# INFOST 370-201

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# Exercise 1: Data Analysis

**1. What is the average age of the survey participants’ children?**

9.1 years

**2. How many children are male? How many are female? What proportion of the children are male and female?**

Male 10 50%

Female 10 50%

**3. How many children are Latino? How many children are Pacific Islander? How many children are American Indian/ Alaskan Native? How many children are Asian? How many children are African American? How many children are White? How many children are Other?**

**What proportion of the children are Latino? What proportion are Pacific Islander? What proportion are American Indian/Alaskan Native? What proportion are Asian? What proportion are African American? What proportion are White? What proportion are Other?**

Latino 3 15%

Pacific Islander 2 10%

American Indian 2 10%

Asian 3 15%

African American 5 25%

White 4 20%

Other 1 5%

**4. Create a table that allows you to compare the frequencies and percentages of race and ethnicity data. Put numbers and percentages in the columns, and the different categories of race and ethnicity in the rows**

|  |  |  |
| --- | --- | --- |
| Race / Ethnicity | Frequency | Proportion |
| Latino | 3 | 15% |
| Pacific Islander | 2 | 10% |
| American Indian | 2 | 10% |
| Asian | 3 | 15% |
| African American | 5 | 25% |
| White | 4 | 20% |
| Other | 1 | 5% |

**If the total population of this community is 54,786, and there were a total of 600 diagnosed cases of childhood asthma, calculate the rate of childhood asthma per 1,000 people.**

Rate of childhood asthma per 1000ppl 10.95 cases

**5. If the state rate of childhood asthma is 65 cases per 1,000 people, then how does this community compare?**

It is better because it has less cases per 1000ppl than the state of California

**6. Calculate the frequency of each of the responses to question #5 among African Americans.**

**If we look on the survey, we see that survey question #5 asks “How often does your child’s asthma limit his or her physical activity – would you say always, most of the time, sometimes, rarely, or never?”**

Always 3 60%

Sometimes 2 40%

**If we look in the spreadsheet, we see that of the 5 African American respondents, 3 answered “always”, which means 60% of the African American respondents gave this answer… (3/5)x100 = 60%**

**2 answered “sometimes”, which is equal to 40%… (2/5)x100 = 40%**

**However, the small numbers we are working with in these calculations fail to provide us with the confidence that these results are true for a larger population of African American children with asthma.**

**Calculate the frequency of the responses to question #5 among whites.**

Always 2 50%

Rarely 1 25%

Never 1 25%

**7. How do these frequencies compare?**

**Health Interview Survey**

**1. What is the rate (per 1000) of asthma among African American children in Los Angeles?**

208

**2. What is the rate (per 1000) of asthma among white children in Los Angeles?**

149

**3. What is the rate (per 1000) of asthma among Latino children in Los Angeles?**

86

**4. What is the rate (per 1000) of asthma among American Indian/ Alaskan Native children in Los Angeles?**

200

**5. What is the rate (per 1000) of asthma among African American children in California?**

220

**6. What is the rate (per 1000) of asthma among white children in California?**

152

**7. What is the rate (per 1000) of asthma among Latino children in California?**

101

**8. What is the rate (per 1000) of asthma among American Indian/ Alaskan Native children in California?**

256

**9. Do these California rates differ from the rates in Los Angeles County?**

African Americans lower in Los Angeles than in California

Whites higher in Los Angeles than in CA

Latinos lower in Los Angeles than in CA

American Indians lower in Los Angeles than in CA

**10. How would you interpret these findings?**

I don’t have much to add beyond what the data shows

**11. What conclusions can you draw?**