

Acceptable Risk

Acceptable Risk

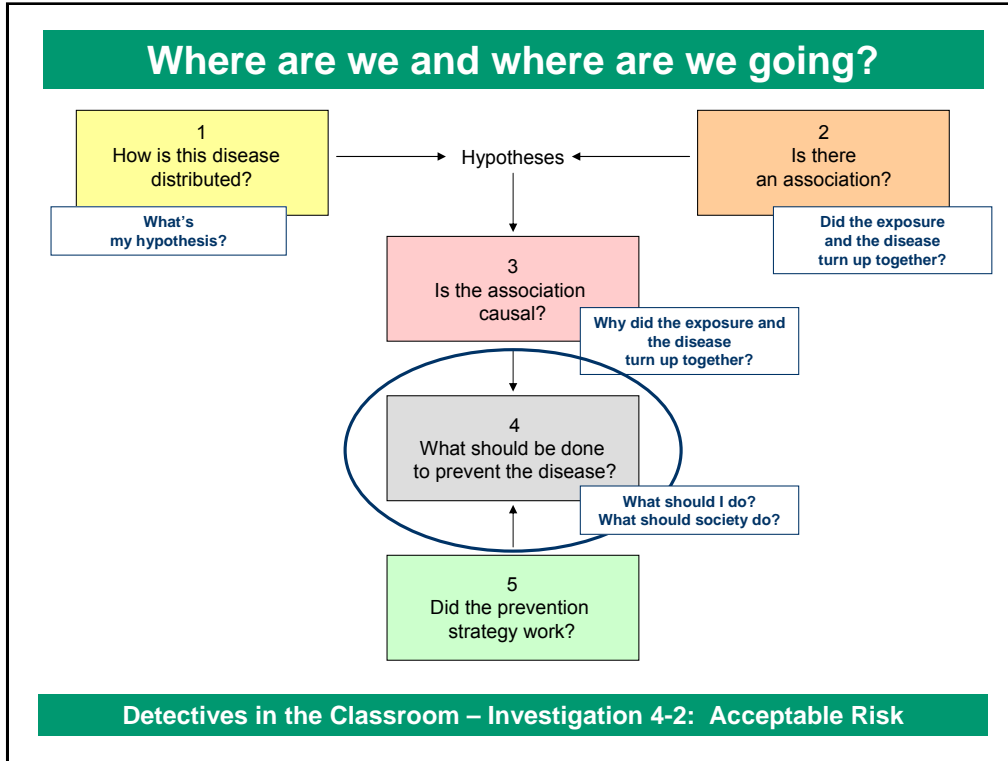


Detectives in the Classroom – Investigation 4-2: Acceptable Risk

In **Investigation 4-2: Acceptable Risk**, students will identify factors, in addition to the size of a risk, that influence their decisions to accept or avoid a risk.

☀ Teacher Alert: It is enlightening for young people to think about risk in terms of whether *they* think it is acceptable, in contrast to adult-world opinions and restrictions that may be imposed upon them. Even in a small group of students, it is common for some to consider a personal risk entirely acceptable, whereas others find it quite the opposite—for example, the risks associated with smoking, drinking alcoholic beverages, and eating junk food. To help reveal differences in the acceptability of various risks, each student will independently list three activities he or she thinks are risky but *would still do as an adult* and three others he or she perceives as risky and *would not do as an adult*. Students are then challenged to identify what makes a particular risk acceptable or unacceptable and to develop a list of considerations that influence their judgments about the acceptability of risk.

Next Slide



Remind students again that in the Module 4 investigations, they are learning how to answer the Fourth Essential Question: “What should be done to prevent the disease?”

Next Slide

Review

Epi Talk

Risk

A measure of how often an event occurs in a defined group of people in a defined period of time.

The likelihood of developing a disease.

Detectives in the Classroom – Investigation 4-2: Acceptable Risk

Review the definition of “Risk.”

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Review

Epi Talk

Risk Perception

One's feeling or opinion of the existence or size of a risk.

One's estimate of the likelihood that an undesirable consequence, associated with some activity, will occur within a period of time.

Detectives in the Classroom – Investigation 4-2: Acceptable Risk

Review the definition of “Risk Perception.”

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Epi Talk

Acceptable Risk

The degree to which an individual or society is willing to tolerate the existence of something that poses a danger.

Detectives in the Classroom – Investigation 4-2: Acceptable Risk

Ask students to find “Acceptable Risk” in the **Epi Talk** list.
Review its definition.

Next Slide

Epi Log Worksheet 1

Detectives in the Classroom Name: _____

Investigation 4-2 Epi Log Worksheet 1 Date: ____/____/____

Acceptable and Unacceptable Risks

3 Risks Most Likely to Take as an Adult	Risks	3 Risks Least Likely to Take as an Adult
_____	Being with someone who is smoking a cigarette	_____
_____	Bungee jumping	_____
_____	Carrying a gun	_____
_____	Drinking alcohol	_____
_____	Driving a car over the speed limit	_____
_____	Eating red meat	_____
_____	Eating junk food	_____
_____	Flying in a space shuttle	_____
_____	Getting in a physical fight	_____
_____	Getting in a verbal fight	_____
_____	Not exercising	_____
_____	Playing soccer	_____
_____	Riding a motorcycle	_____
_____	Riding a bicycle without a helmet	_____
_____	Smoking a cigarette	_____
_____	Smoking marijuana	_____
_____	Skateboarding	_____
_____	Skydiving	_____

Detectives in the Classroom – Investigation 4-2: Acceptable Risk

Give each student an **Investigation 4-2: Epi Log Worksheet 1**.


Ask students to place a check to the left of the three risks they would be *most likely to take as an adult* and then a check to the right of the three risks they would be *least likely to take as an adult*.

☀ **Teacher Alert:** When students have checked their three most likely and three least likely risks, tell them to keep their answers in mind as these behaviors are discussed. They will be asked to think about *why* a risk may be acceptable to some students and unacceptable to others.

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Acceptable Risk

**Most
Likely
to Take
as an Adult**



**Least
Likely
to Take
as an Adult**

Detectives in the Classroom – Investigation 4-2: Acceptable Risk

Select the risk *bungee jumping*.

Ask students to raise their hands if bungee jumping is among the three risks they would *most* likely take as an adult.

Then have them raise their hands if *bungee jumping* is among the three risks they would *least* likely take as an adult.

Help the class realize that it is not unusual, even among a small number of students, for the same risk to be considered acceptable to some and unacceptable to others.

Ask students:

- What do you think about the acceptability of a risk when the activity is thought to *affect only the participant*?


Probe. (When a risk affects only the person taking the risk, should that person be free to decide whether or not to participate in the activity?)

☀ **Teacher Alert:** Although bungee jumping may seem to affect only the participant, in actuality, if the jumper were injured, it may affect the jumper's family, the owner of the bungee jumping business, the first aid squad, the ambulance driver, people in the path of the ambulance, and others in the hospital who may have delayed care due to the emergency room (ER) visit by the injured bungee jumper.

Next Slide

Acceptable Risk

**Most
Likely
to Take
as an Adult**



**Least
Likely
to Take
as an Adult**

Detectives in the Classroom – Investigation 4-2: Acceptable Risk

Select the risk *driving a car over the speed limit*.

Ask students to raise their hands if *driving a car over the speed limit* was among the three risks they would *most* likely take as an adult.

Then have them raise their hands if *driving a car over the speed limit* was a risk they would *least* likely take as an adult.

Ask students:

- What do you think about the acceptability of a risk when the activity *affects not only the participant, but others*?

Probe. (Lead students to uncover that when an activity can result in adverse effects on others, we often make rules that limit someone's freedom to participate in that activity.)

Next Slide

Acceptable Risk

<p style="text-align: center; margin: 0;"><u>Reasons Risks Are Acceptable</u></p> <p>1. Only affects person taking the risk</p>	<p style="text-align: center; margin: 0;"><u>Reasons Risks Are Not Acceptable</u></p> <p>1. Affects people not taking the risk</p>
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Detectives in the Classroom – Investigation 4-2: Acceptable Risk

Divide the board into two columns. Title one column “Reasons Risks Are Acceptable” and the other “Reasons Risks Are Not Acceptable.”

Given students’ comments about the acceptability of the risks of bungee jumping and driving a car over the speed limit, have them identify the reasons why the risk is acceptable or unacceptable.

Write students’ reasons in the appropriate column on the board.

For example, students will probably conclude that one of the “Reasons Risks Are Acceptable” is that the risk affects only the person taking the risk and that one of the “Reasons Risks Are Not Acceptable” is that it affects people not taking the risk.

☀ **Teacher Alert:** Help students uncover the conflicts between an individual’s freedom to take risks and an individual’s responsibility to refrain from activities that may harm others.

Next Slide

Epi Log Worksheet 2

Detectives in the Classroom Name: _____

Investigation 4-2: Epi Log Worksheet 2 Date: ____/____/____

Acceptable Risk Considerations

<u>Reasons Risks Are Acceptable</u>	<u>Reasons Risks Are Not Acceptable</u>
1. Only affects person taking the risk	1. Affects people not taking the risk
2.	2.
3.	3.
4.	4.
5.	5.
6.	6.
7.	7.
8.	8.
9.	9.
10.	10.
11.	11.
12.	12.

Detectives in the Classroom – Investigation 4-2: Acceptable Risk


Give each student an **Investigation 4-2: Epi Log Worksheet 2**.

Instruct students to copy the considerations that are listed on the board onto the **Investigation 4-2: Epi Log Worksheet 2**.

Next Slide

Acceptable Risk

Most Likely to Take as an Adult



Least Likely to Take as an Adult

Detectives in the Classroom – Investigation 4-2: Acceptable Risk

Consider the risks posed by *smoking cigarettes*.

Ask students to raise their hands if this risk was among the three risks they would *most* likely take as an adult.

Then have them raise their hands if this risk was among the three risks they would *least* likely take as an adult.

Ask students:

- Can you identify the primary reason that the risk *is* or *is not acceptable*?

Next Slide

Acceptable Risk

<u>Reasons Risks Are Acceptable</u>	<u>Reasons Risks Are Not Acceptable</u>
<ol style="list-style-type: none"> 1. Only affects the person taking the risk 2. Harm does not happen immediately 	<ol style="list-style-type: none"> 1. Affects people not taking the risk 2. Harm is very serious

Detectives in the Classroom – Investigation 4-2: Acceptable Risk

Write students' suggestions in the appropriate column on the board.

For example, some students may say that the risks posed by cigarette smoking are *acceptable* because "the harm does not happen immediately," whereas others may maintain that the risks are *not acceptable* because "the harm that smoking can cause (lung cancer, heart disease, and emphysema) is very serious."

Students may also note that a smoker is likely to be relatively less healthy over his or her lifetime, require more medications, have more upper respiratory illness, and be a bigger drain on health care resources.

☀ Teacher Alert: Students may also think back to the point raised in the example of driving a car above the speed limit, that is, the conflict between individual freedom to take risks versus individual responsibility to refrain from activities that may harm others. If this happens, rather than writing reasons twice, simply point out where the reason had been previously written on the board.

Next Slide

Epi Log Worksheet 2

Detectives in the Classroom Name: _____

Investigation 4-2: Epi Log Worksheet 2 Date: ____/____/____

Acceptable Risk Considerations

<u>Reasons Risks Are Acceptable</u>	<u>Reasons Risks Are Not Acceptable</u>
1. Only affects person taking the risk	1. Affects people not taking the risk
2. Harm does not happen immediately	2. Harm is very serious
3.	3.
4.	4.
5.	5.
6.	6.
7.	7.
8.	8.
9.	9.
10.	10.
11.	11.
12.	12.


Detectives in the Classroom – Investigation 4-2: Acceptable Risk

Students should continue to copy the considerations that are listed on the board onto the **Investigation 4-2: Epi Log Worksheet 2**.

Next Slide

Acceptable Risk

**Most
Likely
to Take
as an Adult**



**Least
Likely
to Take
as an Adult**

Detectives in the Classroom – Investigation 4-2: Acceptable Risk

☀ **Teacher Alert:** For each of the following risks on the next 14 slides, ask students to raise their hands if the risk was among the three risks they would *most* likely take as an adult and then to raise them if the risk was among the three risks they would *least* likely take as an adult.

Consider the risks posed by *secondhand smoke*.

Ask students:

- Can you identify the primary reason that the risk *is* or *is not* acceptable?


Continue to write students' suggestions in the appropriate column on the board.

Students should keep copying the considerations that are listed on the board onto the **Investigation 4-2: Epi Log Worksheet 2**.

For example, some students may say that the risk posed by being with others who smoke cigarettes is *acceptable* because they believe "there is no serious harm in secondhand smoke," whereas others may maintain that the risk posed by secondhand smoking is *not acceptable* because they believe "secondhand smoke can cause serious health effects similar to those in firsthand smokers."

Next Slide

Acceptable Risk

<p>Most Likely to Take as an Adult</p>		<p>Least Likely to Take as an Adult</p>
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Detectives in the Classroom – Investigation 4-2: Acceptable Risk

Consider the risks posed by *carrying a gun*.

Ask students

- Can you identify the primary reason that the risk *is* or *is not acceptable*?

Continue to write students' suggestions in the appropriate column on the board.

Students should keep copying the considerations that are listed on the board onto the **Investigation 4-2: Epi Log Worksheet 2**.

For example, some students may say that the risks posed by carrying a gun may be *acceptable* because they believe that "when guns are used properly, they are not dangerous," whereas others may maintain that the risks posed by carrying a gun are *not acceptable* because "there is a chance of an accidental shooting."

Next Slide

Acceptable Risk

<p>Most Likely to Take as an Adult</p>		<p>Least Likely to Take as an Adult</p>
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Detectives in the Classroom – Investigation 4-2: Acceptable Risk

Consider the risks posed by *drinking alcohol*.

Ask students:


- Can you identify the primary reason that the risk *is* or *is not acceptable*?

Continue to write students' suggestions in the appropriate column on the board.

Students should keep copying the considerations that are listed on the board onto the **Investigation 4-2: Epi Log Worksheet 2**.

Next Slide

Acceptable Risk

<p>Most Likely to Take as an Adult</p>		<p>Least Likely to Take as an Adult</p>
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Detectives in the Classroom – Investigation 4-2: Acceptable Risk

Consider the risks posed by *eating red meat*.

Ask students:

- Can you identify the primary reason that the risk *is* or *is not acceptable*?

Continue to write students' suggestions in the appropriate column on the board.

Students should keep copying the considerations that are listed on the board onto the **Investigation 4-2: Epi Log Worksheet 2**.

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Acceptable Risk

<p>Most Likely to Take as an Adult</p>		<p>Least Likely to Take as an Adult</p>
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Detectives in the Classroom – Investigation 4-2: Acceptable Risk

Consider the risks posed by *eating junk food*.

Ask students:

- Can you identify the primary reason that the risk *is* or *is not acceptable*?


Continue to write students' suggestions in the appropriate column on the board.

Students should keep copying the considerations that are listed on the board onto the **Investigation 4-2: Epi Log Worksheet 2**.

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Acceptable Risk

Most Likely to Take as an Adult



Least Likely to Take as an Adult

Detectives in the Classroom – Investigation 4-2: Acceptable Risk

Consider the risks posed by *flying in a space shuttle*.

Ask students:

- Can you identify the primary reason that the risk *is* or *is not acceptable*?


Continue to write students' suggestions in the appropriate column on the board.

Students should keep copying the considerations that are listed on the board onto the **Investigation 4-2: Epi Log Worksheet 2**.

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Acceptable Risk

Most Likely to Take as an Adult



Least Likely to Take as an Adult

Detectives in the Classroom – Investigation 4-2: Acceptable Risk

The image shows a cartoon illustration of two people in a physical fight. On the left, a person with white hair, wearing a red shirt and white shorts, is in a boxing stance. On the right, a person with grey hair, wearing a blue shirt and dark pants, is also in a boxing stance. They are facing each other with their fists raised. A small white object, possibly a piece of paper or a card, is on the ground between them. The entire scene is framed by a black border. At the top and bottom of the frame are green bars with white text. The top bar says 'Acceptable Risk'. The bottom bar says 'Detectives in the Classroom – Investigation 4-2: Acceptable Risk'. On either side of the illustration are two columns of text. The left column says 'Most Likely to Take as an Adult' and the right column says 'Least Likely to Take as an Adult'. The words 'Most' and 'Least' are underlined in red, while 'Likely to Take as an Adult' is in green.

Consider the risks posed by *getting into a physical fight*.

Ask students:


- Can you identify the primary reason that the risk *is* or *is not acceptable*?

Continue to write students' suggestions in the appropriate column on the board.

Students should keep copying the considerations that are listed on the board onto the **Investigation 4-2: Epi Log Worksheet 2**.

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Acceptable Risk

<p>Most Likely to Take as an Adult</p>	 <p>IS TOO! IS NOT!</p>	<p>Least Likely to Take as an Adult</p>
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Detectives in the Classroom – Investigation 4-2: Acceptable Risk

Consider the risks posed by *getting into a verbal fight*.

Ask students:

- Can you identify the primary reason that the risk *is* or *is not acceptable*?

Continue to write students' suggestions in the appropriate column on the board.

Students should keep copying the considerations that are listed on the board onto the **Investigation 4-2: Epi Log Worksheet 2**.

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Acceptable Risk

Most Likely to Take as an Adult



Least Likely to Take as an Adult

Detectives in the Classroom – Investigation 4-2: Acceptable Risk

Consider the risks posed by *not exercising*.

Ask students:

- Can you identify the primary reason that the risk *is* or *is not acceptable*?

Continue to write students' suggestions in the appropriate column on the board.

Students should keep copying the considerations that are listed on the board onto the **Investigation 4-2: Epi Log Worksheet 2**.

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Acceptable Risk

**Most
Likely
to Take
as an Adult**



**Least
Likely
to Take
as an Adult**

Detectives in the Classroom – Investigation 4-2: Acceptable Risk

Consider the risks posed by *playing soccer*.

Ask students:

- Can you identify the primary reason that the risk *is* or *is not acceptable*?

Continue to write students' suggestions in the appropriate column on the board.

Students should keep copying the considerations that are listed on the board onto the **Investigation 4-2: Epi Log Worksheet 2**.

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Acceptable Risk

<p>Most Likely to Take as an Adult</p>		<p>Least Likely to Take as an Adult</p>
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Detectives in the Classroom – Investigation 4-2: Acceptable Risk

Consider the risks posed by *driving a motorcycle without a helmet*.

Ask students:

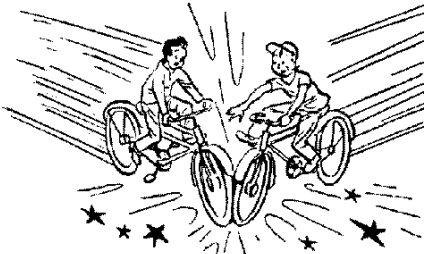
- Can you identify the primary reason the risk *is* or *is not acceptable*?

Continue to write students' suggestions in the appropriate column on the board.

Students should keep copying the considerations that are listed on the board onto the **Investigation 4-2: Epi Log Worksheet 2**.

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Acceptable Risk

<p>Most Likely to Take as an Adult</p>		<p>Least Likely to Take as an Adult</p>
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Detectives in the Classroom – Investigation 4-2: Acceptable Risk

Consider the risks posed by *riding a bicycle without a helmet*.

Ask students:

- Can you identify the primary reason that the risk *is* or *is not acceptable*?

Continue to write students' suggestions in the appropriate column on the board.

Students should keep copying the considerations that are listed on the board onto the **Investigation 4-2: Epi Log Worksheet 2**.

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Acceptable Risk

<p>Most Likely to Take as an Adult</p>		<p>Least Likely to Take as an Adult</p>
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Detectives in the Classroom – Investigation 4-2: Acceptable Risk

Consider the risks posed by *smoking marijuana*.

Ask students:

- Can you identify the primary reason that the risk *is* or *is not acceptable*?

Continue to write students' suggestions in the appropriate column on the board.

Students should keep copying the considerations that are listed on the board onto the **Investigation 4-2: Epi Log Worksheet 2**.

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Acceptable Risk

<p>Most Likely to Take as an Adult</p>		<p>Least Likely to Take as an Adult</p>
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Detectives in the Classroom – Investigation 4-2: Acceptable Risk

Consider the risks posed by *skateboarding*.

Ask students:


- Can you identify the primary reason that the risk *is* or *is not acceptable*?

Continue to write students' suggestions in the appropriate column on the board.

Students should keep copying the considerations that are listed on the board onto the **Investigation 4-2: Epi Log Worksheet 2**.

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Acceptable Risk

<p>Most Likely to Take as an Adult</p>		<p>Least Likely to Take as an Adult</p>
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Detectives in the Classroom – Investigation 4-2: Acceptable Risk

Consider the risks posed by *sky diving*.

Ask students:

- Can you identify the primary reason the risk *is* or *is not acceptable*?

Continue to write students' suggestions in the appropriate column on the board.

Students should keep copying the considerations that are listed on the board onto the **Investigation 4-2: Epi Log Worksheet 2**.

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Epi Log Worksheet 2

Detectives in the Classroom Name: _____	
Investigation 4-2: Epi Log Worksheet 2 Date: ___/___/___	
Acceptable Risk Considerations	
Reasons Risks Are Acceptable	Reasons Risks Are Not Acceptable
1. Only affects person taking the risk	1. Affects people not taking the risk
2. Harm does not happen immediately	2. Harm is very serious
3. XXXXXXXXXXXXXXXXXXXX	3. XXXXXXXXXXXXXXXXXXXX
4. XXXXXXXXXXXXXXXXXXXX	4. XXXXXXXXXXXXXXXXXXXX
5. XXXXXXXXXXXX	5. XXXXXXXXXXXXXXXXXXXX
6. XXXXXXXXXXXXXXXXXXXX	6. XXXXXXXXXXXX
7. XXXXXXXXXXXXXXXX	7. XXXXXXXXXXXXXXXXXXXX
8. XXXXXXXXXXXXXXXXXXXX	8. XXXXXXXXXXXXXXXXXXXX
9. XXXXXXXXXXXX	9. XXXXXXXXXXXXXXXXXXXX
10. XXXXXXXXXXXXXXXXXXXX	10. XXXXXXXXXXXX
11. XXXXXXXXXXXXXXXXXXXX	11. XXXXXXXXXXXXXXXXXXXX
12. XXXXXXXXXXXXXXXX	12. XXXXXXXXXXXXXXXXXXXX

Detectives in the Classroom – Investigation 4-2: Acceptable Risk

Bring the list of acceptable risk considerations to the students' attention. In the next investigation they will be referring back to their list as they hear about lists that have been suggested by others.

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Acceptable Risk



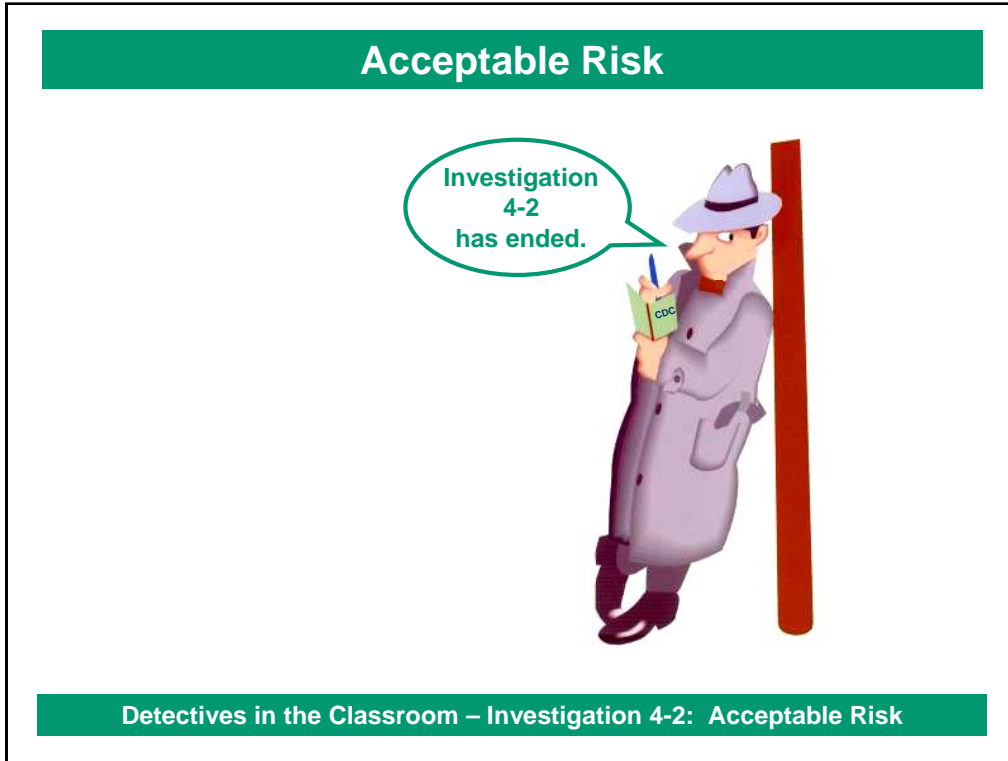
Detectives in the Classroom – Investigation 4-2: Acceptable Risk

Ask students:

- How might people's judgments of the acceptability of risks influence the development of disease prevention strategies?

Decisions about the acceptability of risk can be made at the individual level, as students have discussed in this investigation. Society also makes decisions about the acceptability of risk. Imagine how complicated this situation is, considering how many differences exist among individuals—even among those in this one class!

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This concludes **Investigation 4-2: Acceptable Risk** and students can now put away their **Epi Logs**.