Relationships between Intimate Partner Violence and Alaskan Women's Health

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Acknowledgements

We sincerely thank the nearly 13,000 women who invested time and effort to participate in the various statewide and regional waves of the Alaska Victimization Survey (AVS) from 2010 to 2020. They re-lived horrendous experiences that no one should be subjected to to help us understand the extent of intimate partner violence in Alaska and its various impacts.

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Report Highlights

Intimate partner violence (IPV) includes more behaviors than just physical violence.

• Intimate partner violence includes inflicting psychological, physical, and sexual harm against an intimate partner, as well as controlling behaviors, threats of harm, and inflicting harm against people and things an intimate partner cares about.

Analyses of Alaska Victimization Survey (AVS) data comprised of almost 13,000 survey responses from adult, non-institutionalized Alaskan women confirm the findings of prior research that all types of historical and recent IPV are linked to victims' current physical and mental health.

- Comparing women who experienced the various types of IPV historically to those who never experienced them...
 - The prevalence of having frequent headaches, chronic pain, difficulty sleeping, or health-related limitations is approximately 1.6 times greater.
 - The prevalence of rating one's physical health as 'poor' is approximately 2.5 times greater.
 - The prevalence of rating one's mental health as 'poor' is approximately 4 times greater.
- Comparing women who experienced the various types of IPV recently to those who never experienced them...
 - The prevalence of having frequent headaches, chronic pain, difficulty sleeping, or health-related limitations is approximately 2 times greater.
 - The prevalence of rating one's physical health as 'poor' is approximately 3 times greater.
 - The prevalence of rating one's mental health as 'poor' is approximately 10 times greater.
- The magnitudes of differences vary depending on the form of IPV and specific health outcome.

Non-physical IPV has the same negative relationships with various health status indicators as physical IPV.

 Control, threats, and psychological aggression are generally associated with the same prevalence of negative health outcomes as physical violence, although sexual violence is associated with the highest prevalence of negative health outcomes.

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Introduction

This report includes findings on the relationships between experiencing intimate partner violence (IPV) and health status indicators using data from a sample of almost 13,000 adult, non-institutionalized Alaskan women who participated in various statewide and regional waves of the 2010 through 2020 Alaska Victimization Survey (AVS) phone surveys. More details on the methods for this report are included in the Appendix.

Findings

EXPERIENCES WITH IPV

Experiences with intimate partner violence (IPV) examined in the analyses for this report include historical (i.e., experienced in one's lifetime but not in the year prior to taking the survey) and recent (experienced in the year prior to taking the survey). These historical and recent experiences with IPV are combined into one overall measure of IPV, and are separated into numerous subtypes of IPV, such as controlling behaviors, threats of harm, and harm infliction. Some of the subtypes are separated into further subtypes (e.g., direct harm infliction is broken into physical, psychological, and sexual). Subtypes are only compared to each other when they include distinct behaviors, so the subtypes at each level are mutually exclusive categories. However, many survey participants experienced more than one subtype of IPV (e.g., they experienced both controlling behaviors and harm infliction), so experiences with subtypes of IPV are not mutually exclusive.

Table 1 shows the percentage of the survey sample who experienced IPV historically, recently, and those who experienced it at any point in their lifetime (the combined total of the historical and recent cases). These percentages include those who experienced any form of IPV as well as each of the subtypes of IPV.

Table 1: Percentage of adult, non-institutionalized Alaskan women who participated in the Alaska Victimization Survey (AVS) with historical and recent experiences with various forms of intimate partner violence (IPV; $N = 12,985^{\circ}$)

	HISTORICAL	RECENT°	ANY LIFETIME
ANY INTIMATE PARTNER VIOLENCE	44.3	16.9	61.2
Control	31.3	9.5	40.8
Reproductive control	9.9	1.9	11.8
Threats of harm	36.3	7.3	43.6
Harm infliction	42.4	12.5	54.9
Indirect harm infliction	22.2	3.7	25.9
Direct harm infliction	42.1	11.8	53.9
Psychological aggression	35.1	10.3	45.4
Physical violence	35.5	4.6	40.1
Minor physical violence	33.7	4.1	37.8
Severe physical violence	27.5	2.8	30.3
Sexual violence	16.7	1.3	18.0

^a N for each form of IPV varies slightly under 12,985 due to missing data on each item.

^b Women were classified as having historical experiences if they had experienced a form of IPV in their lifetime but not in the year prior to participating in the survey.

^c Women were classified as having recent experiences if they experienced a form of IPV in the year prior to participating in the survey. Participants with recent experiences may also have had historical experiences, but are only included in the recent category for this report (i.e., historical and recent are mutually exclusive categories).

^d Adding together the historical and recent percentages gives the total percent of women experiencing a form of IPV ever in their lifetime.

Table 1 shows that among adult, non-institutionalized Alaskan women who participated in the Alaska Victimization Survey (AVS):

- 44.3% experienced any IPV historically and 16.9% experienced it recently, amounting to 61.2% having those experiences ever in their lifetime.
- 31.3% experienced controlling behaviors by an intimate partner (a subgroup of any IPV) historically and 9.5% experienced it recently, amounting to 40.8% having those experiences ever in their lifetime.
- 9.9% experienced reproductive control by an intimate partner (a subgroup of controlling behaviors) historically and 1.9% experienced it recently, amounting to 11.8% having those experiences ever in their lifetime.
- 36.3% experienced threats of harm by an intimate partner (a subgroup of any IPV)
 historically and 7.3% experienced it recently, amounting to 43.6% having those
 experiences ever in their lifetime.
- 42.4% experienced harm infliction by an intimate partner (a subgroup of any IPV)
 historically and 12.5% experienced it recently, amounting to 54.9% having those
 experiences ever in their lifetime.
- 22.2% experienced indirect harm infliction by an intimate partner (a subgroup of harm infliction) historically and 3.7% experienced it recently, amounting to 25.9% having those experiences ever in their lifetime.
- 42.1% experienced direct harm infliction by an intimate partner (a subgroup of harm infliction) historically and 11.8% experienced it recently, amounting to 53.9% having those experiences ever in their lifetime.
- 35.1% experienced psychological aggression by an intimate partner (a subgroup of direct harm infliction) historically and 10.3% experienced it recently, amounting to 45.4% having those experiences ever in their lifetime.
- 35.5% experienced physical violence by an intimate partner (a subgroup of direct harm infliction) historically and 4.6% experienced it recently, amounting to 40.1% having those experiences ever in their lifetime.
- 33.7% experienced minor physical violence by an intimate partner (a subgroup of physical violence) historically and 4.1% experienced it recently, amounting to 37.8% having those experiences ever in their lifetime.
- 27.5% experienced severe physical violence by an intimate partner (a subgroup of physical violence) historically and 2.8% experienced it recently, amounting to 30.3% having those experiences ever in their lifetime.
- 16.7% experienced sexual violence by an intimate partner (a subgroup of direct harm infliction) historically and 1.3% experienced it recently, amounting to 18.0% having those experiences ever in their lifetime.

PHYSICAL AND MENTAL HEALTH

Health status indicators examined in the analyses for this report include several physical and mental health status indicators: having frequent headaches, chronic pain, difficulty sleeping, or health-related limitations, as well as self-rated physical and mental health. Table 2 shows the percentage of the survey sample who said that they had certain physical and mental health conditions along with the percentage that rated themselves within each category for physical and mental health.

Table 2: Percentage of adult, non-institutionalized Alaskan women who participated in the Alaska Victimization Survey (AVS) reporting various health conditions and overall physical and mental health status $(N = 12,985^{\circ})$

	%
HEALTH CONDITIONS	
Frequent headaches	17.5
Chronic pain	25.3
Difficulty sleeping	31.6
Health-related limitations	33.2
SELF-RATED PHYSICAL HEALT	Н
Excellent	16.7
Very good	33.6
Good	32.6
Fair	13.3
Poor	3.7
SELF-RATED MENTAL HEALTH	
Excellent	28.6
Very good	36.1
Good	26.5
Fair	7.5
Poor	1.3

^a N for each health condition varies slightly under 12,985 due to missing data on each item.

Table 2 shows that among adult, non-institutionalized Alaskan women who participated in the Alaska Victimization Survey (AVS):

- 17.5% reported having frequent headaches.
- 25.3% reported having chronic pain.
- 31.6% reported having difficulty sleeping.
- 33.2% reported having some type of health-related limitation.
- 16.7% rated their physical health as excellent, 33.6% as very good, 32.6% as good, 13.3% as fair, and 3.7% as poor.
- 28.6% rated their mental health as excellent, 36.1% as very good, 26.5% as good, 7.5% as fair, and 1.3% as poor.

THE RELATIONSHIP BETWEEN IPV AND HEALTH

Table 3 includes the percentage reporting each of the various health conditions/statuses among each of three groups: (1) those who never experienced any IPV, (2) those who experienced any IPV historically, and (3) those who experienced any IPV recently. Percentages should be compared across columns. For example, among those who never experienced any IPV, 11.9% reported having frequent headaches, compared to 18.3% of those who experienced any IPV historically, and 28.0% of those who experienced any IPV recently. This comparison shows that the prevalence of frequent headaches is 1.5 times greater amongst those who experienced any IPV historically compared to those who never experienced it (18.3/11.9 = 1.5), and the prevalence is 2.4 times greater amongst those who experienced any IPV recently compared to those who never experienced it (28.0/11.9 = 2.4). These differences between those who experienced any IPV and those who did not were significant, meaning the differences found in the sample likely exist in the population and are not due to chance or sampling error. In summary, a significantly larger percentage of those who experienced any IPV (either historically or recently) have frequent headaches than those who never experienced it.

Table 3: Percentage of **any intimate partner violence** groups (never experienced, historical experience, and recent experience) endorsing each health outcome

	ANY INTIMATE PARTNER VIOLENCE			
	NEVER (N=4,900)	HISTORICAL (N=5,592)	RECENT (N=2,130)	
Frequent headaches	11.9	18.3	28.0	
Chronic pain	17.5	29.1	32.2	
Difficulty sleeping	20.9	36.3	43.6	
Health-related limitations	23.4	38.2	40.6	
Self-rated physical health				
Excellent	22.0	14.4	11.5	
Very good	38.5	32.2	27.2	
Good	28.7	34.3	37.1	
Fair	9.0	14.9	18.4	
Poor	1.9	4.3	5.7	
Self-rated mental health				
Excellent	37.6	25.1	17.8	
Very good	37.5	37.4	30.1	
Good	21.2	28.0	33.3	
Fair	3.3	8.4	14.7	
Poor	0.3	1.1	4.1	

All differences between the Historical group and the Never group, as well as between the Recent group and the Never group, are significant at the p<0.001 level using Pearson chi square tests of independence.

IPV SUBTYPES AND HEALTH

Control, Threats, and Infliction

Table 4 includes the IPV subtypes controlling behaviors, threats of harm, and harm infliction. As with Table 3, percentages should be compared across columns. The never, historical, and recent groups can be compared to each other within one subtype of IPV (e.g., controlling behaviors), or one group within one type subtype of IPV can be compared to that same group within a different subtype of IPV (e.g., historical controlling behaviors can be compared to historical threats of harm).

For example, focusing just on controlling behaviors (control) in Table 4: among those who never experienced control, 12.9% reported having frequent headaches, compared to 21.9% of those who experienced control historically, and 31.5% of those who experienced control recently. This comparison shows that the prevalence of frequent headaches is 1.7 times greater amongst those who experienced control historically compared to those who never experienced it (21.9/12.9 = 1.7), and the prevalence is 2.4 times greater amongst those who control recently compared to those who never experienced it (31.5/12.9 = 2.4). These differences between those who experienced control and those who did not were significant, meaning the differences found in the sample likely exist in the population and are not due to chance or sampling error. In summary, a significantly larger percentage of those who experienced control (either historically or recently) have frequent headaches than those who never experienced it.

As an example of how to compare across subtypes of IPV in Table 4, compare the historical control group to the historical threats group. Among those who experienced control historically, 21.9% reported having frequent headaches, compared to 21.2% of those who experienced threats of harm historically. Because many survey participants are in both these groups (meaning, they experienced both historical control and historical threats), these percentages cannot be analyzed for significant differences. Thus, these comparisons only tell us that historical control and historical threats have similar associations with frequent headaches, but whether each of these types of violence have similar or different impacts on health when taking into account someone having multiple IPV experiences can only be determined using multivariate analyses that test for the independent effects of each IPV subtype.

Table 4: Percentage of control, threats, and infliction groups (never experienced, historical experience, and recent experience) endorsing each health outcome

	CONTROL				THREATS			INFLICTION	
	NEVER (N=7,602)	HISTORICAL (N=4,016)	RECENT (N=1,220)	NEVER (N=7,729)	HISTORICAL (N=4,649)	RECENT (N=935)	NEVER (N=5,737)	HISTORICAL (N=5,401)	RECENT (N=1,590)
Frequent headaches	12.9	21.9	31.5	13.1	21.2	32.8	12.5	19.4	29.2
Chronic pain	19.9	32.7	33.6	19.5	33.0	32.0	17.5	30.8	33.6
Difficulty sleeping	24.2	41.1	46.4	23.6	40.8	48.4	21.5	38.5	44.5
Health-related limitations	26.9	42.3	41.1	26.4	41.6	43.1	23.8	39.9	42.2
Self-rated physical health									
Excellent	19.8	13.0	10.8	20.0	13.1	9.6	21.8	13.4	10.7
Very good	37.2	29.1	26.2	37.4	29.8	24.3	37.7	31.7	26.6
Good	30.4	35.1	37.6	30.5	34.7	38.4	29.1	34.9	37.1
Fair	10.2	17.2	19.5	9.9	17.2	20.7	9.4	15.5	19.5
Poor	2.3	5.6	6.0	2.2	5.3	7.0	2.0	4.7	6.1
Self-rated mental health									
Excellent	33.6	22.6	17.3	33.8	23.1	15.9	36.8	23.6	16.7
Very good	38.2	34.7	28.0	38.3	34.9	24.7	37.5	36.9	29.1
Good	23.2	30.2	34.0	23.1	29.9	35.0	21.6	29.0	34.0
Fair	4.4	10.6	16.0	4.3	10.3	18.6	3.7	9.2	15.6
Poor	0.5	1.8	4.9	0.5	1.7	5.8	0.4	1.3	4.6

All differences between the Historical group and the Never group, as well as between the Recent group and the Never group, are significant at the p<0.001 level using Pearson chi square tests of independence.

Reproductive Control

Table 5 includes the relationships between health and a subtype of control: reproductive control. Among those who never experienced reproductive control, 15.9% reported having frequent headaches, compared to 28.0% of those who experienced reproductive control historically, and 32.9% of those who experienced reproductive control recently. As was seen in Table 4 that included all controlling behaviors, a significantly larger percentage of those who experienced reproductive control (either historically or recently) have frequent headaches than those who never experienced it.

Table 5: Percentage of **reproductive control** groups (never experienced, historical experience, and recent experience) endorsing each health outcome

	REPRODUCTIVE CONTROL			
	NEVER (N=11,382)	HISTORICAL (N=1,282)	RECENT (N=240)	
Frequent headaches	15.9	28.0	32.9	
Chronic pain	24.1	35.8	25.4	
Difficulty sleeping	29.5	47.9	45.4	
Health-related limitations	31.6	47.1	32.9	
Self-rated physical health				
Excellent	17.6	11.2	7.5	
Very good	34.6	27.0	27.1	
Good	32.2	34.5	42.1	
Fair	12.5	19.8	17.1	
Poor	3.2	7.6	6.2	
Self-rated mental health				
Excellent	30.0	18.1	16.7	
Very good	36.7	33.2	26.7	
Good	25.8	31.5	30.4	
Fair	6.6	13.7	18.3	
Poor	0.9	3.4	7.9	

All differences between the Historical group and the Never group, as well as between the Recent group and the Never group, are significant at the p<0.001 level using Pearson chi square tests of independence, except for the following:

- Recent reproductive control and chronic pain (also not significant at the p<0.05 level)
- Recent reproductive control and health-related limitations (also not significant at the p<0.05 level)

Indirect and Direct Harm Infliction

Table 6 includes the harm infliction subtypes indirect harm infliction and direct harm infliction. As with prior tables, percentages should be compared across columns. The never, historical, and recent groups can be compared to each other within one subtype of IPV (e.g., indirect infliction), or one group within indirect infliction can be compared to that same group within direct infliction (e.g., historical indirect infliction can be compared to historical direct infliction).

For example, focusing just on indirect harm infliction in Table 6: among those who never experienced indirect harm infliction, 14.4% reported having frequent headaches, compared to 24.5% of those who experienced indirect harm infliction historically, and 38.5% of those who experienced indirect harm infliction recently. This comparison shows that the prevalence of frequent headaches is 1.7 times greater amongst those who experienced indirect harm infliction historically compared to those who never experienced it (24.5/14.4 = 1.7), and the prevalence is 2.7 times greater amongst those who experienced indirect harm infliction recently compared to those who never experienced it (38.5/14.4 = 2.7). These differences between those who experienced indirect harm infliction and those who did not were significant, meaning the differences found in the sample likely exist in the population and are not due to chance or sampling error. In summary, a significantly larger percentage of those who experienced indirect harm infliction (either historically or recently) have frequent headaches than those who never experienced it.

As an example of how to compare across subtypes of IPV in Table 6, compare the historical indirect harm infliction group to the historical direct harm infliction group. Among those who experienced indirect harm infliction historically, 24.5% reported having frequent headaches, compared to 19.6% of those who experienced direct harm infliction historically. Because many survey participants are in both these groups (meaning, they experienced both historical indirect harm infliction and historical direct harm infliction), these percentages cannot be analyzed for significant differences. Thus, these comparisons only tell us that historical indirect harm infliction and historical direct harm infliction have similar associations with frequent headaches, but whether each of these types of violence have similar or different impacts on health when taking into account someone having multiple IPV experiences can only be determined using multivariate analyses that test for the independent effects of each IPV subtype.

Table 6: Percentage of **indirect and direct harm infliction** groups (never experienced, historical experience, and recent experience) endorsing each health outcome

	INDIREC	CT HARM INFLIC	TION	DIREC	T HARM INFLIC	TION
	NEVER (N=9,577)	HISTORICAL (N=2,866)	RECENT (N=475)	NEVER (N=5,876)	HISTORICAL (N=5,363)	RECENT (N=1,508)
Frequent headaches	14.4	24.5	38.5	12.6	19.6	29.0
Chronic pain	20.7	38.1	39.7	17.6	31.0	33.7
Difficulty sleeping	26.1	46.6	51.7	21.7	38.7	44.7
Health- related limitations	28.2	47.3	46.5	24.1	40.0	42.6
Self-rated phys	sical health					
Excellent	19.0	10.7	8.4	21.6	13.4	10.5
Very good	36.4	26.0	23.4	37.6	31.5	26.5
Good	31.2	36.4	39.2	29.4	34.8	37.0
Fair	10.9	20.0	21.5	9.5	15.6	19.7
Poor	2.5	7.0	7.4	2.0	4.7	6.2
Self-rated men	tal health					
Excellent	31.6	20.5	16.8	36.6	23.5	16.1
Very good	37.4	33.9	24.4	37.6	36.7	29.1
Good	24.9	31.1	31.8	21.7	29.0	34.6
Fair	5.4	12.0	20.4	3.7	9.4	15.6
Poor	0.7	2.4	6.5	0.4	1.4	4.6

All differences between the Historical group and the Never group, as well as between the Recent group and the Never group, are significant at the p<0.001 level using Pearson chi square tests of independence.

Psychological Aggression, Physical Violence, and Sexual Violence

Table 7 includes the direct harm infliction subtypes psychological aggression, physical violence, and sexual violence. As with prior tables, percentages should be compared across columns. The never, historical, and recent groups can be compared to each other within one subtype of IPV (e.g., psychological aggression), or one group within one type subtype of IPV can be compared to that same group within a different subtype of IPV (e.g., historical psychological aggression can be compared to historical physical violence).

For example, focusing just on psychological aggression in Table 7: among those who never experienced psychological aggression, 13.0% reported having frequent headaches, compared to 21.1% of those who experienced psychological aggression historically, and 29.1% of those who experienced psychological aggression recently. This comparison shows that the prevalence of frequent headaches is 1.6 times greater amongst those who experienced psychological aggression historically compared to those who never experienced it (21.1/13.0 = 1.6), and the prevalence is 2.2 times greater amongst those who experienced psychological aggression recently compared to those who never experienced it (29.1/13.0 = 2.2). These differences between those who experienced psychological aggression and those who did not were significant, meaning the differences found in the sample likely exist in the population and are not due to chance or sampling error. In summary, a significantly larger percentage of those who experienced psychological aggression (either historically or recently) have frequent headaches than those who never experienced it.

As an example of how to compare across subtypes of IPV in Table 7, compare the historical psychological aggression group to the historical physical violence group. Among those who experienced psychological aggression historically, 21.1% reported having frequent headaches, compared to 21.6% of those who experienced physical violence historically. Because many survey participants are in both these groups (meaning, they experienced both historical psychological aggression and historical physical violence), these percentages cannot be analyzed for significant differences.

Thus, these comparisons only tell us that historical psychological aggression and physical violence have similar associations with frequent headaches, but whether each of these types of violence have similar or different impacts on health when taking into account someone having multiple IPV experiences can only be determined using multivariate analyses that test for the independent effects of each IPV subtype.

Table 7: Percentage of **psychological aggression, physical violence, and sexual violence** groups (never experienced, historical experience, and recent experience) endorsing each health outcome

	PSYCHOLOGICAL AGGRESSION		РН	YSICAL VIOLENC	E	S	EXUAL VIOLENCE		
	NEVER (N=7,033)	HISTORICAL (N=4,524)	RECENT (N=1,323)	NEVER (N=7,678)	HISTORICAL (N=4,552)	RECENT (N=588)	NEVER (N=10,554)	HISTORICAL (N=2,149)	RECENT (N=172)
Frequent headaches	13.0	21.1	29.1	13.7	21.6	34.2	15.0	27.4	40.7
Chronic pain	19.0	32.2	34.3	19.2	34.3	33.9	21.9	40.3	42.4
Difficulty sleeping	23.5	40.2	45.2	24.4	41.7	48.0	27.3	50.3	55.8
Health-related limitations	26.1	40.8	43.5	26.7	42.6	42.2	29.4	49.8	52.9
Self-rated physical health									
Excellent	20.8	12.6	9.9	20.2	12.0	9.0	18.1	10.7	7.0ª
Very good	36.7	31.1	26.6	37.3	28.8	24.9	35.4	25.9	20.3
Good	30.4	34.7	37.2	30.0	36.2	38.2	32.0	35.5	35.5
Fair	9.9	16.5	19.9	10.2	17.3	21.2	11.6	20.3	27.9
Poor	2.3	5.1	6.4	2.3	5.7	6.7	2.8	7.6	9.3ª
Self-rated mental health									
Excellent	35.4	22.2	15.2	33.3	22.2	17.1	30.7	19.3	12.8
Very good	37.2	36.5	29.3	38.0	34.7	24.1	37.6	30.5	16.9
Good	23.0	29.1	34.7	23.2	30.8	34.8	25.1	32.6	37.2
Fair	4.0	10.5	16.2	5.0	10.3	17.7	5.8	14.5	24.4
Poor	0.5	1.7	4.6	0.5	2.0	6.3	0.8	3.0	8.7ª

All differences between the Historical group and the Never group, as well as between the Recent group and the Never group, are significant at the p<0.001 level using Pearson chi square tests of independence.

^a Fewer than 20 cases per cell.

Minor and Severe Physical Violence

Table 8 includes the physical violence subtypes minor and severe physical violence. As with prior tables, percentages should be compared across columns. The never, historical, and recent groups can be compared to each other within one subtype of IPV (e.g., minor physical violence), or one group within minor physical violence can be compared to that same group within severe physical violence (e.g., historical minor physical violence can be compared to historical severe physical violence).

For example, focusing just on minor physical violence in Table 8: among those who never experienced minor physical violence, 13.9% reported having frequent headaches, compared to 22.1% of those who experienced minor physical violence historically, and 34.5% of those who experienced minor physical violence recently. This comparison shows that the prevalence of frequent headaches is 1.6 times greater amongst those who experienced minor physical violence historically compared to those who never experienced it (22.1/13.9 = 1.6), and the prevalence is 2.5 times greater amongst those who experienced minor physical violence recently compared to those who never experienced it (34.5/13.9 = 2.5). These differences between those who experienced minor physical violence and those who did not were significant, meaning the differences found in the sample likely exist in the population and are not due to chance or sampling error. In summary, a significantly larger percentage of those who experienced minor physical violence (either historically or recently) have frequent headaches than those who never experienced it.

As an example of how to compare across subtypes of IPV in Table 8, compare the historical minor physical violence group to the historical severe physical violence group. Among those who experienced minor physical violence historically, 22.1% reported having frequent headaches, compared to 23.9% of those who experienced severe physical violence historically. Because many survey participants are in both these groups (meaning, they experienced both historical minor physical violence and historical severe physical violence), these percentages cannot be analyzed for significant differences. Thus, these comparisons only tell us that historical minor physical violence and historical severe physical violence have similar associations with frequent headaches, but whether each of these types of violence have similar or different impacts on health when taking into account someone having multiple IPV experiences can only be determined using multivariate analyses that test for the independent effects of each IPV subtype.

Table 8: Percentage of **minor and severe physical violence** groups (never experienced, historical experience, and recent experience) endorsing each health outcome

	MINOR	PHYSICAL VIOL	ENCE	SEVERE	PHYSICAL VIO	LENCE
	NEVER (N=8,001)	HISTORICAL (N=4,337)	RECENT (N=533)	NEVER (N=8,963)	HISTORICAL (N=3,530)	RECENT (N=354)
Frequent headaches	13.9	22.1	34.5	14.1	23.9	38.1
Chronic pain	19.6	34.4	35.5	20.1	37.2	36.5
Difficulty sleeping	24.9	42.0	48.4	25.7	44.8	50.6
Health- related limitations	27.1	43.1	42.3	28.0	44.7	45.0
Self-rated phys	sical health					
Excellent	19.9	11.9	9.0	19.6	10.6	5.9
Very good	36.9	28.7	25.4	37.0	26.2	23.2
Good	30.3	36.1	37.6	30.5	37.3	39.7
Fair	10.5	17.5	21.2	10.5	19.1	24.1
Poor	2.4	5.8	6.8	2.3	6.8	7.1
Self-rated men	tal health					
Excellent	32.9	22.0	17.3	32.3	20.5	15.3
Very good	37.6	34.8	24.1	37.8	33.5	19.9
Good	23.6	30.8	34.6	23.9	31.8	36.6
Fair	5.3	10.4	17.9	5.4	11.7	20.5
Poor	0.7	2.0	6.2	0.6	2.5	7.7

All differences between the Historical group and the Never group, as well as between the Recent group and the Never group, are significant at the p<0.001 level using Pearson chi square tests of independence.

Conclusion

The findings in this report using an Alaskan sample of women are consistent with decades of prior research that has demonstrated the relationship between all subtypes of intimate partner violence (IPV) and negative physical and mental health outcomes.^{1, 2, 3, 4} These findings confirm that both recent and historical IPV are a public health concern, and given how prevalent these forms of violence are in Alaska, it is crucial that physical and mental health care accessibility are prioritized to address these health issues.

¹ Dokkedahl, S. B., Kirubakaran, R., Bech-Hansen, D., Kristensen, T. R., & Elklit, A. (2022). The psychological subtype of intimate partner violence and its effect on mental health: A systematic review with meta-analyses. *Systematic Reviews*, *11*(1), 1-163. https://doi.org/10.1186/s13643-022-02025-z

² Stubbs, A. & Szoeke, C. (2022). The effect of intimate partner violence on the physical health and health-related behaviors of women: A systematic review of the literature. *Trauma, Violence, & Abuse, 23*(4), 1157-1172. DOI: 10.1177/1524838020985541

³ Trevillion, K., Oram, S., Feder, G., & Howard, L. M. (2012). Experiences of domestic violence and mental disorders: A systematic review and meta-analysis. *PloS One, 7*(12), e51740-e51740. https://doi.org/10.1371/journal.pone.0051740

⁴ Walker, N., Beek, K., Chen, H., Shang, J., Stevenson, S., Williams, K., Herzog, H., Ahmed, J., & Cullen, P. (2022). The experiences of persistent pain among women with a history of intimate partner violence: A systematic review. *Trauma, Violence, & Abuse, 23*(2), 490-505. https://doi.org/10.1177/1524838020957989

Appendix: Study Methods

GENERAL OVERVIEW OF THE ALASKA VICTIMIZATION SURVEY

The Alaska Victimization Survey (AVS) is a general population phone (landlines and cell phones) survey that measures the prevalence of intimate partner violence, sexual violence, and stalking among adult non-institutionalized Alaskan women. Data collection is funded by the Alaska Council on Domestic Violence and Sexual Assault (CDVSA) and data collection and analyses are conducted by the University of Alaska Anchorage (UAA) Justice Center. Additional analyses, such as those in this report, are supported by the Alaska Justice Information Center (AJiC) at UAA, which is funded by the Alaska Mental Health Trust Authority.

Statewide iterations of the AVS were done in 2010, 2015, and 2020, with the intention of conducting the survey every five years (quinquennially). Between 2011 and 2015, twelve regional surveys were conducted to provide prevalence estimates specific to those regions (e.g., women in the City and Borough of Juneau were surveyed in 2011 and those in the Nome Census Area survey were surveyed in 2014).

SURVEY ELIGIBILITY, RECRUITMENT, AND SAMPLES

All statewide and regional AVSs use the same eligibility criteria (except for specific location within the state, which varied with each regional survey) and recruitment methods. The UAA Justice Center contracted a survey research group with a call center to conduct the phone surveys. Alaska-based phone numbers (both landlines and cell phones) were randomly selected and contacted to determine whether an adult woman in that household was interested in participating in the survey. Participants were asked for their self-identified gender, their age, and where they reside. If they met the criteria for inclusion (identified as woman, 18 years old or older, and lived in the state or specific region of interest for the regional surveys), they were invited to participate. See Table 9 for more details on the samples combined for the analyses in this report.

Table 9: Location, years, and sample sizes of statewide and regional Alaska Victimization Surveys (AVSs)

LOCATION/REGION	YEAR	SAMPLE SIZE
Statewide	2010	871
Municipality of Anchorage	2011	718
Bristol Bay Region	2011	373
Fairbanks North Star Borough	2011	745
City and Borough of Juneau	2011	604
Kodiak Island Borough	2012	415
City and Borough of Sitka	2012	282
Yukon-Kuskokwim Delta	2012	509
Kenai Peninsula Borough	2013	987
Ketchikan Gateway Borough	2013	648
Matanuska-Susitna Borough	2013	1,190
Nome Census Area	2014	265
North Slope Borough	2014	169
Aleutian/Pribilof Island Region	2014-2015	82
Statewide ^a	2015	3,027
Statewide	2020	2,100
COMBINED STATEWIDE AND REGIONAL 201	12,985	

^a The 2015 statewide sample included enough cases to also generate Municipality of Anchorage specific prevalence estimates and to add an additional 38 cases to the Aleutian/Pribilof Island sample to generate estimates for that region.

HEALTH MEASURES FOR THIS REPORT

Participants in the AVS were asked a series of health-related questions. The analyses in this report used participants' answers to the following survey questions:

- 1. Do you have frequent headaches? (Yes/No)
- 2. Do you have chronic pain? (Yes/No)
- 3. Do you have difficulty sleeping? (Yes/No)
- 4. Are any of your activities limited in any way because of physical, mental, or emotional problems? (Yes/No) OR Do you have any health problems that require you to use special equipment, such as a cane, a wheelchair, a special bed, or a special telephone? (Yes/No)
- 5. Would you say that in general your physical health is... (Excellent, Very good, Good, Fair, or Poor)
- 6. Would you say that in general your mental health is... (Excellent, Very good, Good, Fair, or Poor)

IPV MEASURES FOR THIS REPORT

To measure intimate partner violence (IPV), survey participants were asked behaviorally specific questions about things their romantic and sexual partners have done to them. Romantic and sexual partners were defined for them as follows:

"When I ask about your romantic or sexual partners, I want you to think about anybody you have been involved with romantically or sexually, which might include spouses, boyfriends, girlfriends, people you have dated, people you were seeing, or people you hooked up with."

If the survey participants said that they had ever had a certain experience by one or more partners, they were then asked if that specific experience had happened in the year prior to the survey. These behaviorally specific items were then classified by this research team into the different subtypes of IPV. The behaviorally specific questions participants were asked and the subtype of violence they were classified under by the research team are detailed below.

1. CONTROL

- How many of your romantic or sexual partners have ever tried to keep you from seeing or talking to your family or friends?
- How many of your romantic or sexual partners have ever made decisions for you that should have been yours to make, such as the clothes you wear, things you eat, or the friends you have?
- How many of your romantic or sexual partners have ever kept track of you by demanding to know where you were and what you were doing?
- How many of your romantic or sexual partners have ever kept you from leaving the house when you wanted to go?
- How many of your romantic or sexual partners have ever kept you from having money for your own use?

A. REPRODUCTIVE CONTROL

- How many of your romantic or sexual partners have ever tried to get you pregnant when you did not want to become pregnant or tried to stop you from using birth control?
- How many of your romantic or sexual partners have ever refused to use a condom when you wanted them to use one?

2. THREATS OF HARM

- How many of your romantic or sexual partners have ever made threats to physically harm you?
- How many of your romantic or sexual partners have ever acted very angry towards you in a way that seemed dangerous?
- How many of your romantic or sexual partners have ever threatened to hurt him or herself or commit suicide when he or she was upset with you?
- How many of your romantic or sexual partners have ever threatened to hurt a pet or threatened to take a pet away from you?
- How many of your romantic or sexual partners have ever threatened to hurt someone you love?
- How many of your romantic or sexual partners have ever threatened to take your children away from you?

 How many of your romantic or sexual partners have ever said things like "If I can't have you, then no one can"?

3. HARM INFLICTION

A. INDIRECT HARM INFLICTION

- How many of your romantic or sexual partners have ever hurt someone you love?
- How many of your romantic or sexual partners have ever destroyed something that was important to you?

B. DIRECT HARM INFLICTION

I. PSYCHOLOGICAL AGGRESSION

- How many of your romantic or sexual partners have ever told you that you were a loser, a failure, or not good enough?
- How many of your romantic or sexual partners have ever called you names like ugly, fat, crazy, or stupid?
- How many of your romantic or sexual partners have ever insulted, humiliated, or made fun of you in front of others?
- How many of your romantic or sexual partners have ever told you that no one else would want you?

II. PHYSICAL VIOLENCE

1. Minor Physical Violence

- How many of your romantic or sexual partners have ever slapped you?
- How many of your romantic or sexual partners have ever pushed or shoved you?

2. Severe Physical Violence

- How many of your romantic or sexual partners have ever hit you with a fist or something hard?
- How many of your romantic or sexual partners have ever kicked you?
- How many of your romantic or sexual partners have ever hurt you by pulling your hair?
- How many of your romantic or sexual partners have ever slammed you against something?

- How many of your romantic or sexual partners have ever tried to hurt you by choking or suffocating you?
- How many of your romantic or sexual partners have ever beaten you?
- How many of your romantic or sexual partners have ever burned you on purpose?
- How many of your romantic or sexual partners have ever used a knife or gun on you?

III. SEXUAL VIOLENCE

• How many of your romantic or sexual partners have ever forced you to engage in sexual activity?

