

Meningococcal Disease (invasive)

In 2017, 26 cases of invasive meningococcal disease (IMD) were reported (0.54 cases per 100,000 population), with two fatal cases. Sixteen cases were serogroup W, five serogroup Y, four serogroup B and one serogroup C.

None of the 2017 cases reported being immunized against the serogroup that caused their disease. None had been eligible for such immunization under the publicly funded immunization programs through either routine immunization or immunization for specific high-risk populations. Routine childhood meningococcal C conjugate vaccination began in BC for infants and school-age children in 2003. A routine meningococcal quadrivalent (ACYW) vaccine immunization program was implemented in grade 9 in BC in September 2016.

Rates of serogroup C IMD have remained low (0-0.04 cases per 100,000 population per year between 2009 and 2017). Since 2008, only one case of meningococcal C disease has been reported in a person under 25 years of age (in 2017).

All but one of the 16 serogroup W cases (an infant) were of the ST-11 clonal complex (cc), which has been identified in BC in prior years, but demonstrated outbreak activity for the first time in BC in 2017 and resulted in two fatal outcomes. Serogroup W ST-11cc cases ranged in age from 0-97 years, with a median of 23 years. Almost half of the ST-11cc cases were aged 15-24 years. ST-11cc cases were reported from seven of BC's 16 Health Service Delivery Areas (HSDAs). Between late September and late December, an outbreak of ST-11cc occurred in the Okanagan

HSDA with a total of five cases, including one fatality, among adolescents. In response to the outbreak, Interior Health Authority implemented a meningococcal quadrivalent vaccine immunization program targeting adolescents aged 15-19 years living in the Okanagan Health Service Delivery Area.¹

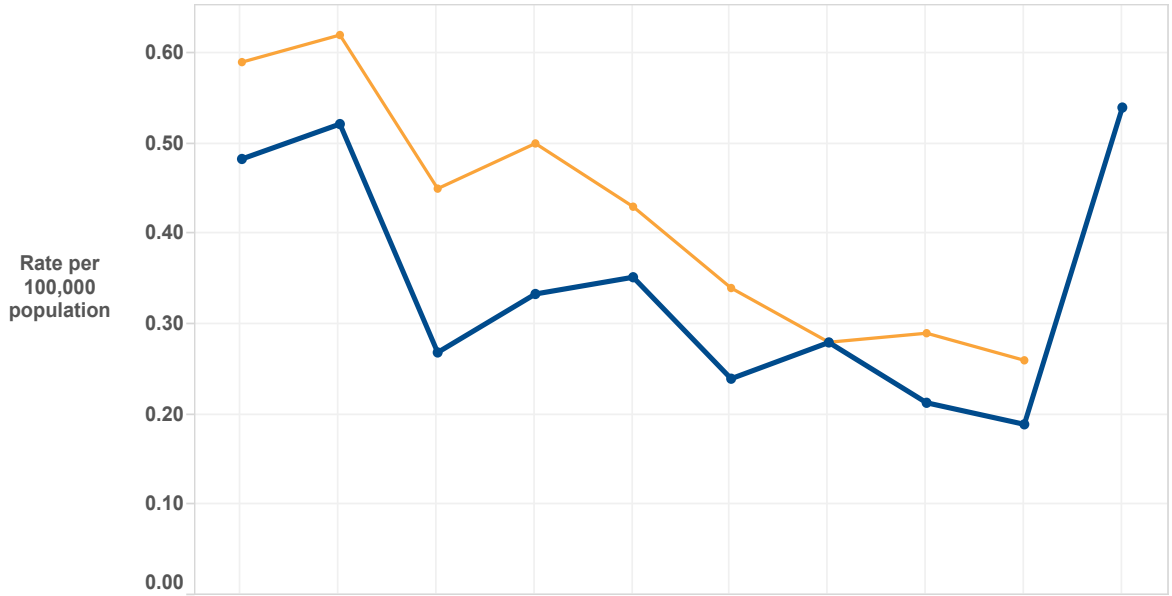
Serogroup Y cases ranged in age from 1-64 years (median=24 years). The cases were reported from three HSDAs. Serogroup Y incidence has fluctuated between 0.04 and 0.16 cases per 100,000 population over the past ten years.

The serogroup B cases ranged in age from 22-61 years (median=42.5 years). The cases were reported from three HSDAs. Serogroup B incidence has fluctuated between 0.04 and 0.36 cases per 100,000 population over the past ten years.



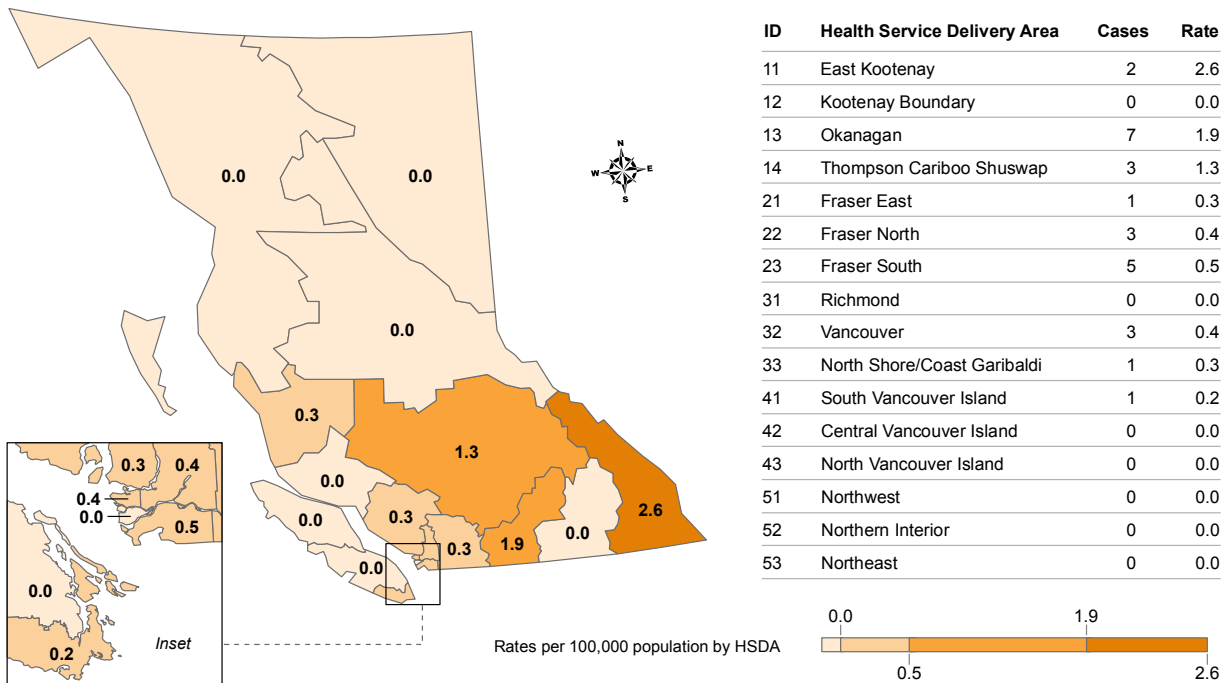
1. Interior Health Authority. Meningococcal Outbreak (Okanagan). Available online at: <https://www.interiorhealth.ca/YourEnvironment/CommunicableDiseaseControl/Pages/Meningococcal-Outbreak.aspx> [Accessed: August 31, 2018].

2.1 Meningococcal Disease (invasive) Rates by Year, 2008-2017

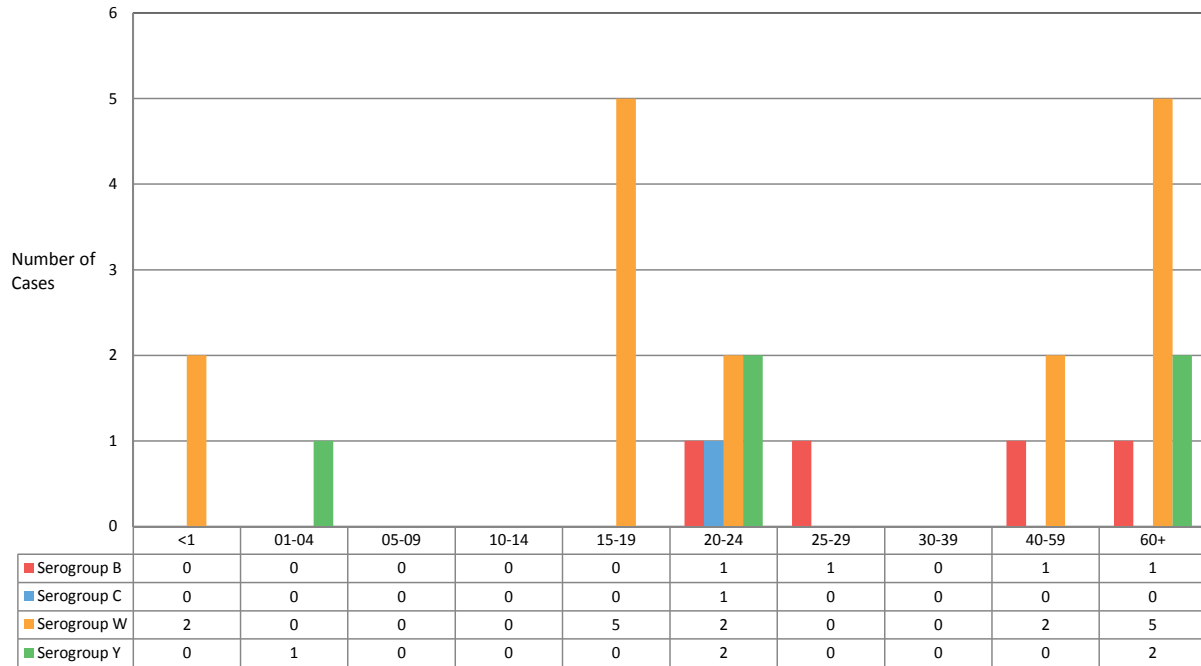


	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Reports	21	23	12	15	16	11	13	10	9	26
BC Rate	0.48	0.52	0.27	0.33	0.35	0.24	0.28	0.21	0.19	0.54
Canada Rate	0.59	0.62	0.45	0.50	0.43	0.34	0.28	0.29	0.26	

2.2 Meningococcal Disease (invasive) Rates by HSDA, 2017



2.3 Meningococcal Disease (invasive) Cases by Serotype and Age Group, 2017



2.4 Meningococcal Disease (invasive) Cases by Serotype and Year, 2008-2017

