

## Econ RA Guide

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# New email!

**Date:** August 15, 2021

**From:** Aide

**To:** New Research Assistant

**Cc:** pigeon@ufancy.edu

**Subject:** Hospital Data

Hello there! Welcome to your first day at PI G. Eon's lab! We hope that you're settling in nicely, moving to a new country can be very challenging. Here is your very first task:

### Question

The PI read the newspaper while eating cereals this morning and found an interesting article about our local town. The article describes a recent increase in children with **asthma** in our town. The journalist speculated that the recent opening of a factory producing Pokeballs could be responsible. Pokeballs, while super cute, are made using a highly toxic process that can cause pollution in the city that a factory is in.

The Professor would like to explore a research project on whether the opening of Pokeball factories across the country has had an effect on childhood asthma in a town.

**What was the effect of the opening of Pokeball factories on a town's incidence of childhood asthma?**

The PI was reminded of a law passed in 2007 that subsidized the opening of Pokeball factories in a number of states. We suspect that the passage of the law was a random and unexpected event. I'm not sure how that would be useful for you, but I attached that dataset as well.

### Data

We have some data for you from our country that will be helpful for you in answering this question.

For each of the datasets below, we have 16 years of balanced panel data. I denote the year variable as `<y>` in the description below, counting from 0 to 15 starting at the year 2000. That means that, for example, `<y>=3` corresponds to the year 2003.

## HOSPITAL DATA

Key: Hospital

[Download hospital data](#)

Variables:

- `hospital`: the name of the hospital, which also has the city name in it
- `cases<y>`: the total number of children's hospital stays related to asthma in the year

## CITY

Key: City

[Download city data](#)

Variables:

- `city`: the name of the city
- `population`: the city's population from the 2010 Census
- `lawchange`: an indicator for whether the city received a subsidy for the opening of Pokeball factories
- `factory_<y>`: the number of Pokeball factories in the city in year
- `production_<y>`: the number of Pokeballs produced in the city in year

## Deliverables

The deliverable should be a set of evidence that can be used to answer the above questions and a very short write-up. You should focus on stating clearly your assumptions, your findings, and any limitations.

Since you're new to the country, don't worry too much about the institutional and local details of the data and just use what you were given. Nonetheless, you are welcome to suggest that the PI takes a deeper look into patterns that you notice and speculate on mechanisms that exist in the economic literature in other countries (e.g. the US). You should also highlight the limitations of the data in answering these questions and suggest other data sources that we can look into (if they exist in other countries).

Thanks!

Best,

Aide

p.s. the Professor's having dinner with an important politician tonight so he needs this set of fact **within 6 hours**. Also I'm gonna be busy today at a donors' event so I can't answer your email in case you have any questions ok good luck.