# PS1 Part1 Food Inspection Data

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### 1 Description

To access City of Chicago Food Inspections Data, go to https://data.cityofchicago.org/Health-Human-Services/Food-Inspections/4ijn-s7e5/data. The data is stored on Chicago Data Portal. There is an ?Export? feature where different formats of data (e.g., csv, json, xml) can be downloaded. The original source is City of Chicago, and the data owner is Chicago Department of Public Health.

### 2 Other Key Papers

HO, D. (2012). Fudging the Nudge: Information Disclosure and Restaurant Grading.

The Yale Law Journal, 122(3), 574-688. Retrieved from http://www.jstor.org/stable/23528234

Harris, J., Mansour, R., Choucair, B., Olson, J., Nissen, C., & Bhatt, J. (2014).

Health

Department Use of Social Media to Identify Foodborne Illness? Chicago, Illinois, 2013?2014. Morbidity and Mortality Weekly Report, 63(32), 681-685. Retrieved from http://www.jstor.org/stable/24855291

# 3 Descriptive Statistics

The following table shows some descriptive statistics of 8 variables, Facility Type, Risk Type, Inspection Type, Results Type, Zip, Number of Violations, Violation Type, and Zero Violations. The 1st row shows the type with the highest number of

occurrences, except for Zero Violations, which is the number of providers that have zero violations. The 2nd row shpws the average number of violations per provider.

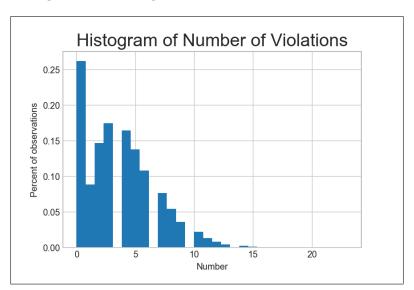
Table 1: Summary Statistics for Food Inspection Data

Food variables	Facility	Risk	Inspection	Results	Zip	Num Violations	Violations	Zero Violations
Type	Restaurant	Risk1	Canvass	Pass	60614		34.	
Max	110828	117586	88972	98082	6382	23	80516	33679
Avg.						3.68		

### 4 Visualization

Figure 1. The histogram is heavily left-skewed, with a long tail.

Figure 1: Histogram of Number of Violations



# 5 Conditional Description

The following table shows descriptive statistics of 8 variables, Facility Type, Number of Risk for schools, Inspection Type, Results Type, Zip, Number of Violations, Violation Type, and Zero Violations (in percentages) across the three risk types, high,

medium, and low. The 1st, 2nd, and 3rd rows show the type of variable with the highest number of occurrences, except for School and Zero Violations for risk1, risk2, and risk 3, respectively.

Table 2: Variables across Risk Type

Food variables	Facility	School	Inspection	Results	Zip	Num Violations	Violations	Zero Violations
Risk1	Restaurant		Canvass	Pass	60614	23	34.	
Max	88052	9024	65614	71428	7108	23	59256	16.25~%
Risk2	Restaurant		Canvass	Pass	60619		34.	
Max	21652	1088	16440	19534	1261	19	16108	21.7~%
Risk3	Grocery Store		Canvass	Pass	60618		34.	
Max	88052	219	6911	7108	620	15	5152	45.30%