Island County COVID-19 Cases Summary Report, April 2020

Background

Beginning February 2020, Island County Public Health staff have identified and monitored all Island County residents with confirmed COVID-19, probable COVID-19, and those persons considered to have had close contact[1] with a lab confirmed COVID-19 case. The aims of these efforts are to ensure rapid evaluation of the health status of all Island County residents with a lab confirmed case of COVID-19, limit further transmission, and better understand risk factors for transmission. (1) This report is a summary of case investigation findings for the months of March & April, 2020.

Methods

Across the state, all COVID-19 positive (COVID-19+) individuals (cases) are investigated to assess the clinical state of each case, the exposure timing and settings, and potential exposed contacts and sites. For April 2020, the Island County investigation team comprised of one nursing director, five case investigators, and one epidemiologist. All lab results, when testing for COVID-19, and all data obtained as part of investigation, are stored and maintained in the Washington State Disease Reporting System (WDRS). The database updates seven days a week with surveillance staff monitoring for new cases belonging to Island County.

Data Limitations & Challenges

The methodology applied to COVID-19 case investigation is an evolving process, an iterative process, and may change over time as part of continuous quality improvement. The information in this report is reflective of data as of May 1, 2020. This data only includes sample results for individuals tested for COVID-19. Although the data is reported as accurately and completely as possible, updates to the data included in this report may take place based on new findings. Investigation takes place in collaboration with community partners across Island County. All Island County COVID-19+ residents identified in March and April 2020 may not be included in this report.

Findings

For the month of March 2020, 114 lab confirmed COVID-19 cases had been diagnosed in Island County. As indicated in the data limitations section of this report, updates to the March data took place in the month of April 2020, and an additional 12 lab confirmed COVID-19 cases with March diagnosis dates were identified. Reasons for data updates may include updated Department of Health (DOH) guidance for determining residency for a COVID-19 case and simple address corrections reported from the testing laboratory, which often leads to the need to add or remove cases from the accountable county on record. Assignment of accountable county is based on residency. Current DOH guidance describes

[1] Close contact was defined by the Washington State Department of Health with guidance from the CDC. https://www.cdc.gov/coronavirus/2019-ncov/hcp/guidance-risk-assesment-hcp.html

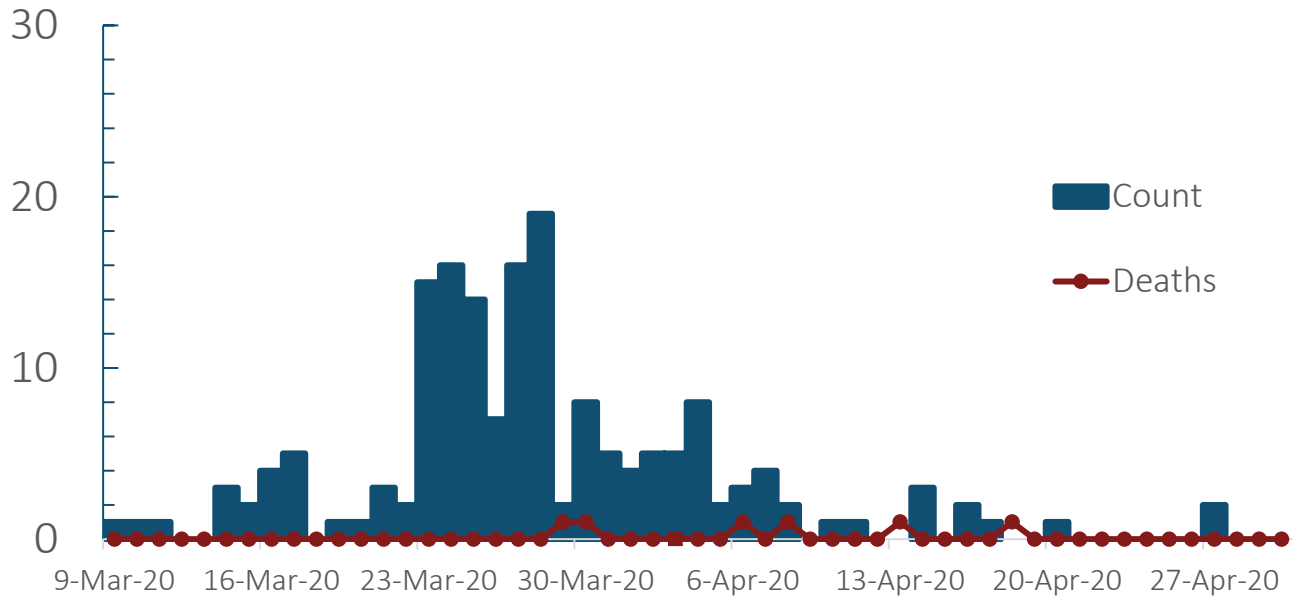
residency as the location of the case at onset of symptoms. For the month of April 2020, 46 lab confirmed COVID-19 cases were diagnosed and identified. As of May 1, 2020, there were a total of 172 COVID-19 confirmed cases. (Table 1)

Table 1: Total COVID-19 Confirmed Counts, Island County, March & April 2020

	March	April	Total
Original Count	114	46	160
Additional	12	0	12
Total	126	46	172

The epidemiologic curve is a tool used to track the outbreak of a disease. It visualizes positive case counts and deaths over the progression of the outbreak. More cases or deaths over a short time period create a very steep curve, while a flat curve indicates fewer cases over time. As an outbreak progresses, governments enact policies to help flatten the curve. One such policy is Governor Inslee's "Stay Home, Stay Healthy" order. Figure 1 visualizes Island County's epidemiologic curve for March and April 2020. (Figure 1)

Figure 1: Island County Epidemiological Curve, March & April 2020



In March, case investigators closed 16 COVID-19+ cases and in April case investigators closed 105 COVID-19 cases for a total of 125 case closures since the outbreak began in Island County. Case closure occurs when the individual is no longer symptomatic and has been released from isolation by their medical provider, when the case is lost to follow up, or when the case passes away.

For March of 2020, persons assigned female at birth represented 67% of overall COVID-19 cases in Island County, compared to 33% in those assigned male at birth. For the month of April 2020, those cases assigned female at birth represented 61% of the cases is Island County, compared to 39% in those assigned male at birth. When combined, the total cases assigned

female at birth represent 61% of the total cases COVID-19 case count, compared to 39% of those assigned male at birth. (Table 2)

Table 2: Island County COVID-19+ Cases Sex Assigned at Birth, March 2020

	March		April		Total	
Sex	N	%	N	%	N	%
Female	85	67%	28	61%	113	61%
Male	41	33%	18	39%	59	39%
Grand Total	126	100%	46	100%	172	100%

During the month of March, 2% of positive cases reported fell within the age band of 19 years or younger. The remaining 98% of cases were distributed among the remaining four age bands, with 21% falling into the 20-39 age group, 25% falling into the 40-59 age group, 28% falling into the 60-79 age group, and 25% falling into the 80+ age group. For the month of April, 2% of positive cases reported fell into the age band 19 years or younger. The remaining 98% of cases were distributed among the remaining four age bands, with 15% falling into the 20-39 age group, 35% falling into the 40-59 age group, 35% falling into the 60-79 age group, and 13% falling into the 80+ age group. When combined, for March and April, 2% of the total cases are ages 19 years or younger, 20% are between the ages 20-39 years, 27% are between the ages 40-59 years, 30% are between the ages of 60-79 years, and 22% are 80 years of age or older. (Table 3). Similarly, in the COVID-19 Island County case population, approximately 61% of residents report ethnicity as “Not Hispanic”, 2% are Hispanic, and for 37% of all lab confirmed COVID-19 cases the ethnicity is “Unknown”. (Table 3)

Table 3: Island County COVID-19 Age Distribution, March & April 2020.

	March		April		Total	
Age Group	N	% of Cases	N	% of Cases	N	% of Cases
</=19	≤5	2%	≤5	2%	≤5	2%
20-39	27	21%	7	15%	34	20%
40-59	31	25%	16	35%	47	27%
60-79	35	28%	16	35%	51	30%
80+	31	25%	6	13%	37	22%
Total	126	100%	46	100%	172	100%

Table 4: Island County COVID-19 Ethnicity, March & April 2020.

	March		April		Total	
Ethnicity	N	%	N	%	N	%
Hispanic or Latino	≤5	4%	≤5	2%	6	2%
Not Hispanic or Latino	79	65%	28	61%	107	61%
Unknown	42	31%	17	37%	59	37%
Grand Total	126	100%	46	100%	172	100%

In March 2020, the distribution of identified positive cases varied with 21% of the March cases reporting residency in Camano Island, 4% reporting residency in Clinton, 34% reporting residency in Coupeville[2], 8% reporting residency in Freeland, 1% reporting residency in Greenbank, 7% reporting residency in Langley, and 30% reporting residency in Oak Harbor. In April 2020, the distribution of identified positive cases varied with 20% reporting residency in Camano Island, 4% reporting residency in Clinton, 24% reporting residency in Coupeville[3], 2% reporting residency in Freeland, 2% reporting residency in Greenbank, 2% reporting residency in Langley, and 46% reporting residency in Oak Harbor. When combined, for March & April 2020, 21% of the total cases reported residency in Camano Island, 4% reported residency in Clinton, 26% reported residency in Coupeville[4], 6% reported residency in Freeland, 1% reported residency in Greenbank, 6% reported residency in Langley, and 34% reported residency in Oak Harbor. (Table 5)

Table 5: Island County COVID-19 Geographic Distribution, March & April 2020.

	March		April		Total	
Location	N	%	N	%	N	%
Anacortes	≤5	1%	0	0%	≤5	1%
Camano Island	27	21%	9	20%	36	21%
Clinton	≤5	4%	≤5	4%	7	4%
Coupeville	34	27%	11	24%	45	26%
Freeland	10	8%	≤5	2%	11	6%
Greenbank	≤5	1%	≤5	2%	≤5	1%
Langley	9	7%	≤5	2%	10	6%
Oak Harbor	38	30%	21	46%	59	34%
Seattle	≤5	1%	0	0%	≤5	1%
Grand Total	126	100%	46	100%	172	100%

According to the Washington State DOH, signs and symptoms that help identify if an individual meets the case definition include: fever, cough, and shortness of breath. As a part of the investigation process, case investigators assess an individual's presenting symptoms. In March, 75% of cases self-identified as symptomatic[5], while in April 70% of cases self-identified as symptomatic. Of the total combined cases, 73% reported as symptomatic. Current guidance on testing suggests prioritize symptomatic individuals for COVID-19 testing. This higher prevalence of COVID-19 individuals reporting as symptomatic is likely a result of the limited testing capacity for all residents resulting in the prioritization of symptomatic individuals. (Table 6)

[2] This number is skewed due to the ongoing COVI19 outbreak at Careage of Whidbey.
[3] This number is skewed due to the ongoing COVID-19 outbreak at Careage of Whidbey.
[4] This number is skewed due to the ongoing COVID-19 outbreak at Careage of Whidbey.
[5] CDC lists nine symptoms associated with COVID-19: cough, shortness of breath or difficulty breathing, fever, chills, repeated shaking with chills, muscle pain, headache, sore throat, new loss of taste or smell.

Table 6: Island County COVID-19 Case Symptomatic, March & April 2020.

	March		April		Total	
Symptomatic	N	%	N	%	N	%
No	30	24%	8	17%	38	22%
Unknown	2	2%	6	13%	8	5%
Yes	94	75%	32	70%	126	73%
Grand Total	126	100%	46	100%	172	100%

One part of case investigation is surveillance for laboratory-confirmed COVID-19 associated with hospitalizations for Island County residents. (2) Among the 172 COVID-19 cases investigated in Island County, 81% were not hospitalized for COVID-19 associated illnesses; 14% were hospitalized for COVID-19 associated illness, and for 5% of lab confirmed COVID-19 cases, the hospitalization status could not be determined. Of the 17 cases that were hospitalized in March, 41% were hospitalized at WhidbeyHealth Medical Center and of the seven hospitalized cases in April, 50% were hospitalized at Island Hospital in Skagit County. (Table 8 & Table 9)

Table 8: Island County COVID-19 Hospitalizations, March & April 2020.

	March		April		Total	
Hospitalized	N	%	N	%	N	%
No	100	79%	39	85%	139	81%
Unknown	9	7%	0	0%	9	5%
Yes	17	13%	7	15%	24	14%
Grand Total	126	100%	46	100%	172	100%

Table 9: Island County COVID-19 Hospitalizations Facilities, March & April 2020.

	March	April	Total
Facility	%	%	%
Island Hospital	6%	43%	17%
Providence	29%	0%	21%
Skagit Valley Hospital	18%	14%	17%
Tacoma General	0%	14%	4%
University of Washington	6%	0%	4%
WhidbeyHealth Medical Center	41%	14%	33%
Unknown	0%	14%	4%
Grand Total	100%	100%	100%

Conclusion

Early data from March and April case investigation shows that the number of new lab confirmed COVID-19 cases has declined since the first case on March 9th. The peak of the epidemiological curve occurred in mid-March. Hospitalizations in Island County were highest among older adults, with nearly 90% of those hospitalized falling into the age group 70 years or older. These findings underscore the importance of preventive measures (e.g., social distancing, respiratory hygiene, and wearing face coverings in public settings where social distancing measures are difficult to maintain) to protect older adults and persons with underlying medical conditions. Increased capacity for testing and monitoring of newly infected cases and potential exposures will be important to better understand the evolving epidemiology of COVID-19 in Island County. (1)

References

1. *Active Monitoring of Persons Exposed to Patients with Confirmed COVID-19.* **Burke, RM, et al.** 9, s.l. : MMWR Morb Mortal Wkly Report, 2020, Vol. 69.

2. *Hospitalization Rates and Characteristics of Patients Hospitalized with Laboratory-Confirmed Coronavirus Disease2019.* **Garg, Kim S, Whitaker, M. and et, al.** 15, s.l. : MMWR Morb Mortal Weekly, 2020, Vol. 69.