

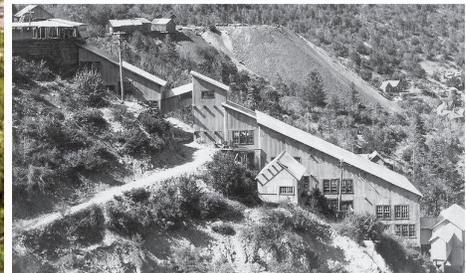
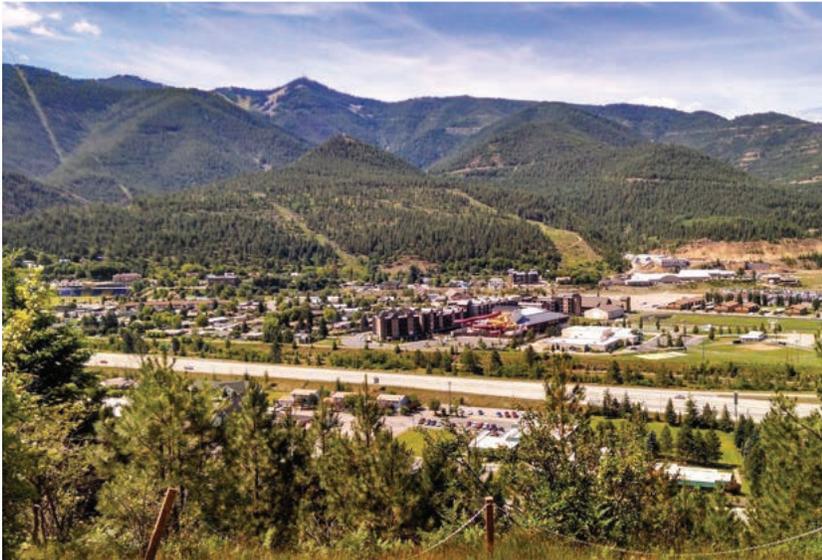
Your Views of Health and Lead Contamination in North Idaho



University of Idaho
College of Natural Resources



Public Health
Prevent. Promote. Protect.
Panhandle Health District



This survey is part of a study being conducted by researchers at the University of Idaho. We would like to understand how you view your health, as well as your opinions about lead contamination issues. We are contacting you as a resident of the Silver Valley in Shoshone County. Throughout this survey we will refer to this area as your “local area.” Your answers are very important for us to understand different perspectives of people living in the Silver Valley. The survey will take about 15 minutes to complete. Thank you in advance for your participation!

Please answer the questions to the best of your ability. There are no right or wrong answers and you have the right to withdraw at any time. This study has been reviewed and meets protection assurance standards, including protection of privacy and confidentiality, by the University of Idaho’s Institutional Review Board (IRB). This means that survey responses will not be linked to any identifying information. If you have questions regarding this study, please contact:

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IDAHO

Kellogg
Pinehurst
Wallace

STUDY AREA

The adult (**age 18 or over**) in your household with the **most recent birthday** should complete this survey.

By opening the survey, you confirm that you are **18 years old or older** and **consent to participate**.

INSTRUCTIONS: Please answer every question by marking one box or filling in the blank. If you are unsure about how to answer, please give the best answer you can.

1. How many total years you have lived in north Idaho? Please include **all years of residence**, even if they were not consecutive and round to the nearest **whole number**.

years

The next questions ask for your views about your health. This information will keep track of how you feel and how well you are able to do your usual activities.

2. In general, would you say your health is...?

Excellent Very Good Good Fair Poor

3. The following items are about activities you might do during a typical day. Does your health now limit you in these activities? If so, how much?

	Yes, Limited A Lot	Yes, Limited A Little	No, Not Limited At All
a. Moderate activities , such as moving a table, pushing a vacuum cleaner, bowling, or playing golf	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Climbing several flights of stairs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

4. During the past 4 weeks, have you had any of the following problems with your work or other daily activities as a result of your physical health?

	Yes	No
a. Accomplished less than you would like	<input type="checkbox"/>	<input type="checkbox"/>
b. Were limited in the kind of work or other activities	<input type="checkbox"/>	<input type="checkbox"/>

5. During the past 4 weeks, have you had any of the following problems with your work or other regular daily activities as a result of any emotional problems such as feeling depressed or anxious?

	Yes	No
a. Accomplished less than you would like	<input type="checkbox"/>	<input type="checkbox"/>
b. Didn't do work or activities as carefully as usual	<input type="checkbox"/>	<input type="checkbox"/>

6. During the past 4 weeks, how much did pain interfere with your normal work (including both outside the home and housework)?

- Not at all A little bit Moderately Quite a bit Extremely

7. These questions are about how you feel and how things have been with you during the past 4 weeks. For each question, please give the one answer that comes closest to the way you have been feeling.

How much of the time during the <u>past 4 weeks</u> :	All of the Time	Most of the Time	A Good Bit of the Time	Some of the Time	A Little of the Time	None of the Time
a. Have you felt calm and peaceful?	<input type="checkbox"/>					
b. Did you have a lot of energy?	<input type="checkbox"/>					
c. Have you felt downhearted or blue?	<input type="checkbox"/>					

8. During the past 4 weeks, how much of the time has your physical health or emotional problems interfered with your social activities (like visiting with friends, relatives, etc.)?

- All of the Time
 Most of the Time
 Some of the Time
 A Little of the Time
 None of the Time

The next few questions relate to how frequently you engage in different activities. These include activities associated with potential lead contamination issues in your local area.

9. Consider your activities in your local area over the PAST 12 months.

How often have you:	Never	Rarely	Sometimes	Often	Very Often
a. Participated in outdoor work or recreation activities?	<input type="checkbox"/>				
b. Thought about lead contamination?	<input type="checkbox"/>				
c. Read or heard about lead contamination?	<input type="checkbox"/>				
d. Attended a public meeting or event about lead contamination?	<input type="checkbox"/>				

10. Please indicate which meetings or events you have attended in your local area in the PAST 12 months.

- Basin Environmental Improvement Commission Meeting
 Citizens Coordinating Council Meeting
 Earth Day Fair Coeur d'Alene
 Our Gem Symposium
 Shoshone Medical Center's Kids Health & Safety Fair
 Silver Valley Community Resource Center Event
 Spokane River Forum
 Other → Please list:

11. Consider your recreational and outdoor activities in your local area in the PAST 12 months.

How often have you:	Never	Rarely	Sometimes	Often	Very Often
a. Promptly removed dirt from your clothes, toys, pets, cars, and equipment after spending time outdoors?	<input type="checkbox"/>				
b. Stayed on designated trails while recreating in areas where lead contamination warning signs are posted?	<input type="checkbox"/>				
c. Recreated in or near the South Fork of the Coeur d'Alene River?	<input type="checkbox"/>				
d. Washed your hands with clean water or wipes before eating or drinking after recreating or working outdoors?	<input type="checkbox"/>				
e. Used a protective barrier such as a blanket when sitting on a sandy beach?	<input type="checkbox"/>				
f. Followed the advice of a public health official about ways to avoid lead contamination while spending time outdoors?	<input type="checkbox"/>				

12. Consider your recreational and outdoor activities in your local area over the NEXT 12 months.

How likely is it that you will:	Very unlikely	Unlikely	Neutral	Likely	Very Likely	Does not apply
a. Promptly remove dirt from your clothes, toys, pets, cars, and equipment after spending time outdoors?	<input type="checkbox"/>					
b. Stay on designated trails while recreating in areas with lead contamination warning signs posted?	<input type="checkbox"/>					
c. Recreate in or near the South Fork of the Coeur d'Alene River?	<input type="checkbox"/>					
d. Wash your hands with clean water or wipes before eating or drinking after recreating or working outdoors?	<input type="checkbox"/>					
e. Use a protective barrier such as a blanket when sitting on a sandy beach?	<input type="checkbox"/>					
f. Follow the advice of a public health official about ways to avoid lead contamination while spending time outdoors?	<input type="checkbox"/>					

The next questions ask about your views of lead contamination issues in your local area and household.

13. Consider your level of concern about environmental issues.

How concerned are you about:	Not at all concerned	Slightly concerned	Somewhat concerned	Moderately concerned	Extremely concerned
a. Global human health issues?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Human health issues in your local area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Health issues in your household?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Human health issues related to lead contamination in your local area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Health issues related to lead contamination in your household?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

14. Indicate how much you agree with these statements regarding possible lead contamination in your local area.

	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
a. I worry about lead contamination while spending time outdoors.	<input type="checkbox"/>				
b. It is worth my time to avoid lead contamination while spending time outdoors.	<input type="checkbox"/>				
c. I can avoid lead contamination while spending time outdoors.	<input type="checkbox"/>				
d. I need more information about how to avoid lead contamination while spending time outdoors.	<input type="checkbox"/>				
e. Avoiding lead contamination while spending time outdoors is inconvenient.	<input type="checkbox"/>				

15. Indicate how much you agree with these statements regarding possible lead contamination around your home.

	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
a. I worry about lead contamination entering my home.	<input type="checkbox"/>				
b. It is worth my time to clean my home to prevent lead contamination.	<input type="checkbox"/>				
c. I can prevent lead contamination from entering my home.	<input type="checkbox"/>				
d. I need more information about how to prevent lead contamination from entering my home.	<input type="checkbox"/>				
e. Preventing lead contamination from entering my home is inconvenient.	<input type="checkbox"/>				

The next questions ask about your views of the relationship between health and lead contamination in your local area.

16. Indicate how much you agree with these statements regarding possible lead contamination in your local area.

	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
a. Clear water in the rivers and streams indicates that the water is safe from lead contamination.	<input type="checkbox"/>				
b. Healthy vegetation along the banks of the rivers and streams indicates that the soil is safe from lead contamination.	<input type="checkbox"/>				

17. Indicate how much you agree with these statements regarding your views of how public money should be spent on issues related to lead contamination in your local area.

	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
a. Public money should be used to limit lead contamination in rivers, streams, and beaches .	<input type="checkbox"/>				
b. Public money should be used to limit lead contamination in cities and towns .	<input type="checkbox"/>				
c. Public money should be used to educate people about lead contamination.	<input type="checkbox"/>				

18. How much do you trust the following sources to provide you with accurate information about health and lead contamination in your local area?

	Not Much	Little	Somewhat	Much	A Great Deal
a. Community leaders	<input type="checkbox"/>				
b. Family members	<input type="checkbox"/>				
c. Friends	<input type="checkbox"/>				
d. Scientists	<input type="checkbox"/>				
e. My public health district	<input type="checkbox"/>				
f. Doctors	<input type="checkbox"/>				

The next few questions ask about your views of the health effects of lead contamination issues in your local area.

19. Indicate how much you agree with these statements regarding how lead contamination in your local area affects your health.

	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
a. I have experienced health effects related to lead contamination.	<input type="checkbox"/>				
b. I feel I will experience health effects related to lead contamination at some time during my life.	<input type="checkbox"/>				
c. I am more likely than the average person to experience health effects from lead contamination.	<input type="checkbox"/>				
d. If it is my destiny to experience health effects related to lead contamination, there is nothing that I can do to prevent it.	<input type="checkbox"/>				

20. Indicate how much you agree with these statements regarding how you address the health effects of lead contamination in your local area.

	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
a. I know how to prevent health effects from lead contamination.	<input type="checkbox"/>				
b. I know who to ask if I have questions about preventing health effects from lead contamination.	<input type="checkbox"/>				
c. I am aware of the available resources for preventing health effects of lead contamination.	<input type="checkbox"/>				

21. Indicate how much you agree with these statements regarding your awareness of lead contamination in your local area.

	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
a. I know a lot about the health effects of lead contamination.	<input type="checkbox"/>				
b. I am better informed about the health effects of lead contamination than most people.	<input type="checkbox"/>				
c. I seek out information about lead contamination.	<input type="checkbox"/>				
d. A small amount of lead in the human body is harmful.	<input type="checkbox"/>				

22. Indicate to what extent you agree that completing the following actions are good for your health. Think about each statement in relation to activities in your local area.

	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
a. Promptly removing dirt from your clothes, toys, pets, cars, and equipment after spending time outdoors.	<input type="checkbox"/>				
b. Staying on designated trails while recreating in areas with lead contamination warning signs posted.	<input type="checkbox"/>				
c. Washing your hands with clean water or wipes before eating or drinking after recreating or working outdoors.	<input type="checkbox"/>				
d. Using a protective barrier such as a blanket when sitting on a sandy beach.	<input type="checkbox"/>				
e. Following the advice of a local public health official about ways to safely avoid lead contamination.	<input type="checkbox"/>				

23. Identify the level of health risk associated with lead contamination in your local area for the following.

	No risk	Low risk	Moderate risk	High risk	Very high risk	Don't Know
a. Level of immediate health risk associated with lead contamination for me.	<input type="checkbox"/>					
b. Level of long-term health risk associated with lead contamination for me.	<input type="checkbox"/>					
c. Level of immediate health risk associated with lead contamination for others in my local area.	<input type="checkbox"/>					
d. Level of long-term health risk associated with lead contamination for others in my local area.	<input type="checkbox"/>					

Finally, we have a few questions about you and your household.

24. What is your gender?

- Male
- Female
- Prefer not to say
- Other

25. What year were you born?

Year

26. What year was your home built in?

Year

27. If you have children, what is the age of your youngest child? Please check "N/A" if you do not have children.

Age N/A

28. Has a member of your household ever worked in a mining-related job in your local area?

- Yes
- No
- I don't know

29. Which of the following racial or ethnic groups do you most closely identify with?

- American Indian or Alaskan Native
- Asian
- Black or African American
- White
- Biracial or multiracial
- Other → Please share:

30. What is the highest level of formal education you have completed or the highest degree you have received?

- Less than high school degree
- High school graduate (high school diploma or equivalent including GED)
- Some college but no degree
- College degree (2 or 4 year)
- Advanced degree (Masters, Ph.D., J.D., M.D.)

31. What is your occupational status?

- Homemaker
- Retired
- Student
- Unemployed
- Working part-time
- Working full-time
- Other → Please specify:

32. What is your total annual household income, before taxes? Please give your best guess.

- Less than \$20,000
- \$20,000 to \$49,999
- \$50,000 to \$79,999
- \$80,000 to \$99,999
- \$120,000 or more

Thank you for taking the time to fill out our survey! We really appreciate your participation. If you have any comments on the survey or about lead contamination or health in your local area, please comment below.

You are now finished with the survey. Please follow the instructions provided to return the survey.

Table S1. Exploratory factor analysis and descriptive statistics for perceived risk and behavioral intentions variables (n=306)

	Mean (SD)	^b Perceived Benefits	Perceived Severity	Behavioral Intentions	Perceived Susceptibility	Self-Efficacy	Perceived Barriers
Cronbach's Alpha		0.86	0.84	0.83	0.82	0.87	0.81
Mean (SD)		3.9 (0.77)	3.0 (0.97)	3.8 (1.0)	2.2 (0.89)	3.1 (0.97)	3.4 (1.0)
<i>Indicate to what extent you agree that completing the following actions are good for your health:</i>							
Promptly removing dirt from your clothes, toys, pets, cars, and equipment after spending time outdoors.	3.9 (0.89)	0.68 ^a					
Staying on designated trails while recreating in areas with lead contamination warning signs posted.	3.9 (0.95)	0.79					
Washing your hands with clean water or wipes before eating or drinking after recreating or working outdoors.	4.2 (0.76)	0.74					
Using a protective barrier such as a blanket when sitting on a sandy beach.	3.8 (0.95)	0.72					
Following the advice of a local public health official about ways to safely avoid lead contamination.	3.9 (0.87)	0.8					
I worry about lead contamination while spending time outdoors.	2.6 (1.18)		0.72				
It is worth my time to avoid lead contamination while spending time outdoors.	3.3 (1.16)		0.56				
I need more information about how to avoid lead contamination while spending time outdoors.**	2.9 (1.28)		0.64				
I worry about lead contamination entering my home.	2.6 (1.26)		0.80				
It is worth my time to clean my home to prevent lead contamination.	3.6 (1.11)		0.59				
I need more information about how to prevent lead contamination from entering my home.**	3.0 (1.23)		0.61				

<i>Consider your recreational and outdoor activities in your local area over the next 12 months. How likely is it that you will?</i>				
Promptly remove dirt from your clothes, toys, pets, cars, and equipment after spending time outdoors?	3.7 (1.33)		0.55	
Stay on designated trails while recreating in areas where lead contamination warning signs are posted?	3.8 (1.35)		0.69	
Wash your hands with clean water or wipes before eating or drinking after recreating or working outdoors?	4.3 (1.12)		0.56	
Use a protective barrier such as a blanket when sitting on a sandy beach?	3.6 (1.37)		0.63	
Follow the advice of a public health official about ways to avoid lead contamination while spending time outdoors?	3.6 (1.34)		0.83	
I have experienced health effects related to lead contamination.	2.0 (1.10)		0.91	
I feel I will experience health effects related to lead contamination at some time during my life.	2.3 (1.12)		0.94	
I am more likely than the average person to experience health effects from lead contamination.	2.3 (1.14)		0.66	
If it is my destiny to experience health effects related to lead contamination, there is nothing that I can do to prevent it.	2.1 (1.07)		0.40	
I know a lot about the health effects from lead contamination.	3.2 (1.04)		0.76	
I am better informed about the health effects of lead contamination than most people.	3.0 (1.03)		0.78	
I seek out information about lead contamination.**	2.7 (0.96)	0.43	0.60	
I know how to prevent health effects from lead contamination.**	3.3 (1.01)		0.45	0.36
I know who to ask if I have questions about preventing health effects from lead contamination.	3.5 (1.04)		0.98	
I am aware of the available resources for preventing health effects of lead contamination.	3.3 (1.12)		0.63	

Notes. Maximum likelihood extraction with direct oblimin rotation; 54% variance explained; Cut-off Eigenvalue=1.00

**Item not included in CFA or Cronbach's Alphas ^aValues are factor loadings from the direct oblimin pattern matrix. Items with loadings below 0.30 were suppressed.

^bAll variables are perceived variables derived from survey items

Table S2. Structural equation model correlation matrix

	1	2	3	4	5	6
1. Perceived Severity	1					
2. Perceived Susceptibility	0.56**	1				
3. Perceived Benefits	0.50**	0.09	1			
4. Perceived Barriers	-0.27**	-0.28**	0.06	1		
5. Self-Efficacy	-0.12	-0.05	0.07	0.75**	1	
6. Behavioral Intentions	0.51**	0.17**	0.75**	-0.03	0.06	1

Note. Correlation is significant at the 0.01 level (two-tailed). **p < .01.