

Investigation 2-2: Homework Answer Key

Given the information below, complete the 2x2 table and calculate the risk of the outcome in the exposed group and unexposed group. Express the risks as fractions and percents. Then calculate the relative risk. Round off your answers to one decimal point.

Example	cell a: 60	cell b: 40	cell c: 30	cell d: 70		
	Outcome	No Outcome	Total	Risk (Fraction)	Risk (Percent)	Relative Risk
Exposed	<b>60</b>	<b>40</b>	<b>100</b>	<b>60 / 100</b>	<b>60%</b>	<b>2</b>
Unexposed	<b>30</b>	<b>70</b>	<b>100</b>	<b>30 / 100</b>	<b>30%</b>	

1.	cell a: 75	cell b: 25	cell c: 30	cell d: 70		
	Outcome	No Outcome	Total	Risk (Fraction)	Risk (Percent)	Relative Risk
Exposed	<b>75</b>	<b>25</b>	<b>100</b>	<b>75 / 100</b>	<b>75%</b>	<b>2.5</b>
Unexposed	<b>30</b>	<b>70</b>	<b>100</b>	<b>30 / 100</b>	<b>30%</b>	

2.	cell a: 25	cell b: 75	cell c: 35	cell d: 65		
	Outcome	No Outcome	Total	Risk (Fraction)	Risk (Percent)	Relative Risk
Exposed	<b>25</b>	<b>75</b>	<b>100</b>	<b>25 / 100</b>	<b>25%</b>	<b>1.4</b>
Unexposed	<b>35</b>	<b>65</b>	<b>100</b>	<b>35 / 100</b>	<b>35%</b>	

3.	cell a: 48	cell b: 27	cell c: 15	cell d: 65		
	Outcome	No Outcome	Total	Risk (Fraction)	Risk (Percent)	Relative Risk
Exposed	<b>48</b>	<b>27</b>	<b>75</b>	<b>48 / 75</b>	<b>64%</b>	<b>3.4</b>
Unexposed	<b>15</b>	<b>65</b>	<b>80</b>	<b>15 / 80</b>	<b>18.8%</b>	

4.		cell a: 56	cell b: 74	cell c: 87	cell d: 65	
	Outcome	No Outcome	Total	Risk (Fraction)	Risk (Percent)	Relative Risk
Exposed	<b>56</b>	<b>74</b>	<b>130</b>	<b>56 / 130</b>	<b>43.1%</b>	<b>1.3</b>
Unexposed	<b>87</b>	<b>65</b>	<b>152</b>	<b>87 / 152</b>	<b>57.2%</b>	

5.		cell a: 5	Exposed Total: 35	cell c: 14	Unexposed Total: 62	
	Outcome	No Outcome	Total	Risk (Fraction)	Risk (Percent)	Relative Risk
Exposed	<b>5</b>	<b>30</b>	<b>35</b>	<b>5 / 35</b>	<b>14.3%</b>	<b>1.6</b>
Unexposed	<b>14</b>	<b>48</b>	<b>62</b>	<b>14 / 62</b>	<b>22.6%</b>	

6.		Exposed & Outcome: 39	Exposed Total: 122	Unexposed & Outcome: 14	Unexposed Total: 79	
	Outcome	No Outcome	Total	Risk (Fraction)	Risk (Percent)	Relative Risk
Exposed	<b>39</b>	<b>83</b>	<b>122</b>	<b>39 / 122</b>	<b>32.0%</b>	<b>1.8</b>
Unexposed	<b>14</b>	<b>65</b>	<b>79</b>	<b>14 / 79</b>	<b>17.7%</b>	

7.		cell a: 150	Exposed Total: 200	cell c: 35	Unexposed Total: 100	
	Outcome	No Outcome	Total	Risk (Fraction)	Risk (Percent)	Relative Risk
Exposed	<b>150</b>	<b>50</b>	<b>200</b>	<b>150 / 200</b>	<b>75%</b>	<b>2.1</b>
Unexposed	<b>35</b>	<b>65</b>	<b>100</b>	<b>35 / 100</b>	<b>35%</b>	