

Appendix Table 1. Unadjusted Prevalence Ratios between Demographic Characteristics and Mental Health Problems and Treatment, NVDRS 2009-2019

Characteristics ¹	Alcohol Problem		Other Substance Use Problem		Current Mental Health Problem		Current Treatment for Mental Health		History of Suicide Attempt		History of Mental Health/ Substance Use Treatment	
	uPR	95%CI	uPR	95%CI	uPR	95%CI	uPR	95%CI	uPR	95%CI	uPR	95%CI
2	0.99	0.97-1.02	0.97	0.94-0.99	1.01	0.99-1.02	0.97	0.95-0.98	0.95	0.93-0.97	0.96	0.95-0.98
3	0.98	0.95-1.01	0.98	0.95-1.01	0.95	0.94-0.96	0.96	0.94-0.98	0.88	0.86-0.91	0.96	0.94-0.98
4 (Bottom Quartile)	0.98	0.94-1.02	0.99	0.95-1.03	0.92	0.90-0.94	0.93	0.90-0.95	0.81	0.78-0.84	0.91	0.89-0.93
Primary Care Provider Quartile (Ref = Top Quartile)												
2	1.02	0.99-1.04	1.01	0.99-1.04	0.98	0.97-0.99	0.91	0.89-0.93	0.96	0.94-0.99	0.91	0.90-0.93
3	1.07	1.04-1.10	1.07	1.03-1.10	0.95	0.94-0.97	0.95	0.93-0.97	0.94	0.92-0.97	0.96	0.95-0.98
4 (Bottom Quartile)	1.00	0.96-1.04	1.01	0.97-1.05	0.91	0.89-0.92	0.88	0.85-0.90	0.84	0.81-0.87	0.88	0.86-0.90
Poor Health Quartile (Ref = Top Quartile)												
2	0.98	0.96-1.01	1.03	1.01-1.06	0.97	0.95-0.98	0.96	0.94-0.97	0.94	0.91-0.96	0.97	0.95-0.98
3	0.97	0.94-1.00	1.06	1.03-1.09	0.95	0.94-0.96	0.86	0.84-0.88	0.91	0.88-0.93	0.87	0.86-0.89
4 (Bottom Quartile)	0.90	0.86-0.94	1.05	1.01-1.09	0.92	0.90-0.93	0.86	0.84-0.88	0.85	0.82-0.88	0.86	0.84-0.88

¹ Column values may not add up to the column total as counts of less than 5 were suppressed.

uPR = Prevalence Ratios; CI = Confidence Interval

Appendix Table 2. Comparison of Main and Sensitivity Analyses

Analysis Type ¹	Urban Military		Rural Military		Rural Civilian	
	aRR	95%CI	aRR	95%CI	aRR	95%CI
Alcohol Use Problem						
1. Main Analysis	0.95	(0.88, 1.03)	0.90	(0.75, 1.08)	1.03	(0.94, 1.14)
2. Undetermined Deaths Included as Suicides	0.96	(0.89, 1.04)	0.84	(0.74, 0.97)	0.98	(0.92, 1.04)
3. Complete Case Analysis	0.97	(0.94, 1.00)	0.88	(0.83, 0.93)	1.00	(0.98-1.03)
Substance Use Problem						
1. Main Analysis	0.65	(0.60, 0.71)	0.57	(0.50, 0.66)	0.95	(0.90, 1.00)
2. Undetermined Deaths Included as Suicides	0.69	(0.64, 0.75)	0.50	(0.44, 0.57)	0.82	(0.77, 0.88)
3. Complete Case Analysis	0.69	(0.66, 0.72)	0.59	(0.55, 0.65)	0.96	(0.93, 0.98)
Current Mental Health Problem						
1. Main Analysis	0.97	(0.93, 1.01)	0.88	(0.81, 0.96)	0.89	(0.86, 0.92)
2. Undetermined Deaths Included as Suicides	0.97	(0.94, 1.01)	0.89	(0.84, 0.93)	0.91	(0.89, 0.94)
3. Complete Case Analysis	0.88	(0.87, 0.90)	0.80	(0.77, 0.82)	0.87	(0.86, 0.89)
Current Mental Health/Substance Use Treatment						
1. Main Analysis	0.93	(0.89, 0.96)	0.87	(0.81, 0.94)	0.89	(0.85, 0.92)
2. Undetermined Deaths Included as Suicides	0.92	(0.89, 0.96)	0.85	(0.81, 0.90)	0.89	(0.85, 0.92)
3. Complete Case Analysis	0.80	(0.78, 0.82)	0.75	(0.72, 0.78)	0.86	(0.84, 0.88)
History of Suicide Attempt						
1. Main Analysis	0.87	(0.80, 0.94)	0.71	(0.62, 0.82)	0.82	(0.75, 0.89)
2. Undetermined Deaths Included as Suicides	0.90	(0.83, 0.97)	0.77	(0.68, 0.87)	0.89	(0.83, 0.96)
3. Complete Case Analysis	0.87	(0.85, 0.90)	0.71	(0.66, 0.76)	0.82	(0.80-0.84)
History of Mental Health/Substance Use Problem Treatment						
1. Main Analysis	0.93	(0.89, 0.97)	0.85	(0.78, 0.92)	0.90	(0.86, 0.93)
2. Undetermined Deaths Included as Suicides	0.92	(0.89, 0.95)	0.82	(0.78, 0.86)	0.89	(0.86, 0.92)
3. Complete Case Analysis	0.83	(0.82, 0.85)	0.75	(0.72, 0.78)	0.87	(0.86, 0.89)

Abbreviations: aRR = Adjusted Risk Ratio; CI = Confidence Interval

¹ Analysis 1 is the main analysis with imputed data for missing values as indicated from Figures 2 and 3 and are presented comparison. Analysis 2 includes both confirmed suicide deaths and undetermined deaths and includes imputed values for missing values. Analysis 3 includes data with no missing values.