Carefully read the description of the experiment below. Be prepared to answer the questions that follow the design description as a class quiz.

A researcher investigating water treatment systems in Haiti found "that 14.74% of the sample population without filters suffered a diarrheal episode [56 of 380] compared with 6.51% of the sample population with filters [30 of 461]". How would we determine if the proportions who suffered illness differ between those with and without filters?

	No filter	Filter
No illness	324	431
Illness	56	30