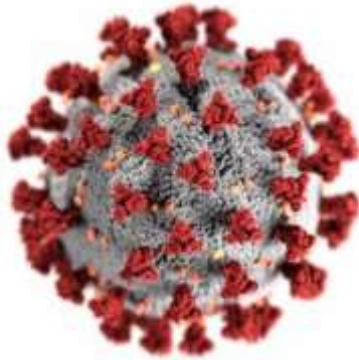


Novel Coronavirus  
(COVID-19)



# Respiratory Disease Outbreak at a Local Intermediate School

February 2024

# Outbreak Overview

- CCBH notified on 2/5/2024 of high volume of absent students at local primary school grades 3-5
- ~80 students absent that day, with a typical absentee amount reportedly being ~30-40 kids
- Early reports indicated possible GI illness based on information from facility nurse and administration

# Possible Exposure Events

Thursday, 2/1/2024- KIS in school for full normal day, evening school events included talent show and aftercare

Friday, 2/2/2024- KIS in school for full normal day, evening school events included talent show, basketball game, and aftercare

-No cafeteria lunch is served at this school, and no non-prepackaged foods were served at any event

# Initiation of Investigation

- Based on illness volume and ongoing GI illness outbreaks statewide an investigation was started
- Case-Control Study
  - -Surveymonkey
  - -Absentee list was used to Identify sick individuals
  - -School agree to offer survey link to all students, staff, and families to provide controls
  - -Demographics, illness, symptoms, severity, duration, possible exposures

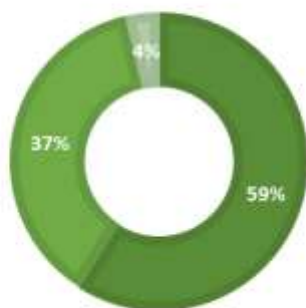
# Survey Results

- A total of 292 survey responses were recorded
- After cleaning and deduplication (thanks Kiley), 166 records were included in our data set

# Respondent Demographics

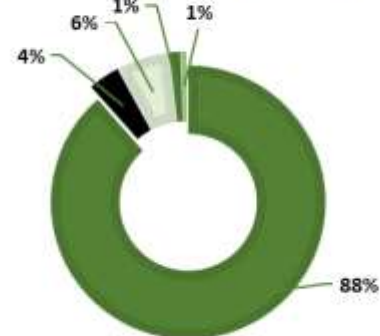
## SURVEY RESPONDENTS BY SEX

Female Male Other



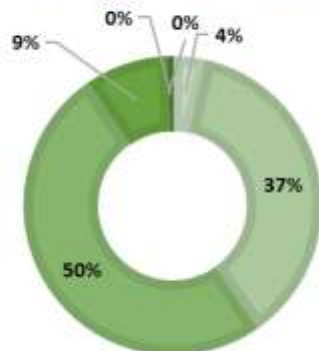
## SURVEY RESPONDENTS BY TYPE

Student Staff Parent Sibling Other



## SURVEY RESPONDENTS BY AGE

Unknown 5-9 10-17 18-49 50-64 65-74



## SURVEY RESPONDENTS REPORTING ANY ILLNESS

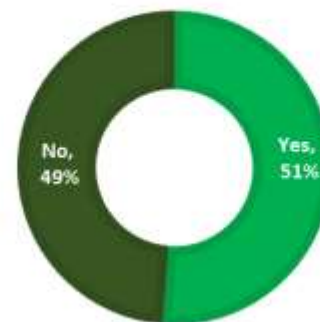
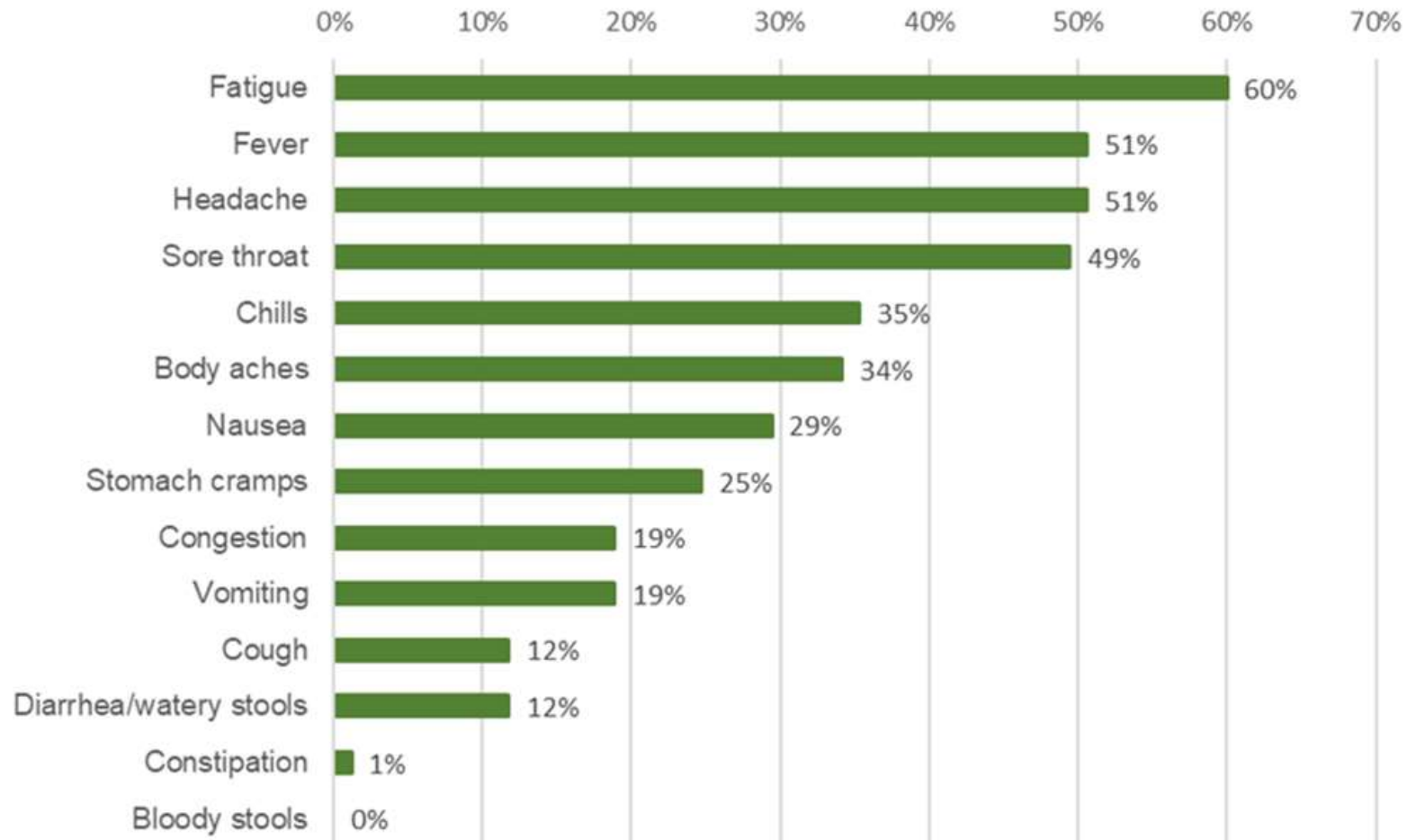


Table 1. Illness attack rates by demographics

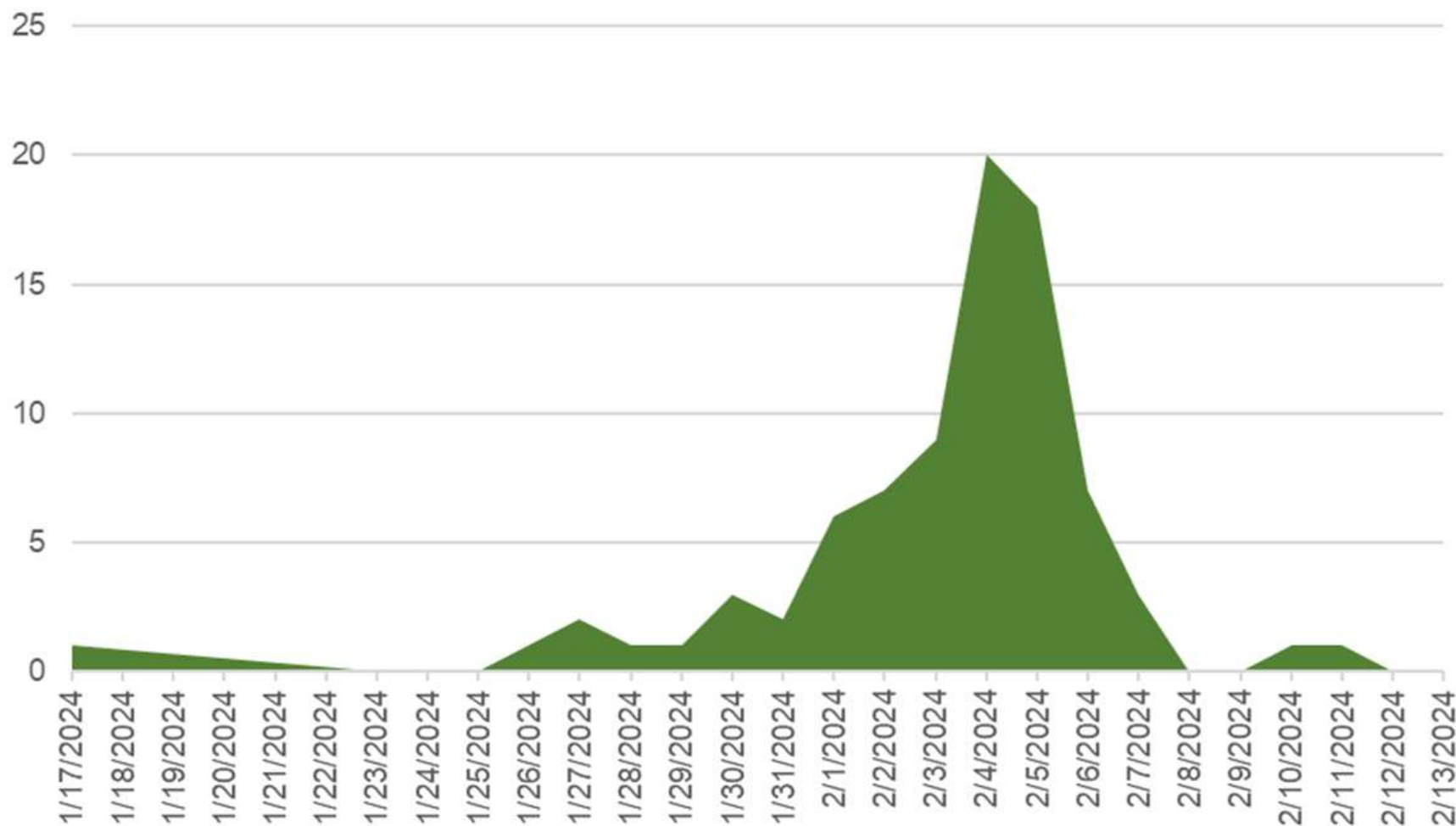
	Ill n	Not Ill n	Total n	Attack Rate %
<b>Total</b>	<b>85</b>	<b>81</b>	<b>166</b>	<b>51.2</b>
Student	75	71	146	51.3
Parent	7	3	10	<b>70</b>
Staff	2	4	6	33.3
Sibling	1	1	2	50
Unknown	0	1	1	0
Female	50	48	98	<b>51</b>
Male	28	34	62	45.2
Unknown	1	5	6	16.7
5-9 years	24	37	61	39.3
10-17 years	51	32	83	<b>61.4</b>
18-49 years	9	6	15	60
50-64 years	0	0	0	***
65-74 years	0	1	1	0
Unknown	1	5	6	20
White	80	70	150	53.3
Black/ African American	1	0	1	<b>100</b>
Asian/ Asian American	0	1	1	0
American Indian/ Alaska Native	0	0	0	***
Native Hawaiian/ Pacific Islander	0	0	0	***
Other	3	5	8	37.5
Non-Hispanic	81	81	162	50
Hispanic	4	0	4	<b>100</b>

## Symptoms Reported by Ill Respondents





## Reported Illness Onset by Date



# Not a GI Outbreak?

- 83.5% of sick respondents only reported symptoms consistent with respiratory illness
- Only 19% reported vomiting and 12% reported diarrhea
- No statistically significant risk associated with specific days or events
- Specific causes cited: 3 COVID-19, 7 Flu, 7 Strep throat
- CDI team obtained positive lab results for 3 Flu cases and 3 Strep throat cases, allowing us to designate this as a respiratory outbreak

# Limitations and Challenges

- Incomplete data set from school
- Initial reporting and assessment subject to possible experience bias
- This made instrument design inadequate for most likely actual causes
- Multiple identified pathogens makes overall analysis difficult (different illnesses which are similar but may still have differences in symptoms and course history)

# Conclusions and Discussion

- This “outbreak” was likely related to multiple clusters of common respiratory diseases overlapping (and a few cases of GI illness probably)
- Communicating directly with staff in building is best source of information
- Requesting all information upfront at one time
- Making sure not to jump to conclusions

# Questions?