

Vibrio Infection

The incidence of *Vibrio* infections increased in 2018 to 1.28/100,000 (64 cases). After the 2015 outbreak, there was an initial decrease in reports of *Vibrio parahaemolyticus* (Vp) infection that may have been due to environmental changes (e.g. cooler ocean temperatures), a change in circulating Vp strains and/or improved awareness and industry practices. Since 2016 there has been a consistent increase in incidence for unknown reasons. The majority of Vp infections are caused by eating raw bivalve shellfish. In 2018, 22.0% of *Vibrio* infections were due to international travel.

In 2018, the highest incidence rates were reported from North Vancouver Island and North Shore/Coast Garibaldi HSDA and the highest number of cases were reported from North Shore/Coast Garibaldi and Vancouver HSDA. These coastal HSDA have a large number of retail and restaurant premises that serve raw oysters and/or include areas where self-harvest of shellfish occurs. The majority of cases occurred in adults, with the highest incidence in adults over the age of 40 years.

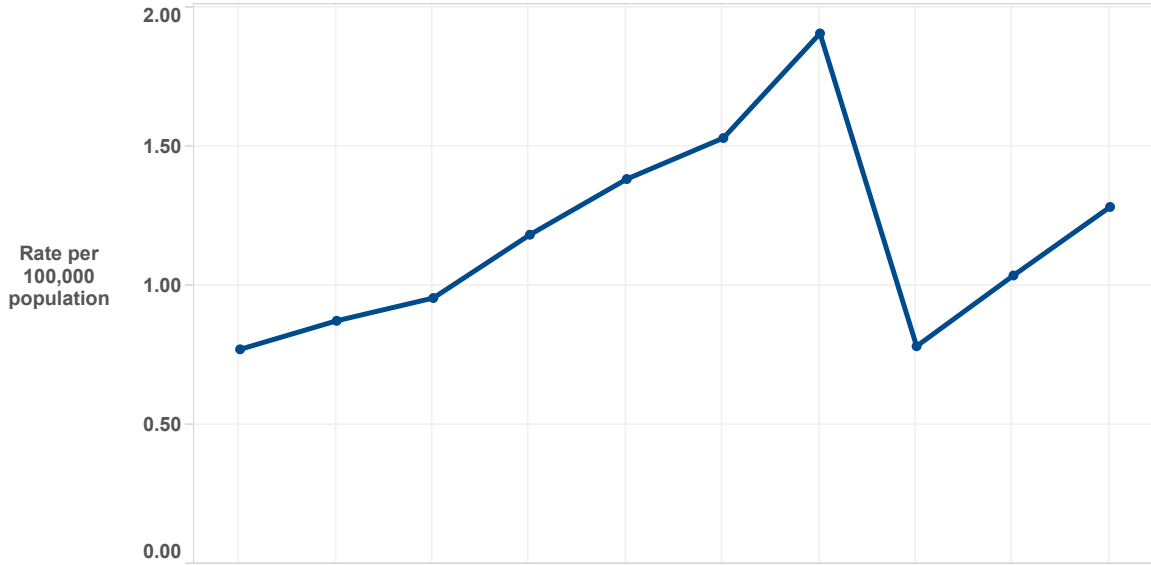
There is a peak in cases in the summer months when the levels of Vp are highest in the marine environment.

In 2018, there was one outbreak of *Vibrio cholera* non-O1/non-O139 on Vancouver Island. Three lab-confirmed cases were associated with the consumption of raw herring eggs harvested in the French Creek and Qualicum Bay areas. This was the first recorded outbreak of non-toxicogenic *Vibrio cholera* associated with a locally-harvested product in BC (VIHA, 2018¹).



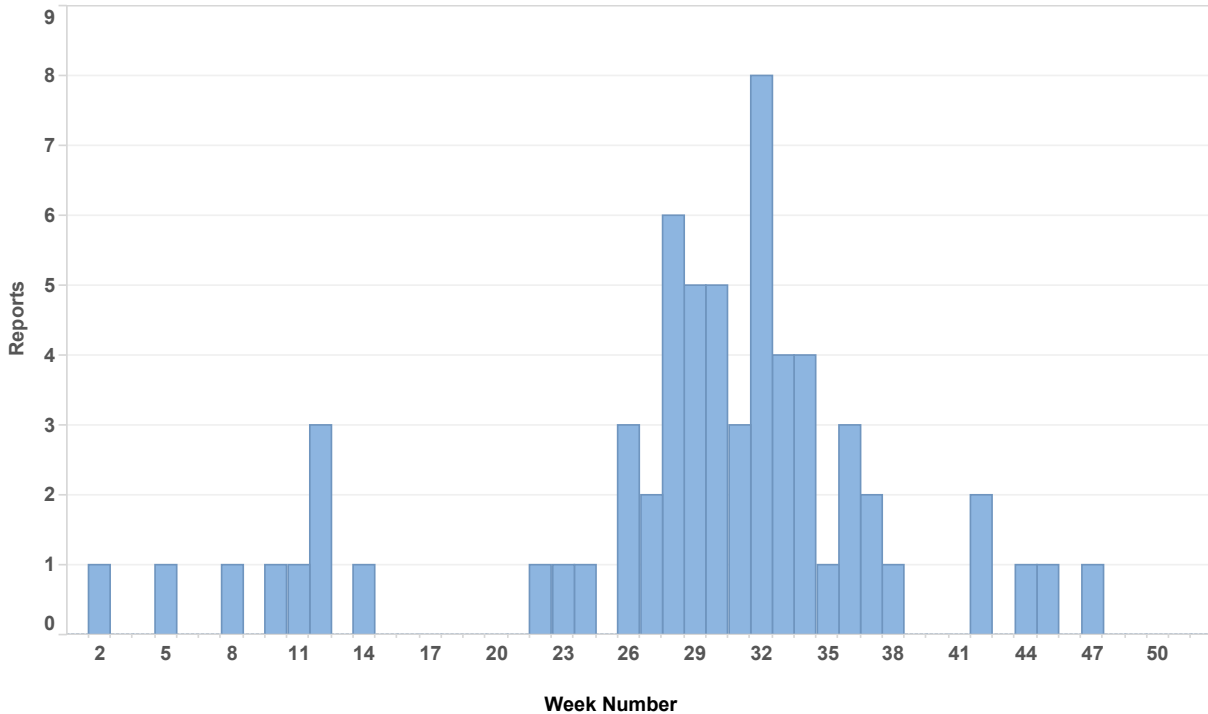
1. VIHA. Illness Associated with Herring Eggs-Vancouver Island. 2018. Accessed May 14, 2019: <http://www.fnha.ca/about/news-and-events/news/illness-associated-with-herring-eggs-vancouver-island>

12.1 Vibrio Infection Rates by Year, 2009-2018

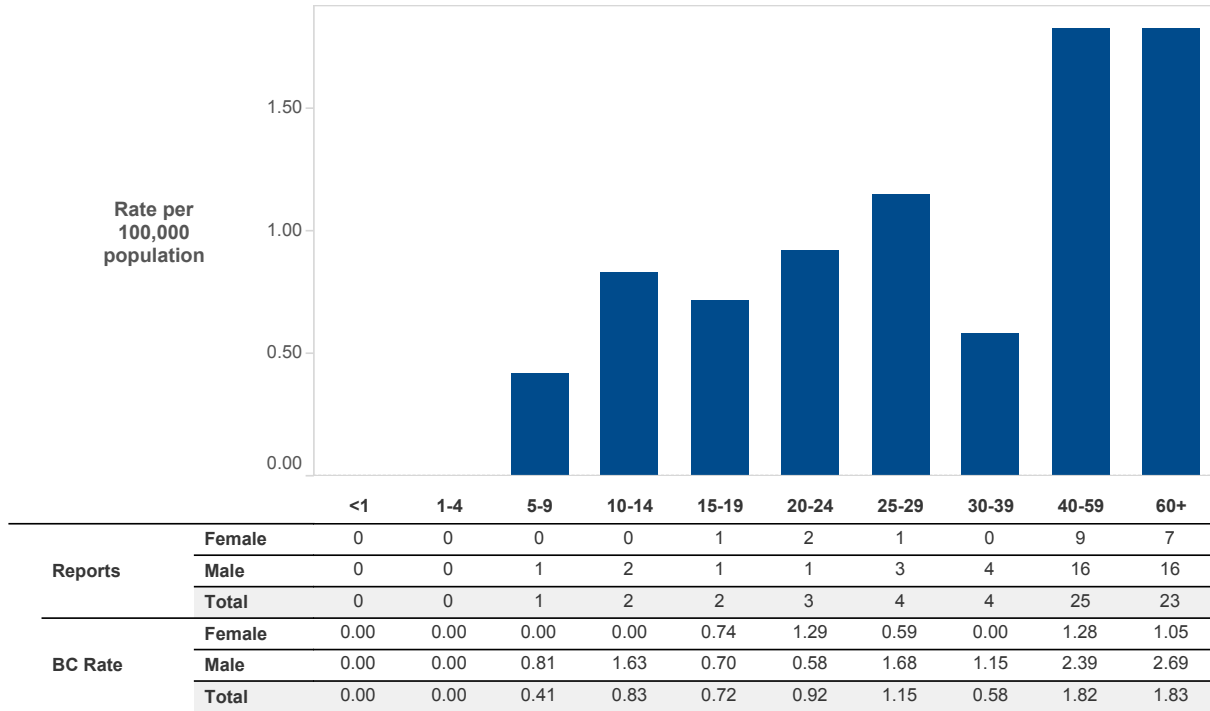


	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Reports	34	39	43	54	64	72	91	38	51	64
BC Rate	0.77	0.87	0.96	1.18	1.38	1.53	1.91	0.78	1.04	1.28

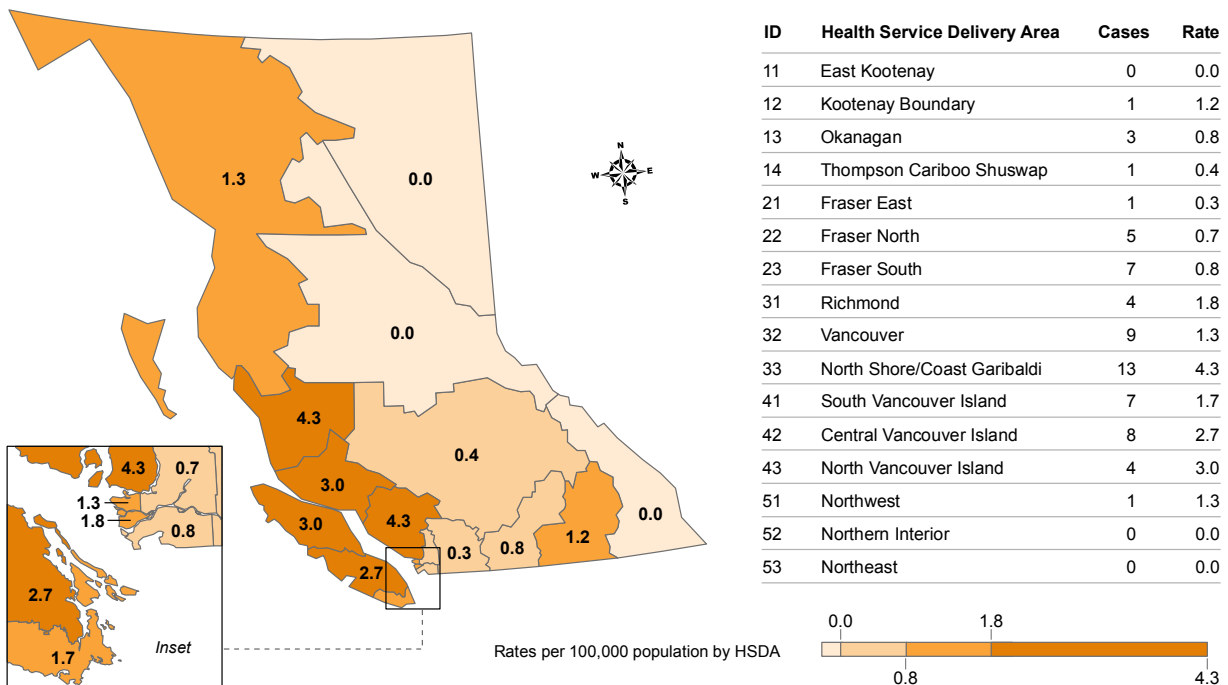
12.2 Vibrio Infection Reports by Week, 2018



12.3 Vibrio Infection Rates by Age Group, 2018



12.4 Vibrio Rates by HSDA, 2018



12.5 Vibrio Species Distribution, 2018

Rank	Species	Number of Cases	Proportion
1	Parahaemolyticus	54	83.1%
2	Fluvialis	3	4.7%
3	Cholera non- O1/O139	3	4.7%
3	Other/unknown	4	6.3%
	Total	64	100.0%

Notes: Species distribution is based on Panaroma data