2020 COVID-19 RAPID Response: *Pandemic Preparedness in Remote Rural Fishing Communities Facing Rapid, Massive, Seasonal In-Migration*

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Project Overview

- NSF Rapid response program – one year project for quick response research and data collection related to COVID-19
- Focused on the Bristol Bay region
- Project involves
  - Epidemiological modelling to estimate outbreaks and demand for various medical resources under different mitigation scenarios
  - Related agent-based modelling
  - Surveys to identify risk perceptions, responses to policy, compliance, and vaccination related topics

Survey #1

- Designed the survey in June 2020 and conducted it online (via Qualtrics) in July and August 2020
- Limited to Bristol Bay residents and / or people working in the Bristol Bay fishing industry
- Placed postcard invitations in Dillingham PO Boxes and sent emails to fishermen and community members through community agencies
- Paid survey – upon completion we emailed participants Amazon Gift Cards based on their response to the lottery question. People could earn between $30 and $5 based on the coin toss and their response to the lottery question. Average payout $17.50
- We received about 926 valid responses from real people, about 50% from Alaska.
- We had many invalid responses (probably computer robot responses) in August and helped us identify valid responses.

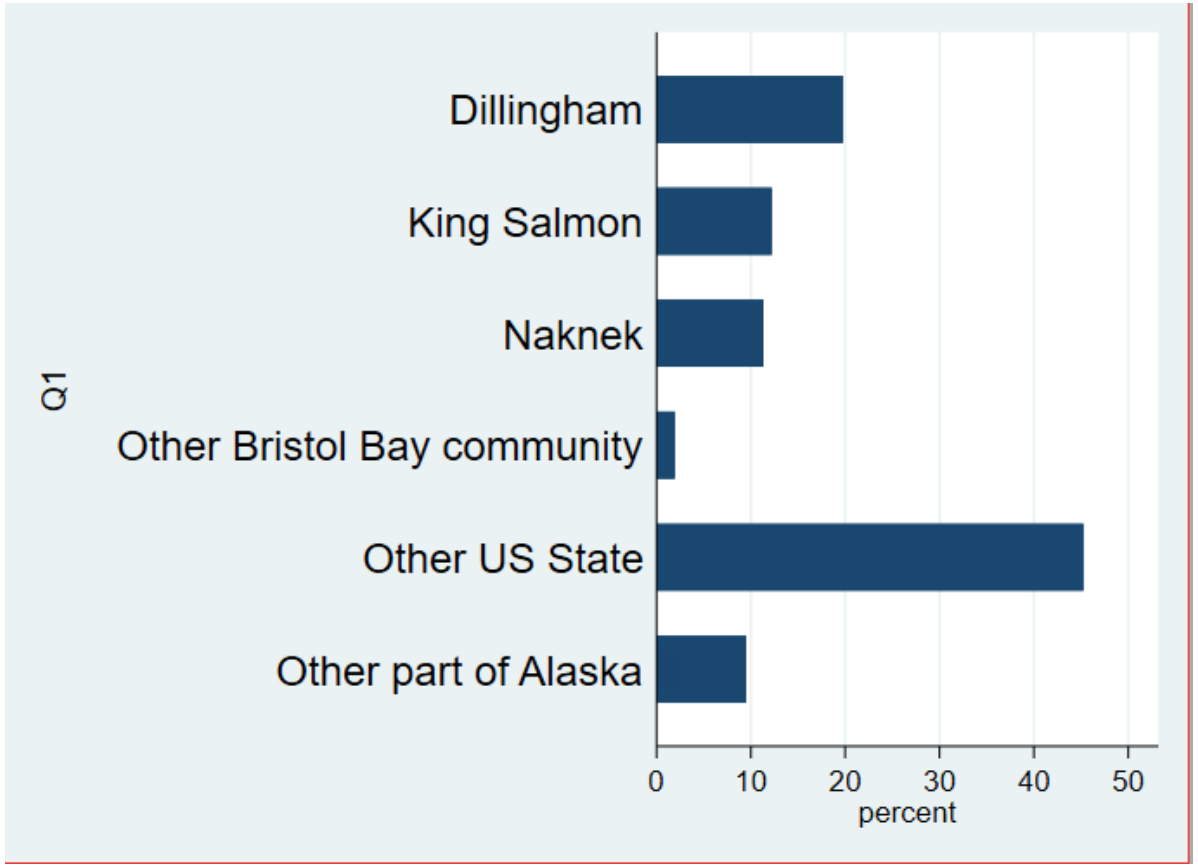
Survey Categories

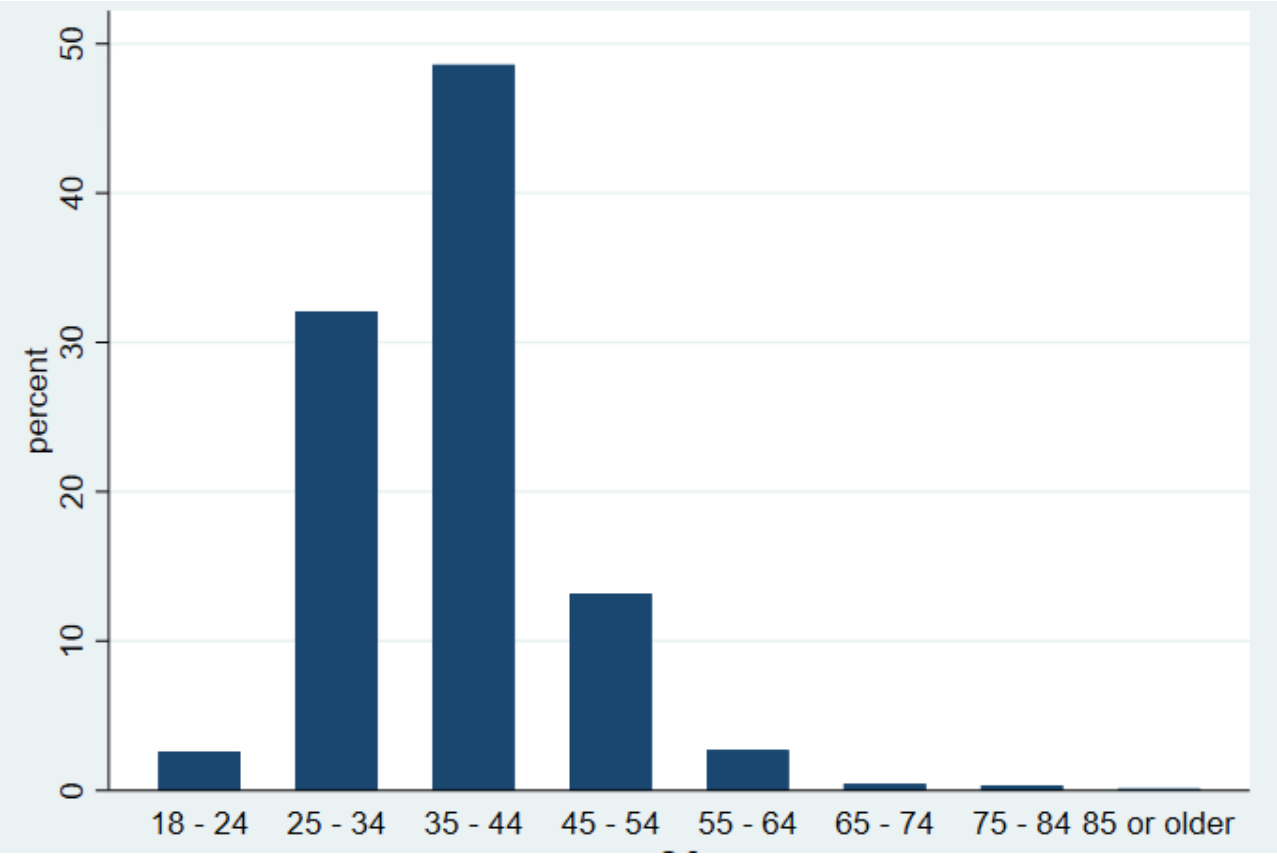
- Demographics
  - Age
  - Income
  - Education
  - Occupation
  - Migration history
  - Health
  - Health insurance
- Resident and non-Resident worker questions
  - Separate questions for captains, crew, or processing workers
  - Fishery participation questions
  - Risk of contracting COVID-19 and risk of experiencing health complications
  - Fishery open ? Yes no
- Standard economics risk elicitation question (coin toss)

General findings of survey #1

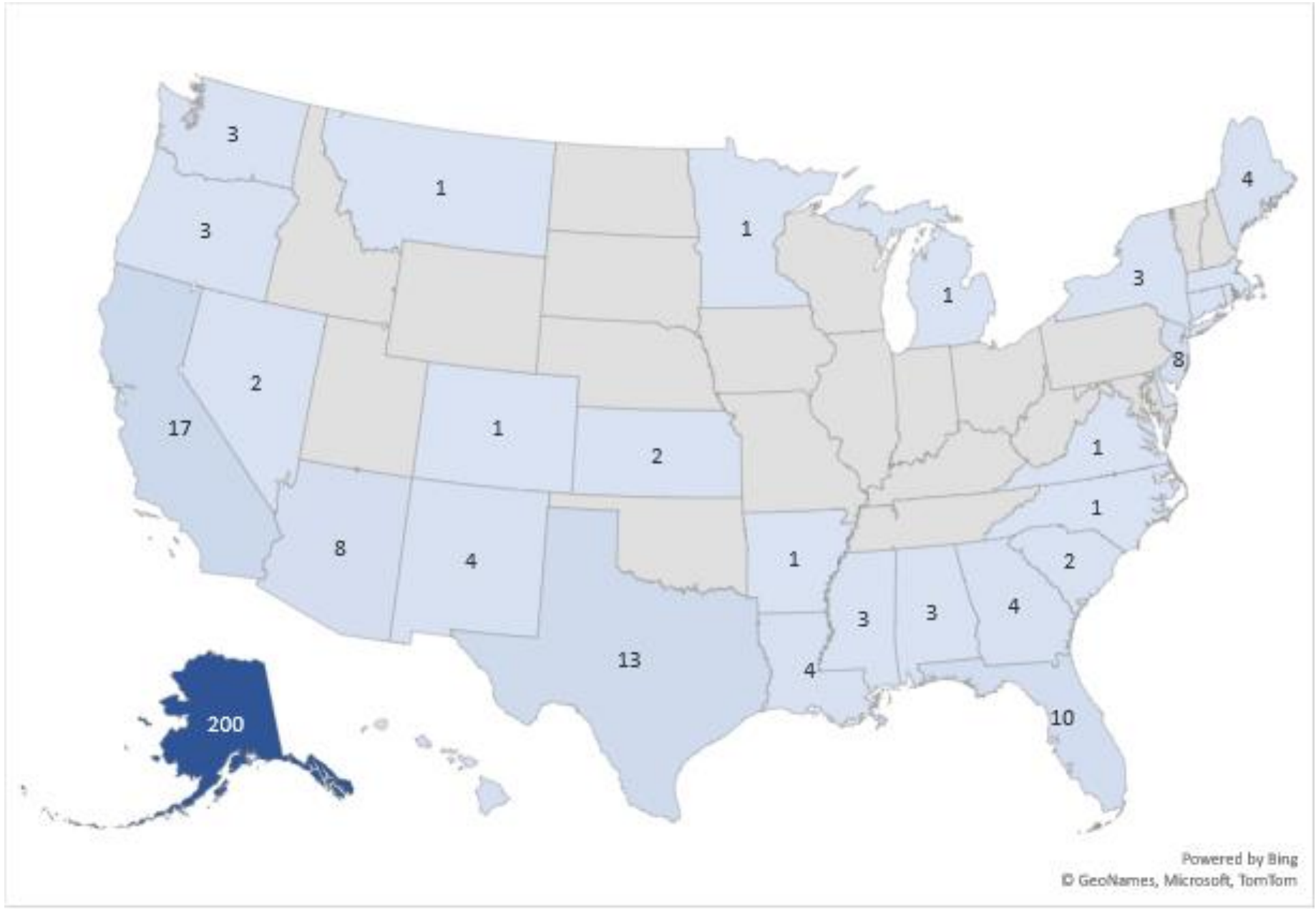
- Most respondent's age 35-44
- About 50% of respondents from out of state
- Out of the 926 valid responses 780 respondents work in the fishing industry. About ½ from out of State.
- Generally strong support for opening the fishery in summer 2020

Simple demographics of respondents (n=926)

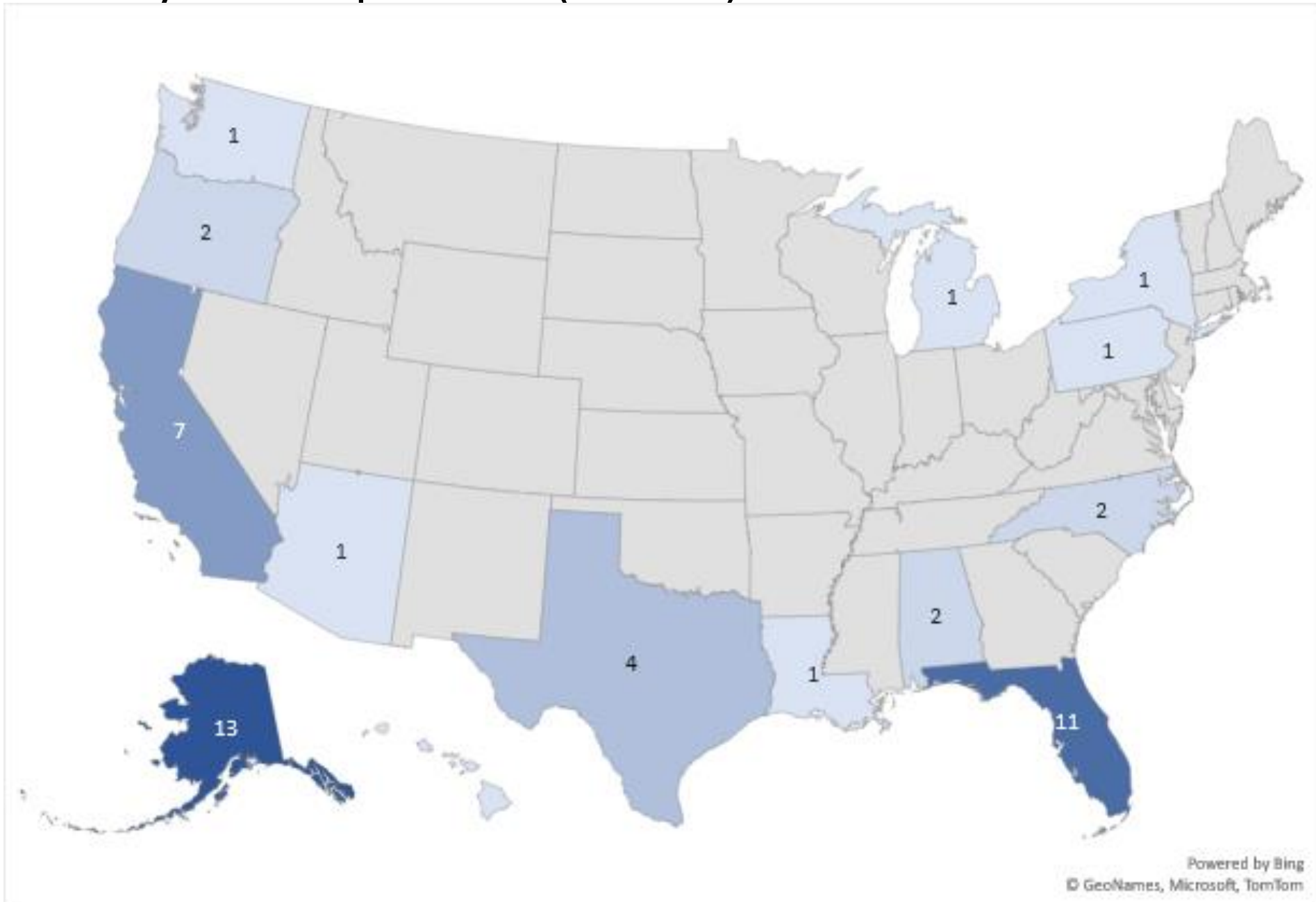




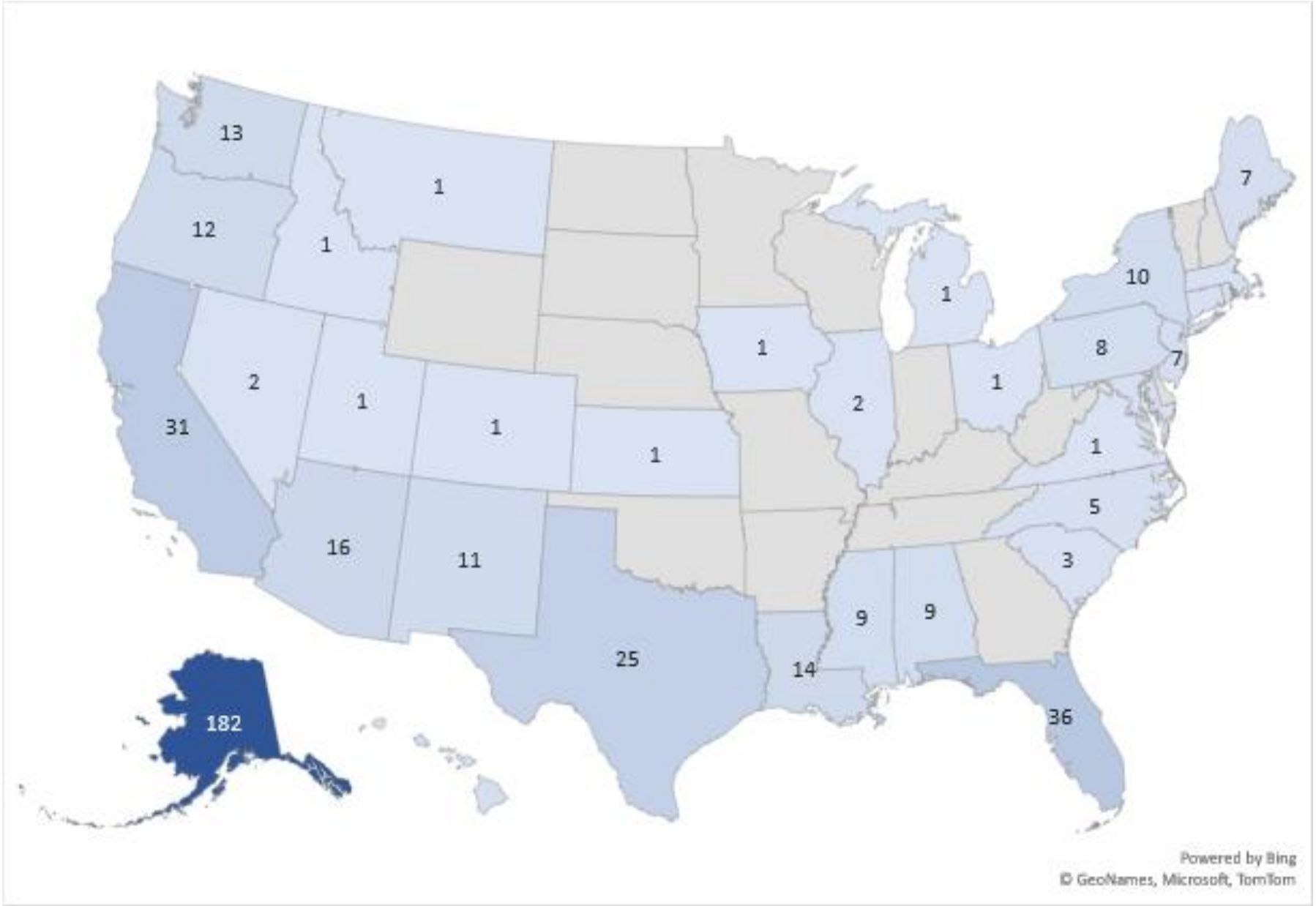
Residency of Processors (n=310)



Residency of Captains (n=43)



Residency of Crew (n=432)



Survey #2

- Presented results of survey #1 and Epidemiological modelling to community partners in Bristol Bay region. Community leaders asked for more information on vaccinations, vaccination hesitancy, and follow-up questions about the 2020 fishing season.
- Survey #2 sent to 900+ initial respondents who indicated a willingness to participate in a second survey (we used unique survey links).
- Used vaccination questions from the recent US Census COVID-19 Household Pulse Survey Phase 3. About 5 questions, 2 related to vaccine hesitancy.
- Survey fielded in April, as of today we have 752 responses. Will provide feedback to Bristol Bay policymakers in about shortly thereafter.

	Have you received one or more vaccination shots?			
Community of Residence	No	Yes	*Yes*	Total
Dillingham	57	107	*65.2%*	164
King Salmon	31	82	*72.6%*	113
Naknek	19	74	*79.6%*	93
Other Bristol Bay community	0	2	*100.0%*	2
Other US State	171	152	*47.1%*	323
Other part of Alaska	1	1	*50.0%*	2
Total	279	418	*60.0%*	697

About 50% of those from out of state haven’t received a second dose.

Surveys 3-6 - Follow-up vaccination and COVID-19 related questions

- We plan to send short follow-up paid surveys to:
  - Those who haven’t been vaccinated (about 300)
  - Send to those who haven’t received both doses
  - Inform Bristol Bay policymakers as to trends we are observing in vaccination rates and vaccine hesitancy.

Thank you

More information on survey results can be found on our website

https://polaris.ghs.alaska.edu/covid