

**A TEAM**

# **Flu Vaccinating Analysis**

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Are you looking for a comprehensive tool to help you **stay on top** of the flu vaccination situation in the US?



Are you looking for a **one-stop shop** for all your flu vaccination needs?

Do you want to **plan ahead** and schedule your flu shot at a **convenient** time?

**Look no further than our new R Shiny app!**

# Dataset Introduction

## The Vaccines.gov Dataset

powered by VaccineFinder

- **Provider Information**
- **Vaccine Information**



Centers for Disease Control and Prevention  
CDC 24/7: Saving Lives. Protecting People.™

## The Vaccines.gov Dataset

- **Provider Information**

providers' names, addresses, phone numbers, zip codes, and locations, insurance\_accepted, walkins\_accepted, etc

- **Vaccine Information**

vaccine information including vaccine names, in stock or not, supply levels, etc

Link:

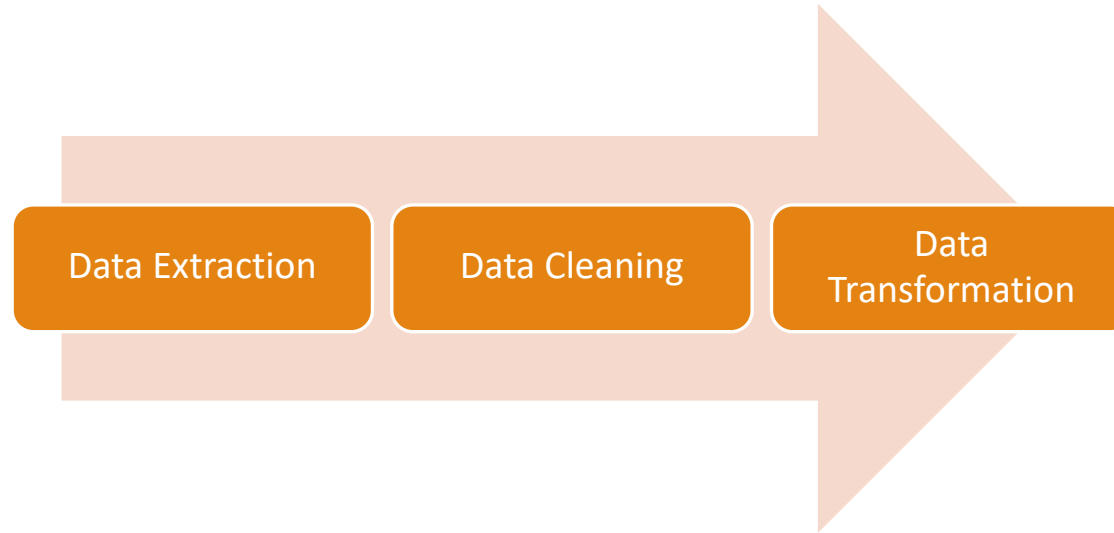
<https://data.cdc.gov/Flu-Vaccinations/Vaccines-gov-Flu-vaccinating-provider-locations/bugr-bbfr>

# Dataset Introduction

Field Name	Field Description	Data Type	Field Name	Field Description	Data Type
provider_location_guid	Vaccine Finder Provider ID	integer(36)	pre_screen	Web address (Pre-Screen link)	varchar(255)
loc_store_no	Chain store number for pharmacies only	integer	insurance_accepted	Accepts Insurance?	boolean
loc_phone	Location phone number	varchar (128)	walkins_accepted	Accepts Walk-ins?	boolean
loc_name	Provider Location Display Name	varchar (255)	provider_notes	Notes to display on the provider details page	varchar (1000)
loc_admin_street1	Street address 1	varchar (255)	searchable_name	Name of searchable flu vaccine	varchar(255)
loc_admin_street2	Street address 2	varchar (255)	ln_stock	Is this vaccine in stock for the public at this location?	boolean
loc_admin_city	City	varchar (255)	supply_level	The Supply level availability code (number)	integer
loc_admin_state	State	varchar (2)			
loc_admin_zip	Postal Code	varchar (10)			
sunday_hours	Open hours for Sunday	varchar(255)			
monday_hours	Open hours for Monday	varchar(255)	date_last_updated	Date the "on hand quantity (number)" was last updated	date
tuesday_hours	Open hours for Tuesday	varchar(255)	Latitude	latitude	varchar(255)
wednesday_hours	Open hours for Wednesday	varchar(255)	Longitude	longitude	varchar(255)
thursday_hours	Open hours for Thursday	varchar(255)	Category	Is this vaccine a COVID or Seasonal Flu vaccine?	varchar(255)
friday_hours	Open hours for Friday	varchar(255)			

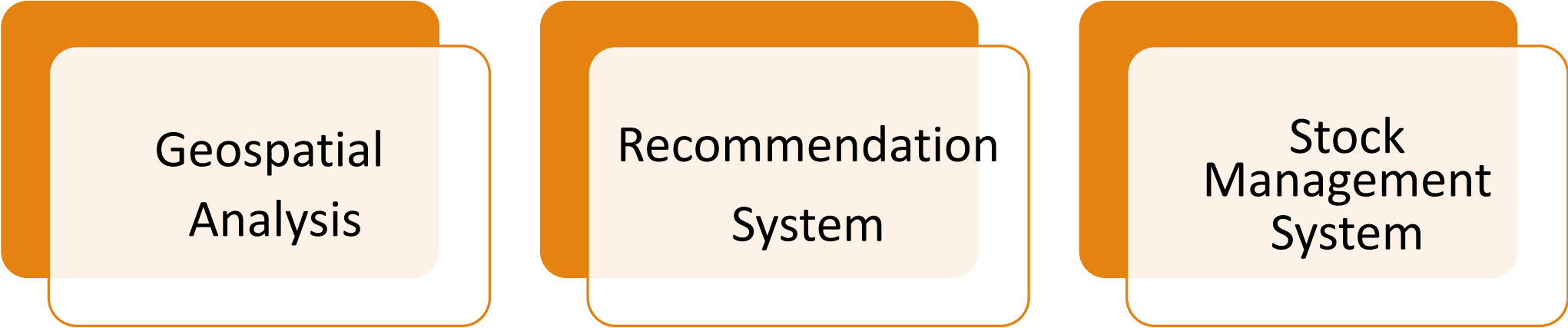
# Data Pipeline

**Vaccine.gov**



**Shiny App**

# Shiny App Introduction



Geospatial  
Analysis

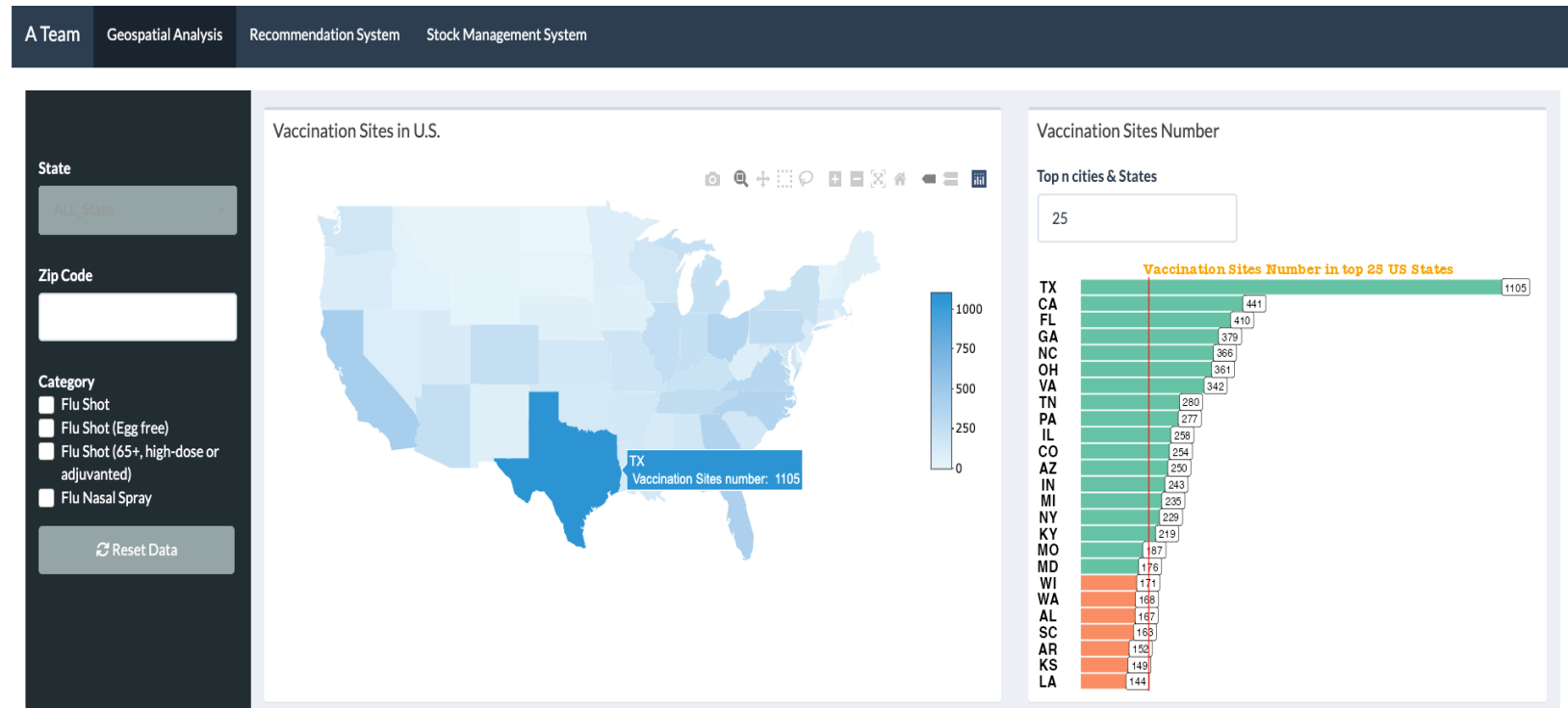
Recommendation  
System

Stock  
Management  
System

# Geospatial Analysis

- Input Widgets
- Interactive Map
- Interactive Table
- Interactive Bar Chart
- Interactive Pie Chart

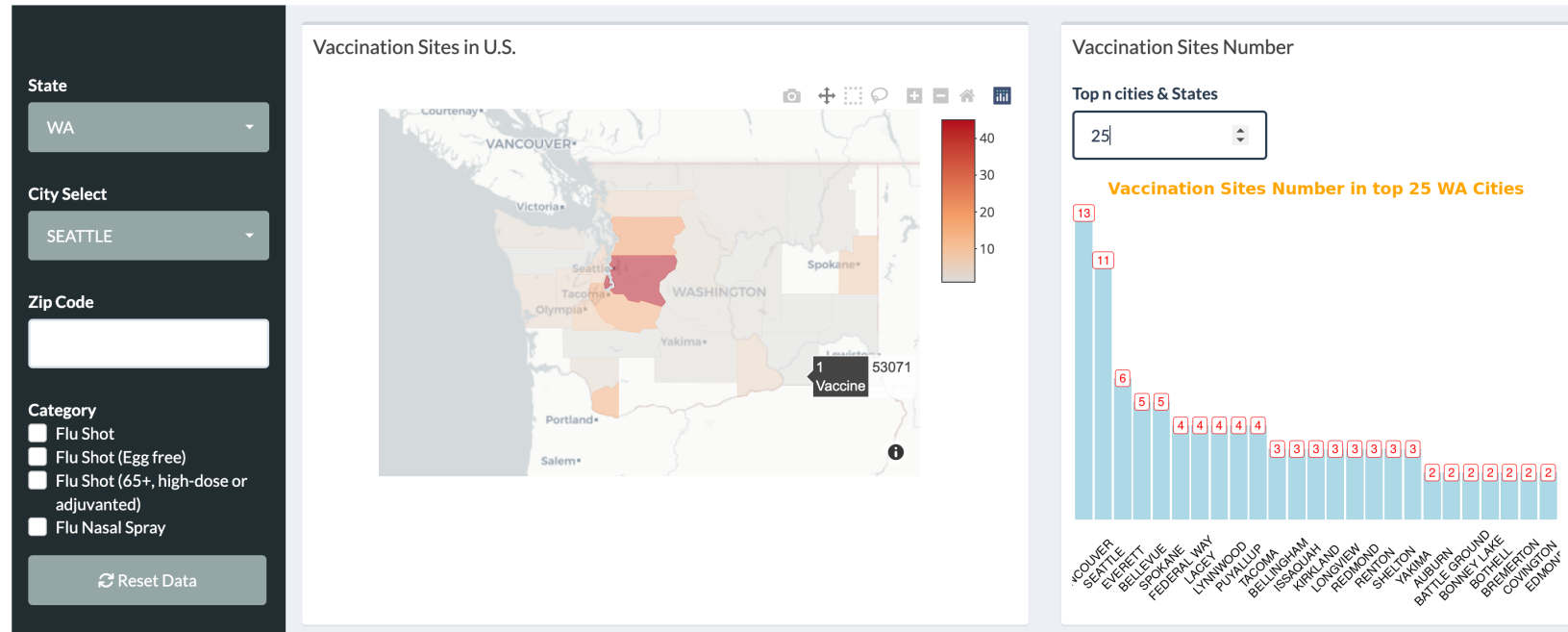
- ❑ **Input:** State, City, Zip Code, Flu Category, bars num
- ❑ **Interactive Map:** Vaccination Sites Distribution in US
- ❑ **Interactive Bar Chart:** Vaccination Site Number in top n States



# Geospatial Analysis

- Input Widgets
- Interactive Map
- Interactive Table
- Interactive Bar Chart
- Interactive Pie Chart

- ❑ **Input:** State, City, Zip Code, Flu Category
- ❑ **Interactive Map:** Vaccination Site County distribution in selected State
- ❑ **Interactive Bar:** Vaccination Site Number in top n cities of selected state





# Geospatial Analysis

- Input Widgets
- Interactive Map
- Interactive Table
- Interactive Bar Chart
- Interactive Pie Chart

- ❑ **Input:** State, City, Zip Code, Flu Category
- ❑ **Interactive Table:** Pharmacy information in selected state /city/zip code/flu category
- ❑ **Pie Chart:** Proportions of Vaccination Types in selected state

## Pharmacy Information

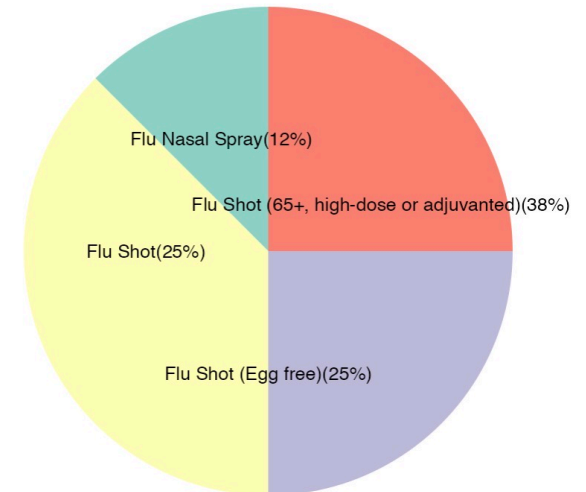
Show  entries

Search:

	Name	Street	City	State	zip	Flu Name
1	Walmart Inc #10-2385	762 Supermall Way	AUBURN	WA	98001	Flu Shot (Egg free)
2	Walmart Inc #10-2385	762 Supermall Way	AUBURN	WA	98001	Flu Nasal Spray
3	Walmart Inc #10-2385	762 Supermall Way	AUBURN	WA	98001	Flu Shot
4	Walmart Inc #10-2385	762 Supermall Way	AUBURN	WA	98001	Flu Shot (65+, high-dose or adjuvanted)

## Vaccination Types Proportion

### Proportions of vaccination types in WA



# Recommendation System

- Input Widgets
- Interactive Table
- KPI Card

- ❑ **Input:** State, City, Zip code, Flu Category, Weekday
- ❑ **Interactive Table:** Pharmacy Recommendation Information
- ❑ **KPI Card:** the Number of Available Pharmacies

A Team

Geospatial Analysis

Recommendation System

Stock Management System

State Select

WA

City Select

BELLEVUE, SEATTLE

Zipcode

Zipcode

Flu Category

☒ Flu Shot (Egg free)

☐ Flu Shot (65+, high-dose or adjuvanted)

☐ Flu Nasal Spray

☒ Flu Shot

Weekday

Wednesday

Reset Data

Pharmacy Number: 14

Flu Vaccine

Pharmacy Recommendation Information

Show10entries

Search:

	Name	Street	City	State	Phone	Wednesday	insurance_accepted	walkins_accepted	searchable_name
1	QFC Pharmacy #70500859	2636 BELLEVUE WAY NE	BELLEVUE	WA	(425) 576-9222	9:00 AM - 8:00 PM	true	false	Flu Shot (Egg free)
2	QFC Pharmacy #70500859	2636 BELLEVUE WAY NE	BELLEVUE	WA	(425) 576-9222	9:00 AM - 8:00 PM	true	false	Flu Shot
3	Fred Meyer Pharmacy #70100023	2041 148TH NE	BELLEVUE	WA	(425) 865-8593	9:00 AM - 8:00 PM	true	false	Flu Shot (Egg free)
4	Fred Meyer Pharmacy #70100023	2041 148TH NE	BELLEVUE	WA	(425) 865-8593	9:00 AM - 8:00 PM	true	false	Flu Shot
5	QFC Pharmacy #70500874	1510 145TH PL SE	BELLEVUE	WA	(425) 653-2431	9:00 AM - 8:00 PM	true	false	Flu Shot
6	QFC Pharmacy #70500874	1510 145TH PL SE	BELLEVUE	WA	(425) 653-2431	9:00 AM - 8:00 PM	true	false	Flu Shot (Egg free)

# Stock Management System

- Input Widgets
- Interactive Table
- Interactive Bar Chart

- ❑ **Input:** State, City, Zip Code, Flu Category, Supply days
- ❑ **Interactive Table:** Stock Management Information
- ❑ **Interactive Bar Chart:** Vaccination distribution in selected region according to supply level

State Select

WA

City Select

SEATTLE

Zip Code

Category Select

choose

Vaccine supply days

0

0 1 2 3

Reset Data

In-Stock Pharmacy Information

Availability of Future Stocks

Show 10 entries

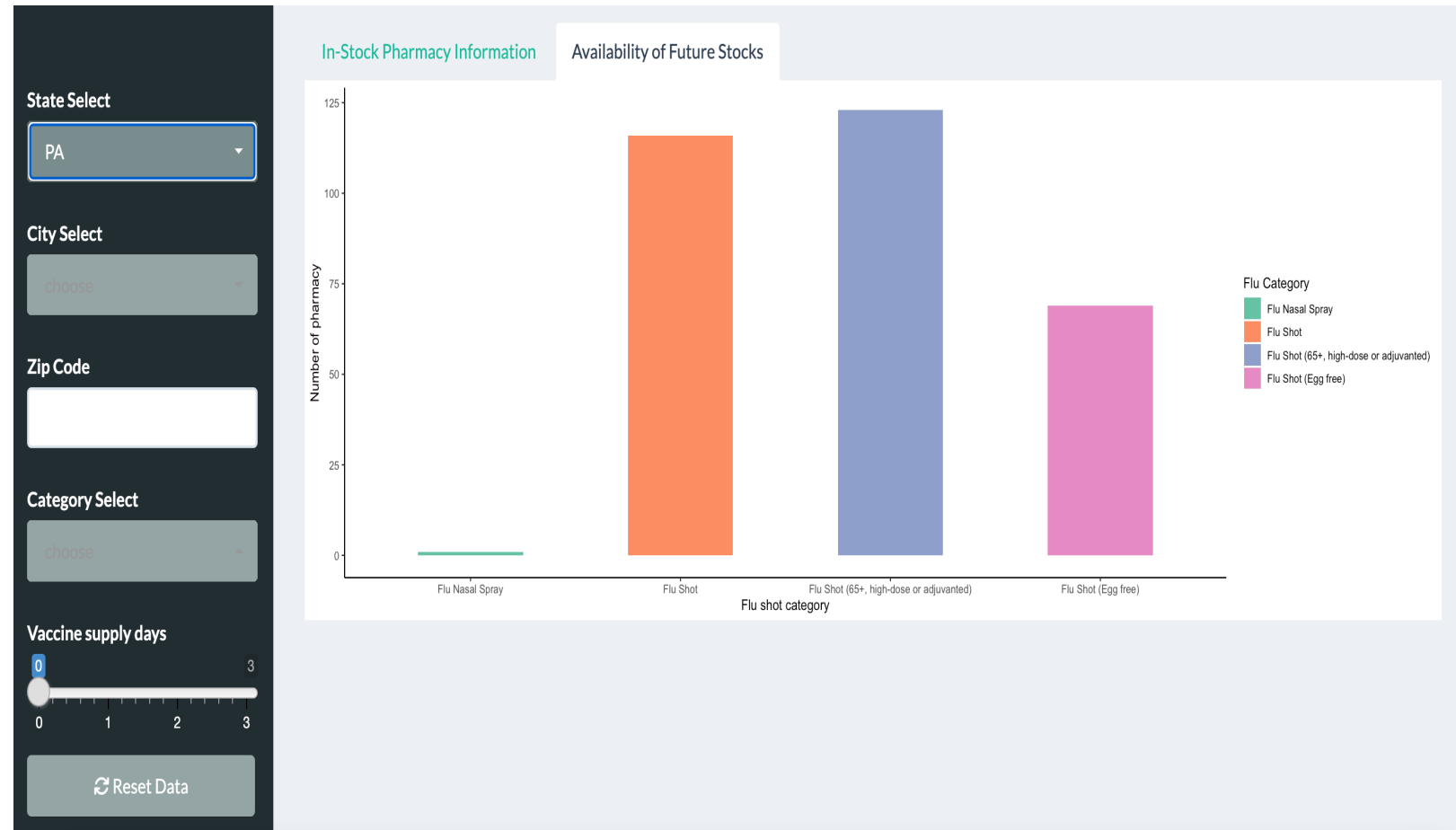
Search:

	Name	State	City	Street	Phone	Zip	Insurance Acceptability	Walkin Acceptability	Flu Name	Supply Level
1	QFC Pharmacy #70500887	WA	SEATTLE	417 BROADWAY E	(206) 323-6586	98102	Yes	No	Flu Shot (Egg free)	no report
2	QFC Pharmacy #70500887	WA	SEATTLE	417 BROADWAY E	(206) 323-6586	98102	Yes	No	Flu Shot (65+, high-dose or adjuvanted)	no report
3	QFC Pharmacy #70500887	WA	SEATTLE	417 BROADWAY E	(206) 323-6586	98102	Yes	No	Flu Shot	no report
4	QFC Pharmacy #70500807	WA	SEATTLE	2746 NE 45TH	(206) 729-3080	98105	Yes	No	Flu Shot (Egg free)	no report
5	QFC Pharmacy #70500807	WA	SEATTLE	2746 NE 45TH	(206) 729-3080	98105	Yes	No	Flu Shot	no report
6	QFC Pharmacy #70500807	WA	SEATTLE	2746 NE 45TH	(206) 729-3080	98105	Yes	No	Flu Shot (65+, high-dose or adjuvanted)	no report

# Stock Management System

- Input Widgets
- Interactive Table
- Interactive Bar Chart

- ❑ **Input:** State, City, Zip Code, Flu Category, Supply days
- ❑ **Interactive Table:** Stock Management Information
- ❑ **Interactive Bar Chart:** Vaccination distribution in selected region according to supply level



# Let's try our system!!!

Don't forget to get vaccinated in a timely manner  
for your own and others health.