

# Daily Population Statistics Analysis

## Single-Facility Analysis

2025-10-29

### Data Summary

Total days recorded: 1713

Simulation period: Day 3651 to Day 5363

Mean total population: 97.49

Mean colonized patients: 31.67

Mean detected patients: 19.67

Mean isolated patients: 19.67

### Descriptive Statistics

#### Population Statistics Summary

Table 1: Descriptive Statistics for Daily Population Counts

population	Mean	Median	SD	Min	Max
total	97.49	97	9.84	68	127
colonized	31.67	31	6.16	16	55
detected	19.67	19	5.13	3	38
isolated	19.67	19	5.13	3	38

### Correlation Analysis

Table 2: Correlation Matrix of Population Types

	Variable	total	colonized	detected	isolated
total	total	1.000	0.446	0.410	0.410
colonized	colonized	0.446	1.000	0.648	0.648
detected	detected	0.410	0.648	1.000	1.000
isolated	isolated	0.410	0.648	1.000	1.000

## Visualizations

### Distribution of Population Types

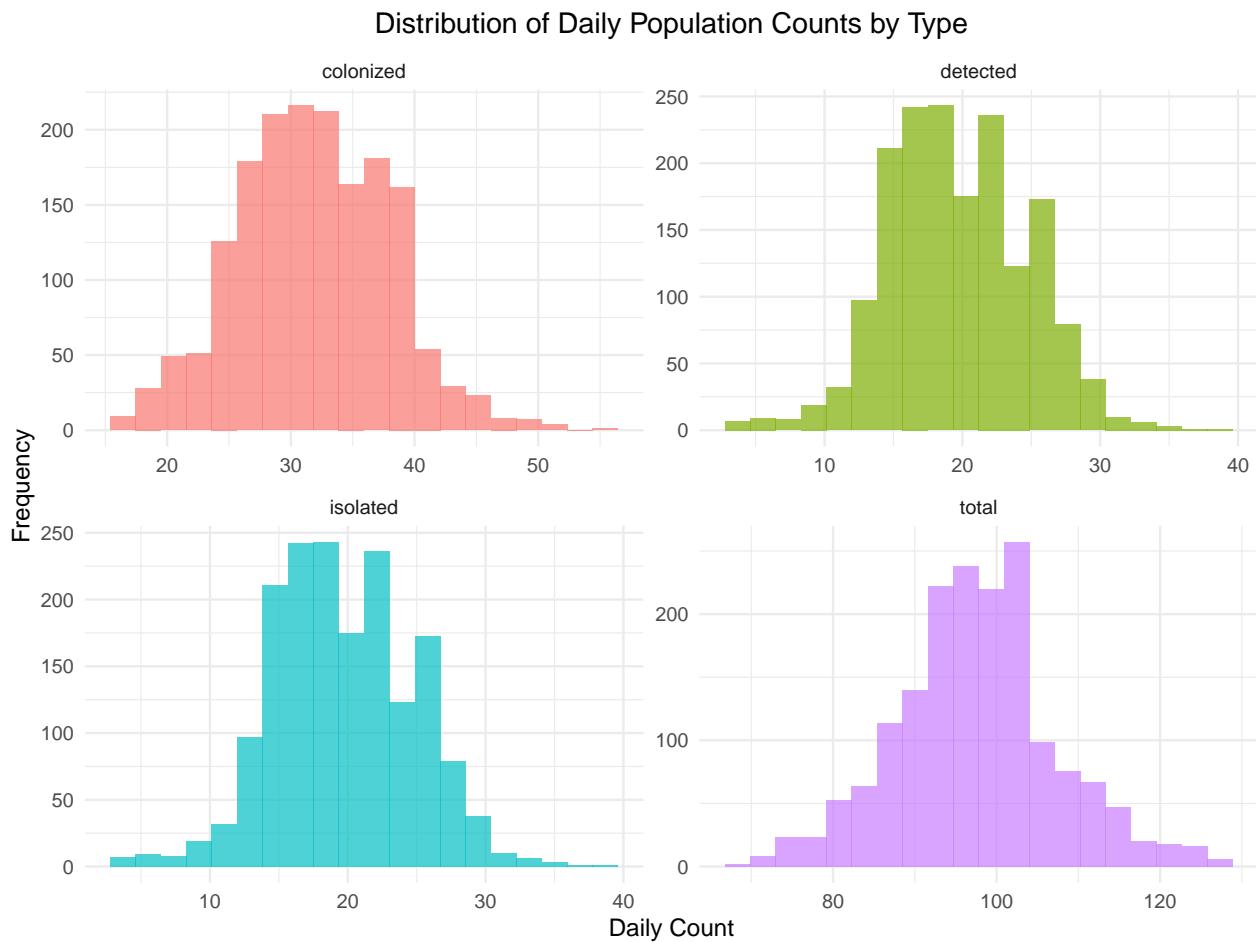


Figure 1: Distribution of Daily Population Counts

## Population Trends Over Time

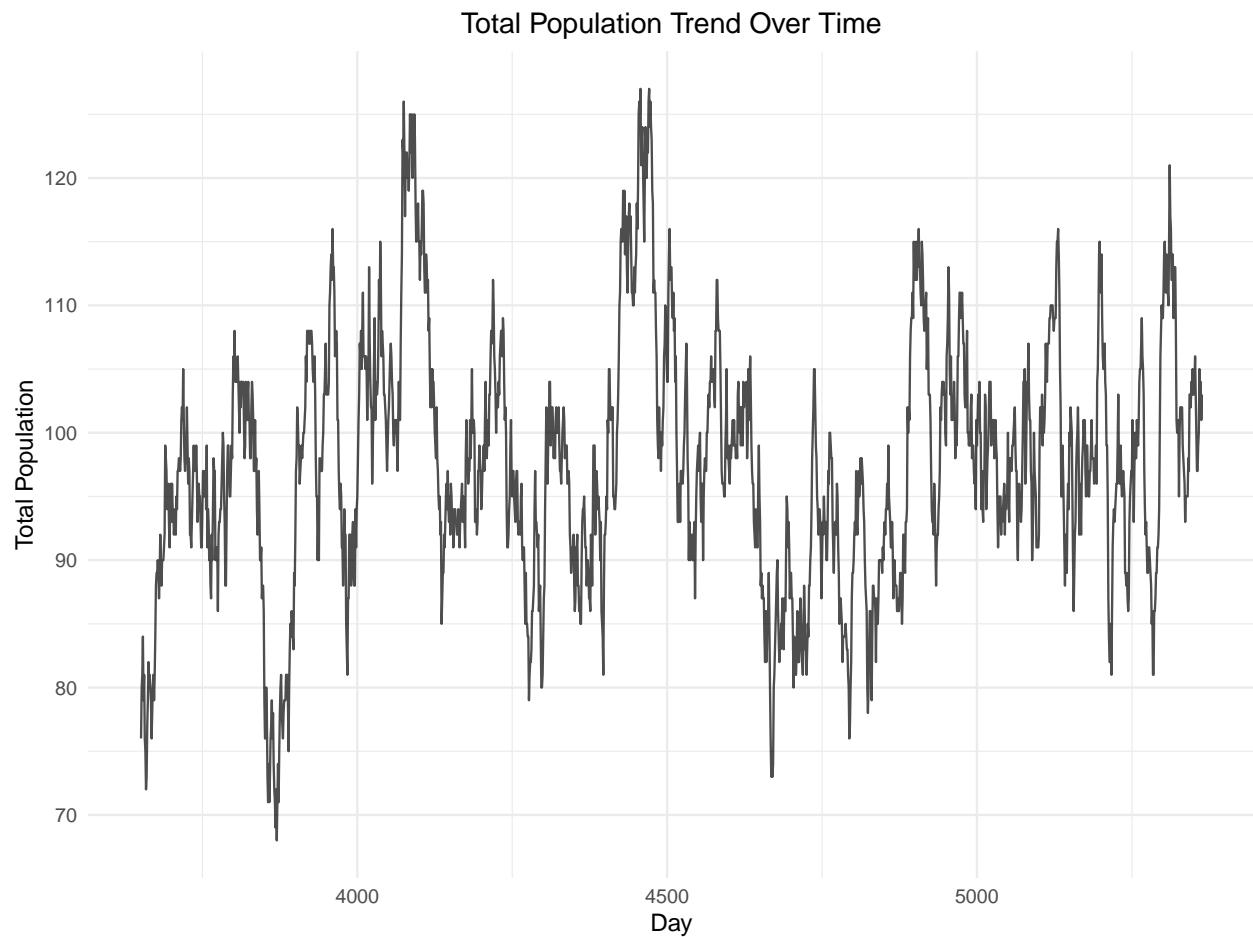


Figure 2: Total Population Trend Over Time

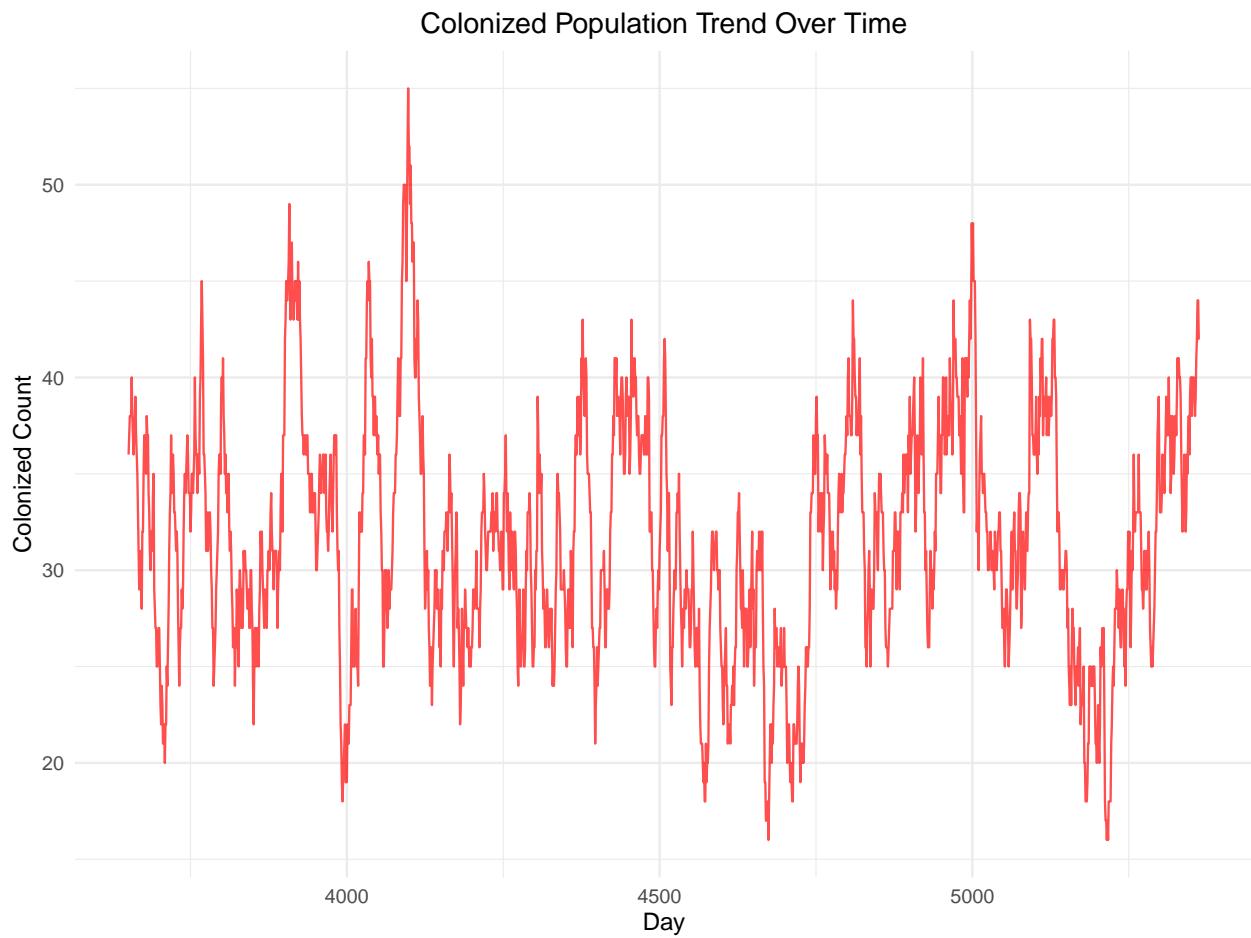


Figure 3: Colonized Population Trend Over Time

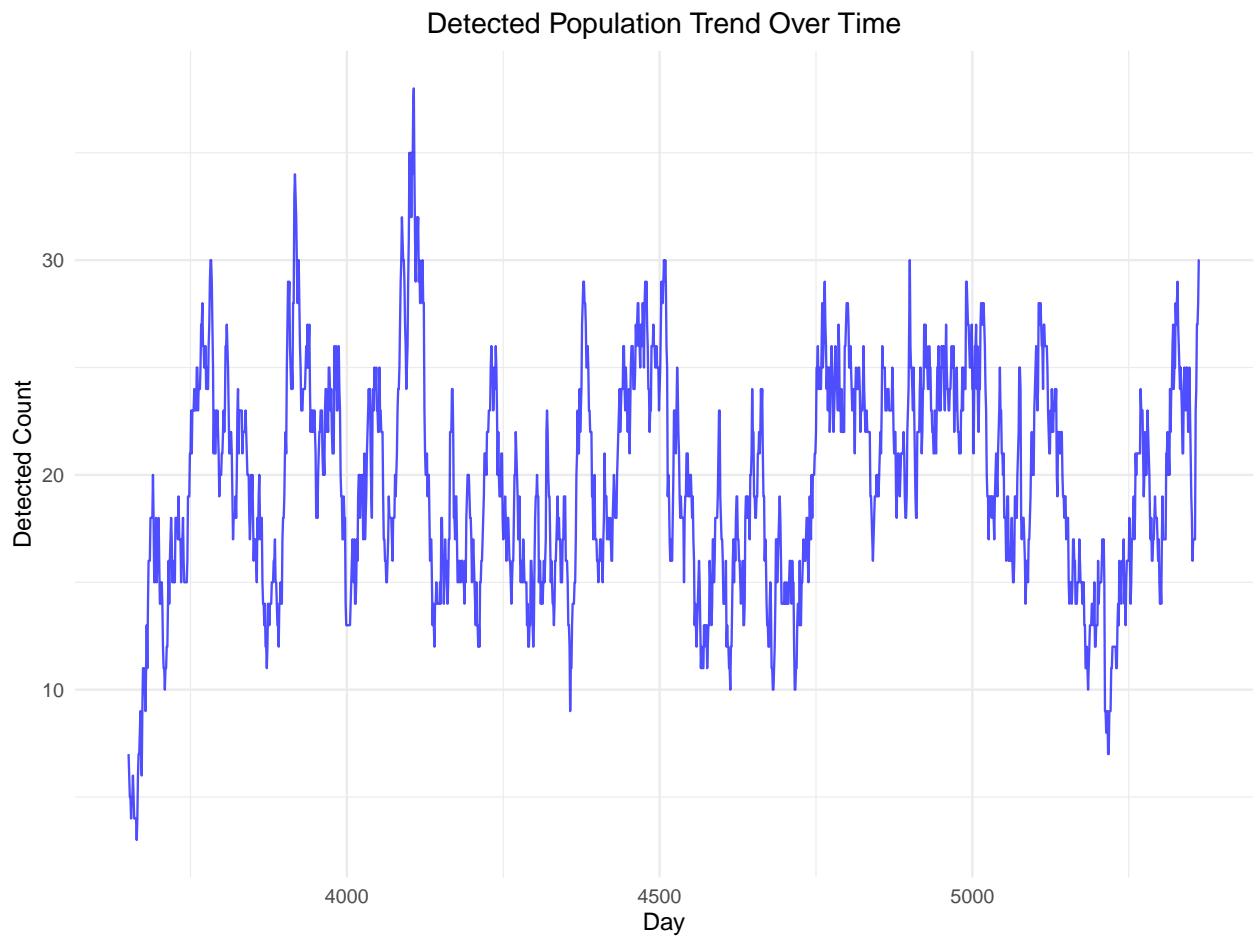


Figure 4: Detected Population Trend Over Time

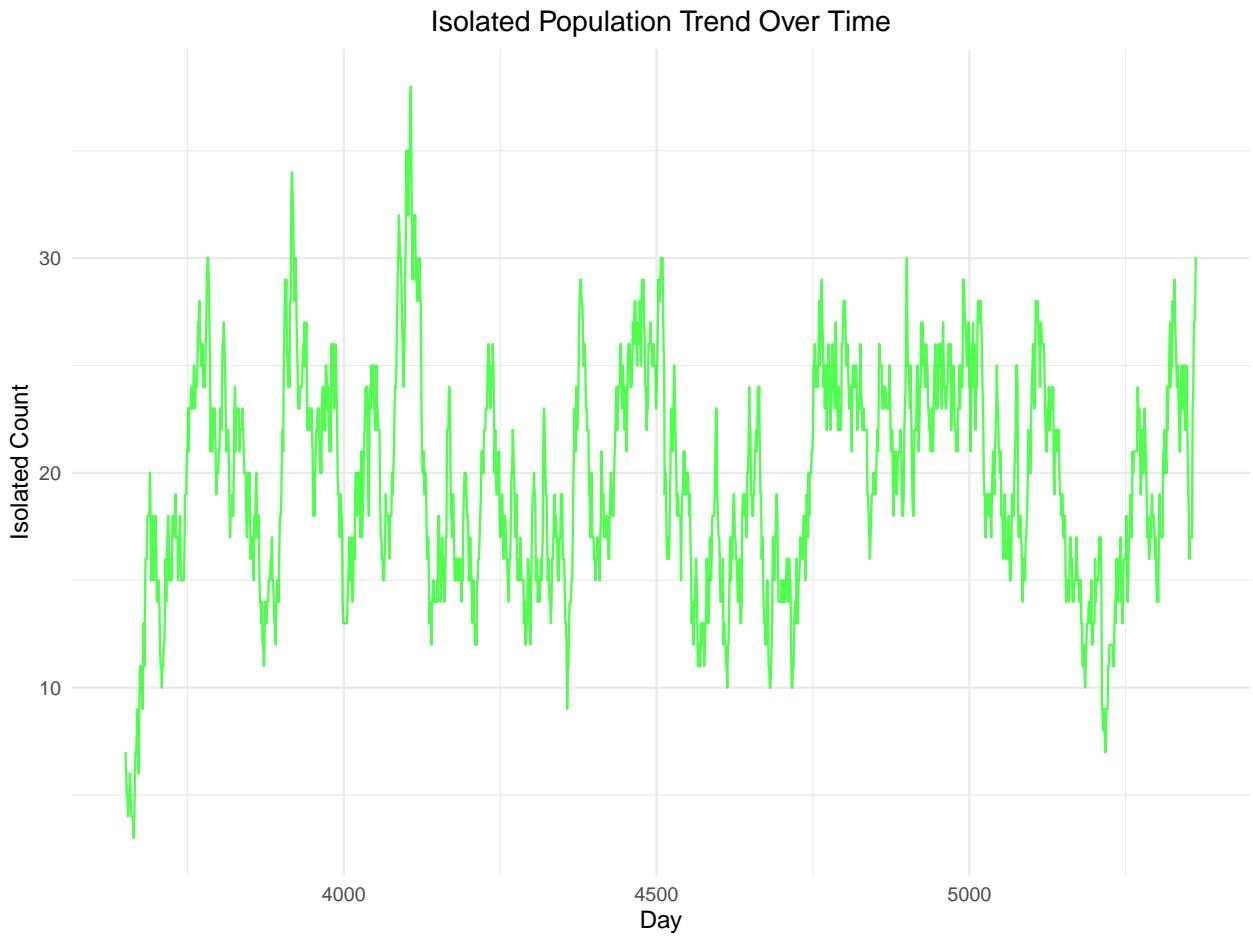


Figure 5: Isolated Population Trend Over Time