	7.826	.320	[.24, .40]
EMT	11.481	.425	[.35, .50]	181	11.238	.416	[.34, .49]
AEMT	4.547	.519	[.28, .76]	19	4.468	.510	[.27, .75]
Paramedic	10.710	.408	[.33, .48]	170	10.473	.399	[.32, .47]
Field							
EMS Only	13.061	.418	[.35, .48]	242	12.779	.409	[.35, .47]
Fire	10.112	.407	[.33, .49]	152	9.888	.398	[.32, .48]
Police	3.157	.181	[.07, .30]	51	3.000	.172	[.06, .29]
Other	7.445	.469	[.34, .59]	63	7.302	.460	[.33, .59]

Note: EMR = Emergency Medical Responder, EMT = Emergency Medical Technician, AEMT = Advanced Emergency Medical Technician. **df* same for both tests.

Table 5: One-Sample *t* Test Emergency Responder Reported Plans Compared to General Population.

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Means. Our search of the literature was unsuccessful in revealing the number of people in the U.S. with suicide plans reporting access to the means of their plan. As a result, we present descriptive statistics only on our findings (see Table 2). Researchers in Australia have found, however; that those in occupations with ready access to means (firearms, medications, carbon monoxide, poisons) are significantly more likely to die by suicide (Milner, Witt, Maheen, & LaMontage, 2017). In the Milner et al. (2017) study, police officers, firefighters, and EMS personnel all made the list of highrisk occupations for suicide secondary to means access (p. 3).

Attempts. One-sample *t* tests were conducted on the mean number of responders reporting an attempt against the lowest percentage of the U.S. general population (1.9%) having reported a suicide attempt (Nock et al., 2008a, 2008b). We discovered the mean number of responders overall ($n = 83$) having reported an attempt (4.5%) was significantly higher than that of the lower reporting end of the general population. When analysis by credential level and field was conducted against the lower threshold, we learned that EMRs, EMTs, paramedics, singlerole EMS providers, and firefighters, and those in the Other category all had significantly higher numbers of reported attempts than the general population. We also discovered that those credentialed as AEMTs and those in the law enforcement field did not have a statistically different rate of reported attempts than the general population on either end of the threshold.

The last series of onesample *t* tests conducted on the mean number of responders reporting an attempt against the highest percentage of the U.S. general population (8.7%) having reported a suicide attempt (Nock et al., 2008a, 2008b). We uncovered that the mean number of overall responders ($n = 83$) having reported a suicide attempt (4.5%) was significantly lower than the upper threshold of the general population reporting an attempt. When analysis by credential level and field was conducted against the lower threshold, we found that EMRs, EMTs, paramedics, singlerole EMS providers, firefighters, and law enforcement all had significantly lower attempt rates than the general population. We further learned that those with an AEMT credential and those in the Other category did not have a number of attempts significantly different than that of the general population.

Type	Lower Range (1.9%)				Upper Range (8.7%)		
	<i>t</i>	<i>M Diff.</i>	95% CI	<i>df</i> *	<i>t</i>	<i>M Diff.</i>	95% CI
Overall	5.736	.030	[.35, .43]	685	-7.167	-.038	[-.05, -.03]
EMS Credential							
EMR	2.489	.020	[.24, .40]	593	-6.094	-.048	[-.06, -.03]
EMT	3.839	.034	[.34, .49]	641	-3.848	-.034	[-.11, -.04]
AEMT	930	.035	[.27, .75]	36	-8.74	-.033	[-.05, -.02]
Paramedic	3.381	.039	[.32, .47]	415	-2.561	-.029	[-.05, -.01]
Field							
EMS Only	4.356	.041	[.35, .47]	628	-2.796	-.027	[-.05, -.01]
Fire	2.263	.016	[.32, .48]	648	-7.099	-.052	[-.07, -.04]
Police	-.816	-.006	[.06, .29]	231	9.964	-.074	[-.09, -.06]
Other	3.618	.082	[.33, .59]	178	.601	.014	[-.03, -.06]

Note: EMR = Emergency Medical Responder, EMT = Emergency Medical Technician, AEMT = Advanced Emergency Medical Technician. **df* same for both tests.

Table 6: One-Sample *t* Test Emergency Responder Reported Suicide Attempts Compared to General Population.

Multiple linear regression analysis was used to test if each of the characteristics (see Table 1) significantly predicted the reported number of suicide attempts of emergency responders. The number of reported attempts per responder in those who had attempted ranged from one to five ($M = 1.83$, $SD = 0.991$) with a value of five indicating five or greater attempts in a lifetime. Number of reported attempts was nonnormally distributed (Shapiro-Wilks test $p < 0.05$), with high skewness of 1.470 ($SE = 0.277$) and leptokurtic kurtosis of 2.355 ($SE = 0.548$). The preliminary analysis revealed no violations of the assumption of linearity or homoscedasticity as verified by P-P plot, QQ plot, histogram, and tests of collinearity. The results of the regression indicated that none of the variables were predictive of the number of reported suicide attempts (Model 2 ANOVA $p = .155$). Thus, we reject the alternative hypothesis that a specific list of emergency responder characteristics (see Table 7) is predictive of the number of reported suicide attempts

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among responders and accept the null hypothesis that none of the characteristics predict emergency responder's reported number of suicide attempts.

Variable	B	SE B	β	B	SE B	β
Suicidality						
Any Ideation	b	b	b			
1 Ideation	-.262	.643	-.060			
2 Ideations	b	b	b			
3 Ideations	.350	.571	.104			
4 Ideations	.549	.620	.126			
5+ Ideations	.092	.464	.044			
Plan	.333	.383	.161			
Means	.363	.470	.165			
EMS Credential						
EMR	-.001	.430	.000			
EMT	b	b	b			
AEMT	.117	1.056	.019			
Paramedic	.005 ^a	.469 ^a	.648 ^a	.424	.264	.182
Field						
EMS Only	b	b	b			
Fire Service	1.098 ^a	.469 ^a	.454 ^a	.517	.270	.216
Police	1.279	1.349	.211			
Other	.486	.463	.181			
Age Group						
18-24	b	b	b			
25-34	-.686	.601	-.284			
35-44	-1.278	.760	-.529			
45-54	-1.036	.689	-.437			
55-64	-1.559	1.975	-.183			
65+	b	b	b			
Experience (Years)						
< 1	-.825	.713	-.166			
1 – 3	b	b	b			
4 – 7	-.600	.702	-.178			
8 – 10	.021 ^a	.736 ^a	.007 ^a	-.260	.361	-.721
11 – 15	-.115	.674	-.044			
16 – 20	-.283	.812	-.084			
20+	.714	.867	.212			
Employment Status						
Full-time	b	b	b			

Part-time	-.644	.935	-.106			
Paid-on-call	.073	.453	.023			
Volunteer	.368	.475	.368			
Education						
High School	-.490	.865	-.081			
Some College	b	b	b			
Associate's	-.473	.391	-.325			
Bachelor's	-.152	.444	-.064			
Master's	-.273	.937	-.055			
Doctorate	b	b	b			
Military Ser-vice						
Yes	-.154	.532	-.046			
No	b	b	b			

Note: EMR = Emergency Medical Responder, EMT = Emergency Medical Technician, AEMT = Advanced Emergency Medical Technician. ^a*p* < .05. ^bVariables excluded by SPSS.

Model 1 (*R*² = .544, *F* = 1.432) Model 2 (*R*² = .065, *F* = 1.796)

Table 7: Multiple Linear Regression Analysis for Variable Predicting Number of Suicide Attempts.

Discussion

The notably high prevalence of suicidal thoughts and planning, coupled with high percentages of self-reported access to the means of the responder's suicide plan, is a disturbing finding. While suicide attempts among responders are less than the general population, it does not mean the suicide death rates are necessarily lower. In a study of the rates of suicide among Minnesota emergency responders, it was discovered that suicide deaths are greater among responders than the public (Caulkins, 2018). Perhaps this is because advanced knowledge of how to enact suicide in a lethal manner has been gained by the repeated exposure of responders to those who have attempted and/or died by suicide. Although there is no variable used in this study that is predictive of increased numbers of responder suicide attempts, the presence of a suicide plan is a strong indicator of more frequent ideation. Thus, mental health practitioners should be aware that responders articulating a plan are likely having increased thoughts of suicide. Treatment of this higher level of psychological distress/pain should be a priority. Results further affirm the need to routinely screen responders for suicidality as they may be at higher risk for suicide than the public they serve.

There are three main limitations of this study. The first is that demographics on sex and race/ethnicity were not collected. According to a report published by the National Highway Traffic Safety Administration (2008), females made up 28% of EMS, 4% of the fire service, and 14% of law enforcement. Non-White workers made up 19% of EMS, 24% of the fire service, and 28% of law enforcement. Limitation two is that ideation and attempt questions were asked in such a way as to imply lifetime occurrence. Occurrence before and after entering the emergency response workforce may yield more valuable information as to whether suicidality was preexisting or potentially a result of emergency response. The third limitation is that we did not determine where the people answering other for field are working. This is an especially glaring limitation as the suicidality of this group is generally much greater than the Other groups. We can only speculate these people may be dispatchers or EMS credentialed people working in a hospital or other healthcare environment.

Appendix

Voluntary/Anonymous Survey of EMS Providers Experience(s) with Suicide

Voluntary statement: This survey is completely voluntary; there will be no adverse actions taken at ECU or any other institution with reference to the completion or incompleteness of this survey.

Anonymous statement: This survey is completely anonymous; no identifiable information is being collected.

Informed consent statement: By starting or completing the survey you are giving informed consent that your responses can be calculated with other responses to test the hypothesis created during this study and used as part of research publications and that you the person to complete the are 18 years of age or older.

Other information about survey:

- This survey is used to determine your experience(s) with EMS provider suicide.
- This survey is to be used for published research.
- Purpose of the research: The purpose of this survey is to assess the number of EMS providers that know of a provider's suicide or have considered or attempted suicide themselves.
- Procedures involved in the research: The research will involve analysis of the survey results.
- Alternatives available should a subject decide not to participate in the research: none

- Foreseeable risks and discomforts to the subject: It is possible that a respondent may experience sadness, stress or suicidal ideation with the completion of this survey. Emergency Interventional services are listed at the end of this disclaimer.
- Benefits of the research to society and possibly to the individual human subject: This study should gain valuable information about the rate of peer suicides and highlight the issues in order to bring meaningful changes to education, EAP and other services for EMS Providers.
- Length of time the subject is expected to participate. Estimated that will require less than 5 minutes to complete the survey.
- Payment for participation: There is no payment for participation.
- Person to contact for answers to questions or in the event of a research-related injury or emergency contact Dr. Wolman
- Participation is voluntary and that refusal to participate will not result in any consequences or any loss of benefits that the person is otherwise entitled to receive
- Participants have the right to confidentiality and right to withdraw from the study at any time without any consequences

Mandatory questions are indicated by an asterisk. Drop down box selects shown after item.

Age *	18-24, 25-34, 35-44, 45-54, 55-64, 65+
EMS Level *	EMR, EMT, AEMT/EMT-I, Paramedic
Geographical State *	Choice of 50 States
Employment Status *	FT, PT, Paid-on-call, Volunteer
Employment Type *	EMS Only, Firefighter/EMS, Police Officer, Other
Years of Experience *	< 11-34-78-1011-1516-2020+
Level of Education*	HS, Some College, Associates, Bachelor, Master, Doctoral
Are you a veteran? *	Yes, No
Are you aware of any peers in EMS that have attempted suicide? *	Yes, No
If yes, how many?	1, 2, 3, 4, 5, 5+
Are you aware of any peers in EMS that have completed suicide? *	Yes, No
If yes, how many?	1, 2, 3, 4, 5, 5+
Have you thought of suicide? *	Yes, No

Citation: Chris Caulkins and Dariusz Wolman. (2020). Emergency Responder Suicidality: An Analysis by Field and Emergency Medical Services Credential. *Journal of Brain and Neurological Disorders* 2(1).

If yes, how many times?	1, 2, 3, 4, 5, 5+
Have you attempted suicide?	Yes, No
If yes, how many times?	1, 2, 3, 4, 5, 5+
Do you have a plan on how you would enact suicide?	Yes, No
Do you have access to the means in your plan?	Yes, No
Have you talked to anyone about your situation?	Yes, No

If at any time you experience sadness, stress or suicidal ideation, please contact any of the services listed below, Dial 911 or go to your nearest Emergency Hospital.

Suicide Prevention Lifeline 1800-273- TALK (8255)

Crisis Text Line TEXT – CNQR to 741741

IM ALIVE 1800-SUICIDE (784-2433)

COP Line 1-800-267-5463

Grief Helpline 1-800-445-4808

Suicide & Crisis Hotline 1-800-999-9999

Safe Call Now 1-206--459-3020.

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