

Terminology for Valuing Mortality Risk Reductions

Focus Group Discussion Guide

November 2016

I. Overview

The purpose of the focus groups is to identify language people use to describe health risk reductions from environmental exposures and explore alternatives to the term “value of a statistical life.” The discussion will focus on:

- Language used to describe trade-offs between safety and other factors. We will explore how people think about health risk trade-offs using an automobile example first, as it should be a familiar context for most people, then turning to an environmental example. We will be exploring how people describe their choices in these contexts.
- Describing health risk reduction. We will also explore how people think about and describe reductions in risks, particularly those to health. Are people able to think about the choices and describe them in a meaningful way?
- General understanding of risk reductions and communication. The ultimate goal is to determine a phrase or set of words people think are relevant for describing trade-offs between money and mortality risk reductions.

We have provided a draft script for the initial focus group below.

II. Discussion Guide for Initial Focus Group

This guide provides a general framework for the initial focus group discussion. Actual questions posed may deviate from those listed below depending on the direction of the discussion. The structure of subsequent discussions will depend on the results from the earlier discussions.

I. Background Information

1. Introductions and purpose
 - (a) Introduce focus group participants: state your first name and town where you live
 - (b) Purpose of focus group is to help identify effective ways to communicate about risks to safety and health
2. Ground rules
 - (a) Session is being video-taped.
 - (b) Discussion is strictly confidential. No names will be used in reporting and no one will contact you regarding anything you say. No one will follow-up with you after the discussion in any way.
 - (c) Expect the session to last 2 hours.
 - (d) Want to hear from everyone. Important that everyone contribute; there are no right or wrong answers, we are simply asking your honest opinions about various topics.
 - (e) Important for people to speak one at a time and that you refrain from interrupting others. We ask that you respect the right of others to be heard and voice opinions that may differ from yours. Try not to let the group sway you in your opinion; say what you think.
 - (f) The moderator’s job is to keep the discussion on task.

3. We are going to talk about risks to safety and health, and particularly how to communicate about these risks. There are no right or wrong answers and we are just trying to explore your thoughts. We want to hear from everyone so sometimes we will need to move to a new person or topic quickly.
4. Questions?

NOTE: For the first focus group we will start directly with eliciting reactions to value of statistical life term and description, before asking participants to think more conceptually (in parts IV and V). For the second focus group we may change the order and start with the more conceptual discussion.

II. Initial Reactions to existing language

Goal of this discussion: To introduce and discuss the VSL term and how it is used in regulatory documents. We are looking for initial reactions to the language.

Health and safety regulations involve trade-offs between costs and changes in health risk. For instance, it costs money to reduce air pollution but as a result, there will be lower risk of asthma attacks or fatal heart attacks. That is, there will be fewer deaths.

Everyone pays the costs (through prices) and everyone's chances of dying are reduced, but it is impossible to know who exactly will be affected ahead of time.

Of course, costs are always in dollars. But these benefits – fewer expected deaths – are more difficult to place in terms of dollars. Here is one example of how this is done.

<Show the following table and information>

| Number of reduced expected deaths | Value of Statistical life * | Total benefits |
|--|------------------------------------|-----------------------|
| (A) | (B) | = (A) X (C) |
| 100 | \$9 million | \$900 million |

** The benefit provided by air pollution reductions is the avoidance of small increases in the risk of mortality. By summing how much individuals are willing to pay to avoid small increases in risk over enough individuals, we can infer the value of a statistical premature death avoided.*

This is referred to the “value of a statistical life” (VSL), even though the actual valuation is of small changes in mortality risk experience by a large number of people.

1. Tell us about your initial reactions to this description
 - a. What does it mean to you?
 - b. Have you heard the term “value of statistical life” before?
 - c. Does it make sense to you?
 - d. Is the description clear?

2. What do you think of the concept that is being described?
3. How would you describe this concept to someone else?
4. Can we improve on how this concept is described?
5. What about the term “Value of Statistical Life”? Is there a better alternative that better describes to you what’s going on here?

III. **Testing specific terms and alternatives**

Goal of this discussion:

- *Learn what specific terms resonate best with people for describing these trade-offs*
- *Determine whether one phrase can be used, or if different ones are needed*

Reminder if needed:

Figuring out how to describe these kinds of risk changes and the value people place on them is a big challenge in the work policy analysts do. When weighing the advantages and disadvantages of a proposed policy, both benefits and costs need to be expressed in dollars to make the comparison.

To express benefits from policies that reduce the risks of dying, analysts multiply the expected change in the risk or probability of death for a population that results from the policy by the value individuals have expressed in surveys or revealed by their purchases of safety devices, such as those we discussed earlier, for a change in the risk of death. Similar calculations are made to summarize the benefits from other outcomes – nonfatal cancers, illnesses, etc. The problem we’re grappling with today is how to describe these values, in words, to the general public in the clearest possible way.

I’d like to ask you about some specific terms that could be used to describe the tradeoffs or choices between money and health risk.

6. Here are some other phrases that have been used to describe these trade-offs (Post on screen). Have you heard of any of them?
7. What do they mean to you, if anything?
 - Value of mortality risk
 - Value of a statistical case
 - Willingness to pay
 - Value of risk reduction
 - Marginal value of risk
 - Unit benefit value for mortality
 - Value of risk
 - Value of mortality risk

- Value of prevented fatality / value of fatality prevented
- Value of risk reduction
- Value of mortality risk reduction
- Price of risk
- Price of mortality risk
- Price of mortality risk reduction

8. How do you think researchers should describe these trade-offs?
9. Do you have any other thoughts on this topic?
10. Can you think of a phrase or term to describe the amount people pay for changes in the risk of dying? (in other contexts: GDP, CPI, BMI etc.)
11. Would the phrase you pick be different depending on the
 - Source of the risk?
 - Size of the risk?
 - Outcome being affected?
 - Type of risk or how it is reduced?
 - Or can one phrase do the trick?

IV. **Thinking about tradeoffs in our daily lives**

Goal of this discussion: The purpose is to get people thinking and talking about trade-offs we make all the time.

Every day we each make decisions that increase or decrease the chances of having an accident or getting sick. These decisions involve trade-offs.

Some of the trade-offs involve time. For example, by driving faster you may reach your destination sooner but you may also increase the chances that you'll be hurt in an accident. Or, by driving more slowly you may reach your destination later but you may also reduce the chances you'll be hurt in an accident.

And some tradeoffs involve pain and suffering. For example, we get a flu shot to reduce the chances of getting sick, even though it hurts a little and there are small risks of side effects.

Or, they may involve money. For example, we may pay money to install radon detectors in our home to reduce the chances of getting lung cancer.

These are just a few examples of the types of trade-offs we make in our everyday lives that can increase or decrease our chances of getting sick or injured.

12. Can you think of other examples where you have made these kinds of decisions or tradeoffs - trading time or convenience or money for changes in the chances of illness or injury?
13. What are some of the things you were thinking about when making these tradeoff decisions?

14. Were there any factors that were more important to you than others? Less important?

V. Thinking about mortality risks - Automobile example

Goal of this discussion:

- *We want to get people thinking about risk reductions in the context of a familiar choice set - automobile safety*
- *We want to know how people think about these choices and how they describe the choices.*

As an example, let's talk specifically about automobile accidents. To keep things simple, let's assume a one-car accident occurs—for example, a collision with a tree—and the only occupant in the vehicle is the driver. When an accident occurs a number of outcomes are possible. For instance:

- The car could incur minor damage
- The car could incur major damage
- The driver could receive minor injuries
- The driver could receive serious injuries
- The driver could get killed
- Or some combination of outcomes (for example, major damage to the car, but only minor injuries to the driver)

Standard safety device

Suppose a new device is developed that consumers could buy that would reduce the chances of having an automobile accident. This might be some type of warning system that detects collisions and applies the brakes for you. It wouldn't be standard on all vehicles, but rather some type of optional safety feature you could buy.

15. Would you purchase such a device?

16. How would you decide whether or not it was worth purchasing the device?

17. What factors would you consider in making your decision?

Prompts, if needed:

- How safe my car is without the device (baseline risk)
- How safe a driver I am
- Age of car
- Possible cost to repair my car if it was in an accident
- Type of insurance - health and auto - I have
- How quickly I could recover from a serious injury (baseline health)
- My age
- Alternative means of transportation

Protection against injury or death

Now suppose that instead of reducing your chances of getting into an accident the device reduces your chance of getting hurt or dying if you do get into an accident. This could be like some type of optional air bag that you could purchase. You don't know if you are going to need the device – no one tries to get into a car accident – but you do know that it will reduce your probability of getting hurt.

18. Would your answer change if instead of reducing your chances of getting into an accident in the first place the device reduced your chances of getting seriously hurt in an accident? Would you purchase the device, knowing that it affects your own personal safety?

19. What factors would you consider when making your decision?
(Use same prompts as above, if needed.)

20. Do the factors that affect your purchase decision change from the scenario we talked about earlier? If so, how?

Probability and cost information

Suppose you are told the device would reduce your probability of dying in a car accident by 10%.

21. Does knowing this information affect your decision? Why or why not?

Suppose the device costs \$100. It's an add-on feature you can install at any time.

22. Would you pay this amount? More? Less?

23. Could you make these decisions? That is, could you decide whether or not to purchase one of these devices?

Describing the risk reduction

24. How would you describe the risk reduction?

25. How would you describe the choice you made to someone else?

26. What terms would you use to describe these trade-offs?

27. Can you think of a general term that describes these trade-offs? What other information would you need to describe a term?

28. Do you think people would understand what these terms mean? What would make it more/less clear?

VI. Conclusions

Thank you very much for your time and insights.