

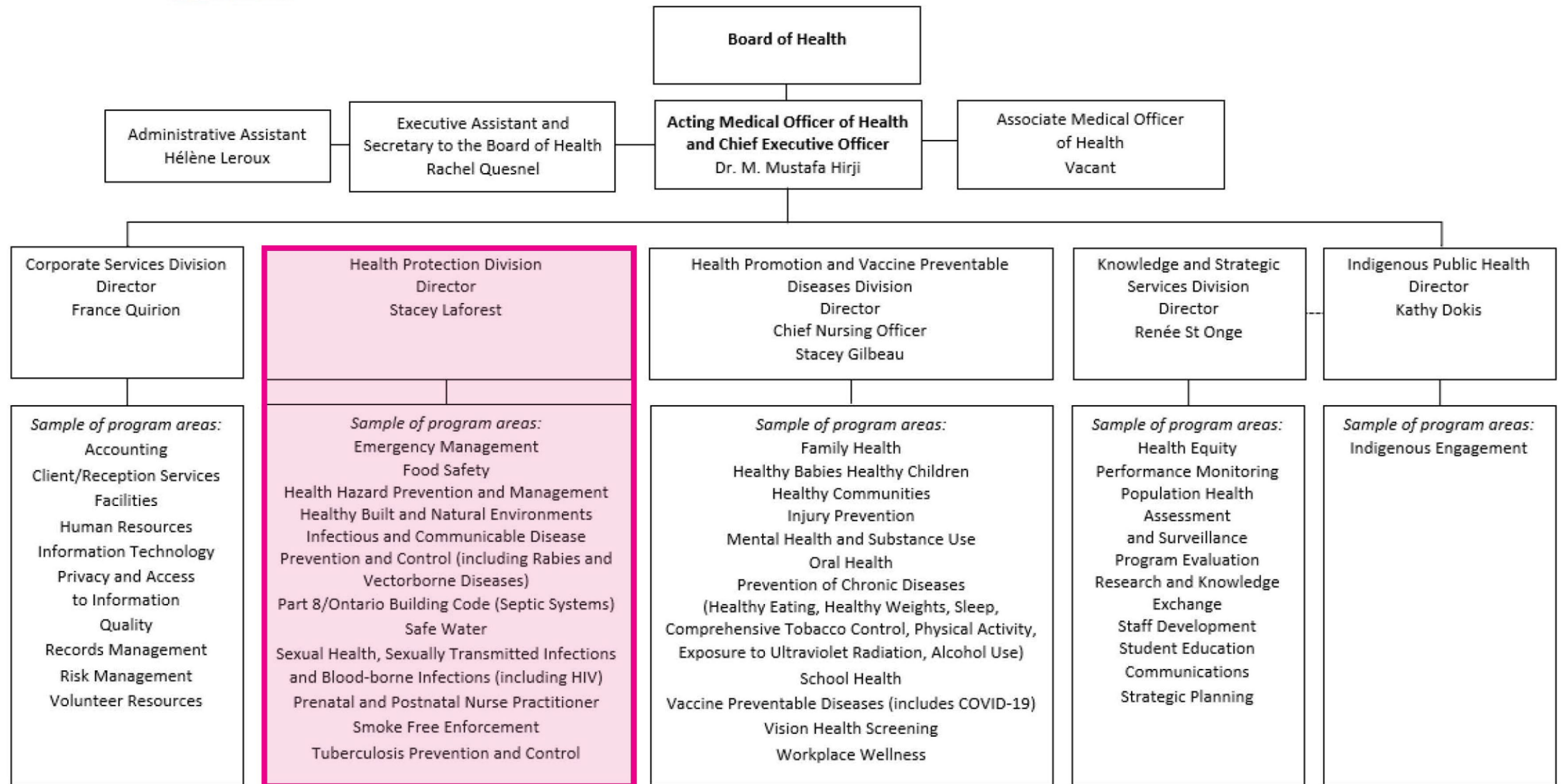
Changing Patterns of Infectious Disease

Respiratory, vaccine preventable diseases, sexually transmitted and blood borne infections trends, and program impacts

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Public Health
Santé publique
SUDBURY & DISTRICTS



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Requirements for Diseases of Public Health Significance (DOPHS)

- All DOPHS must be reported to Public Health, as per the requirements outlined within the *Health Protection and Promotion Act*.
- Per the *Ontario Public Health Standards*, Public Health is responsible for
 - Conducting case investigations of all reported DOPHS that are spread through respiratory, blood-borne, or direct contact route.
 - Following up with persons with suspect or confirmed DOPHS to prevent the spread of infection, which may include isolation.
 - Conducting contact tracing and providing preventative treatment, vaccination and/or education.

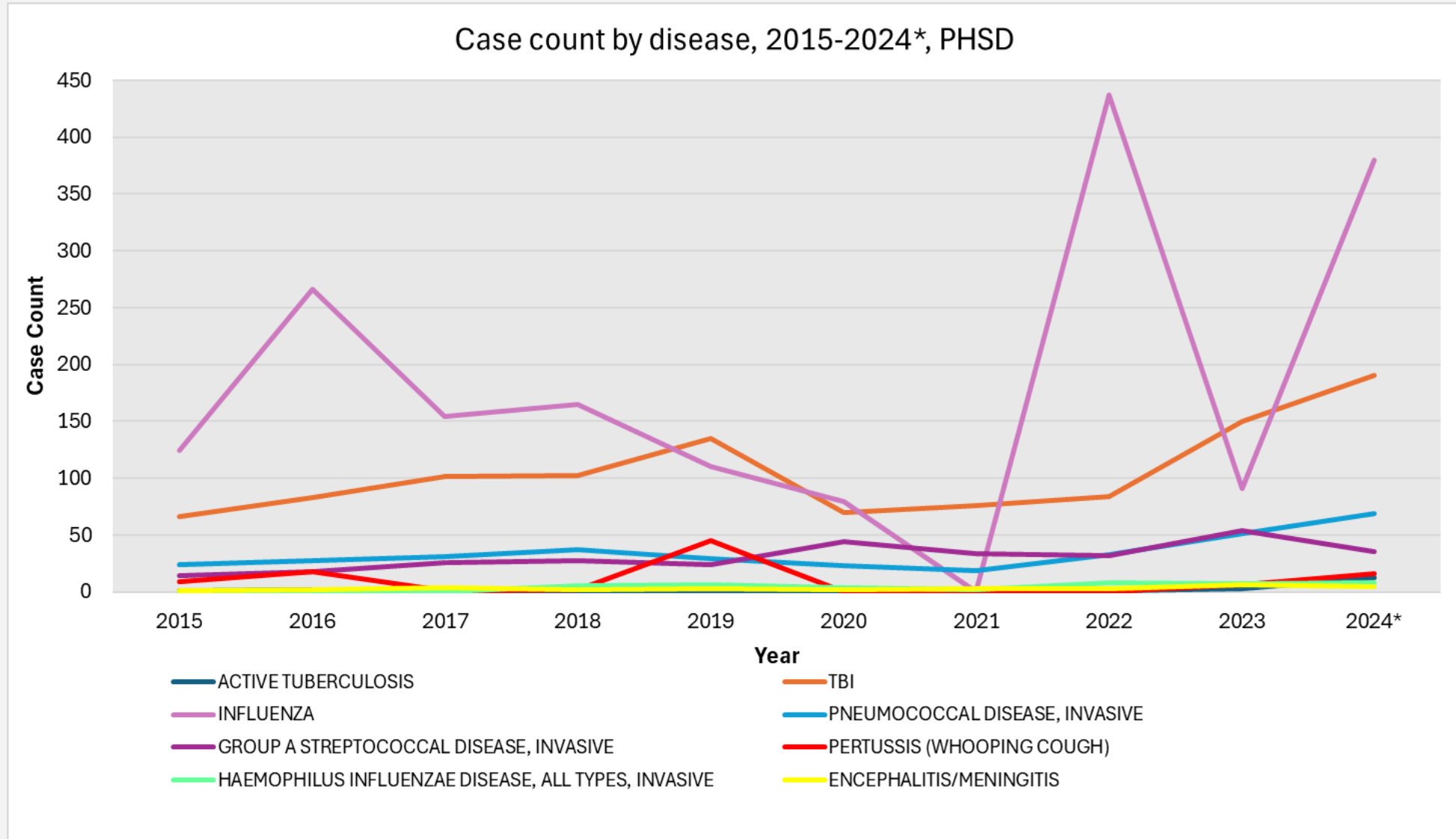
Management of DOPHS

- DOPHS management in a snapshot
 - Review incoming positive lab reports for clients in the PHSD service area, or receive notification by HCP about possible DOPHS based on clinical assessment (i.e. symptom presentation)
 - Follow up with client to investigate symptom onset, isolation, exposures, contacts and any relevant education and/or treatment information and often testing or medication support
 - Follow up with HCP to review treatment provided per IDP, and to provide any additional support to HCP for case management. Support referral to specialist when required.
 - Follow up with contacts to provide education and arrange prophylaxis, treatment or vaccination as required
 - Clinical documentation and entry into provincial database (iPHIS) to report to the province. Case contact and documentation must be completed within required timeline.
 - Some DOPHS require additional follow up, e.g. TB, where multiple follow up appointments are required.

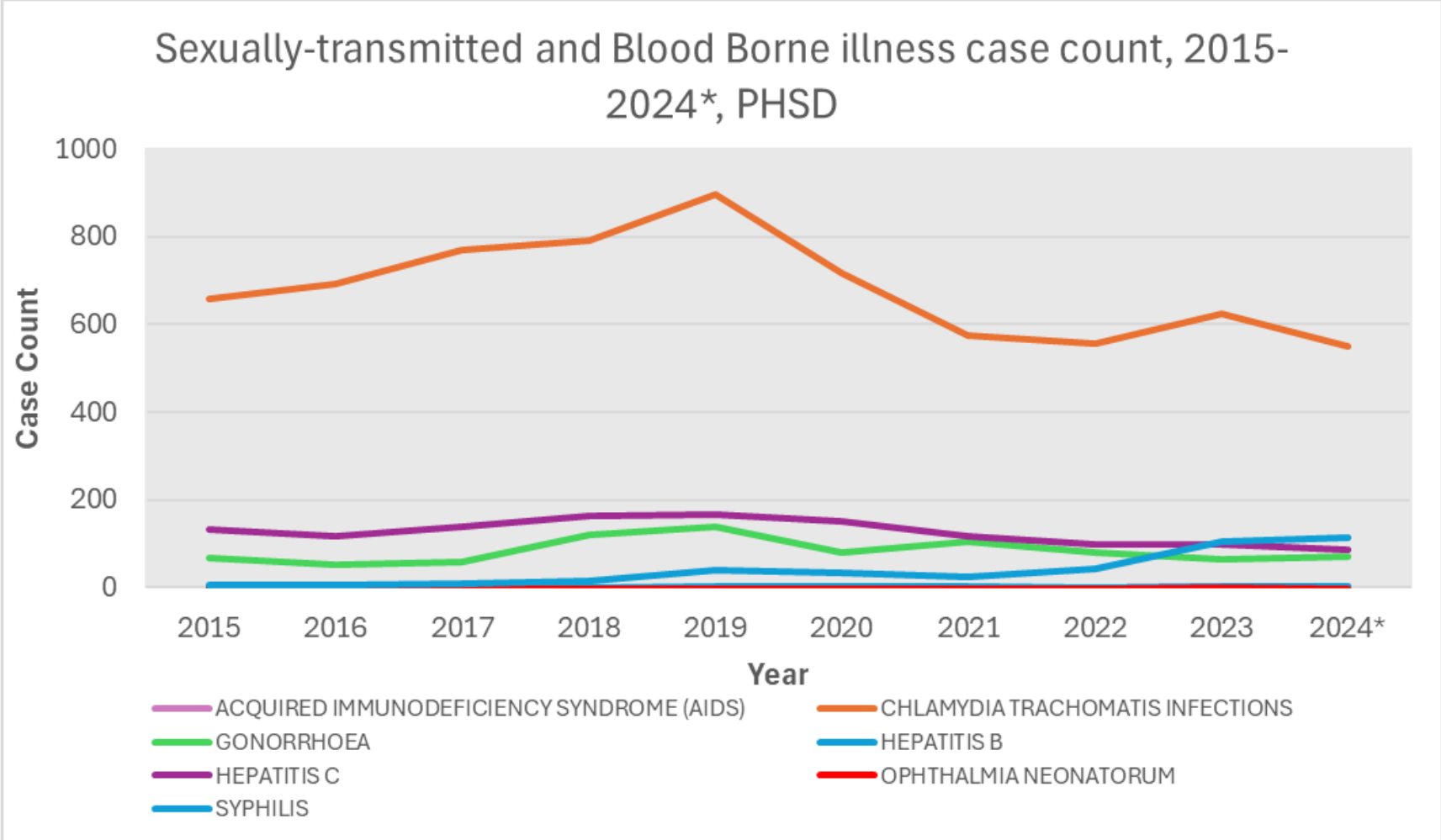
Requirements for Immunization Programs and Services

- Promote and provide provincially funded immunizations to eligible clients, including underserved and priority populations.
- Assess the immunization status of students and children in licensed child care settings as per the *Immunization of School Pupils Act* and the *Child Care and Early Years Act*.

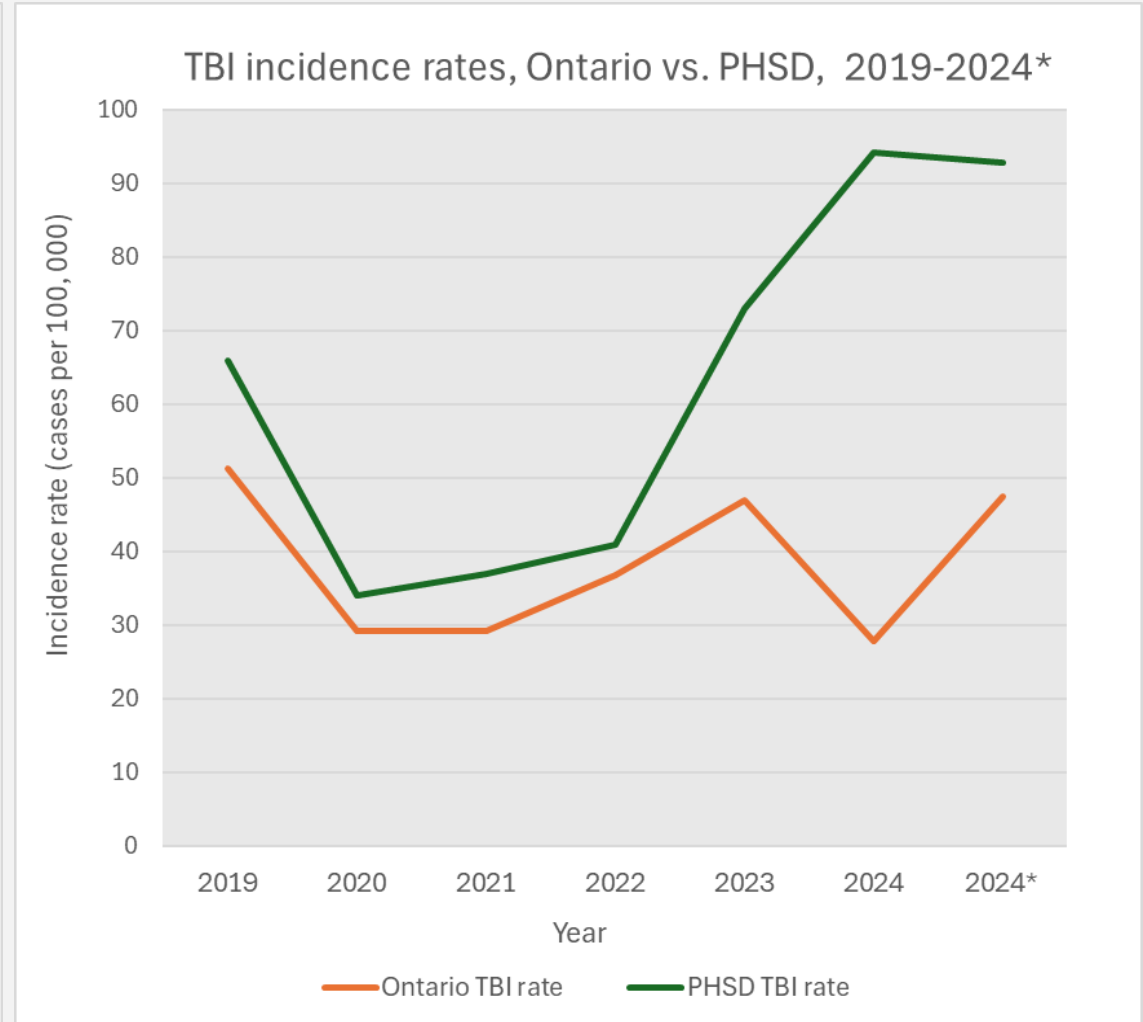
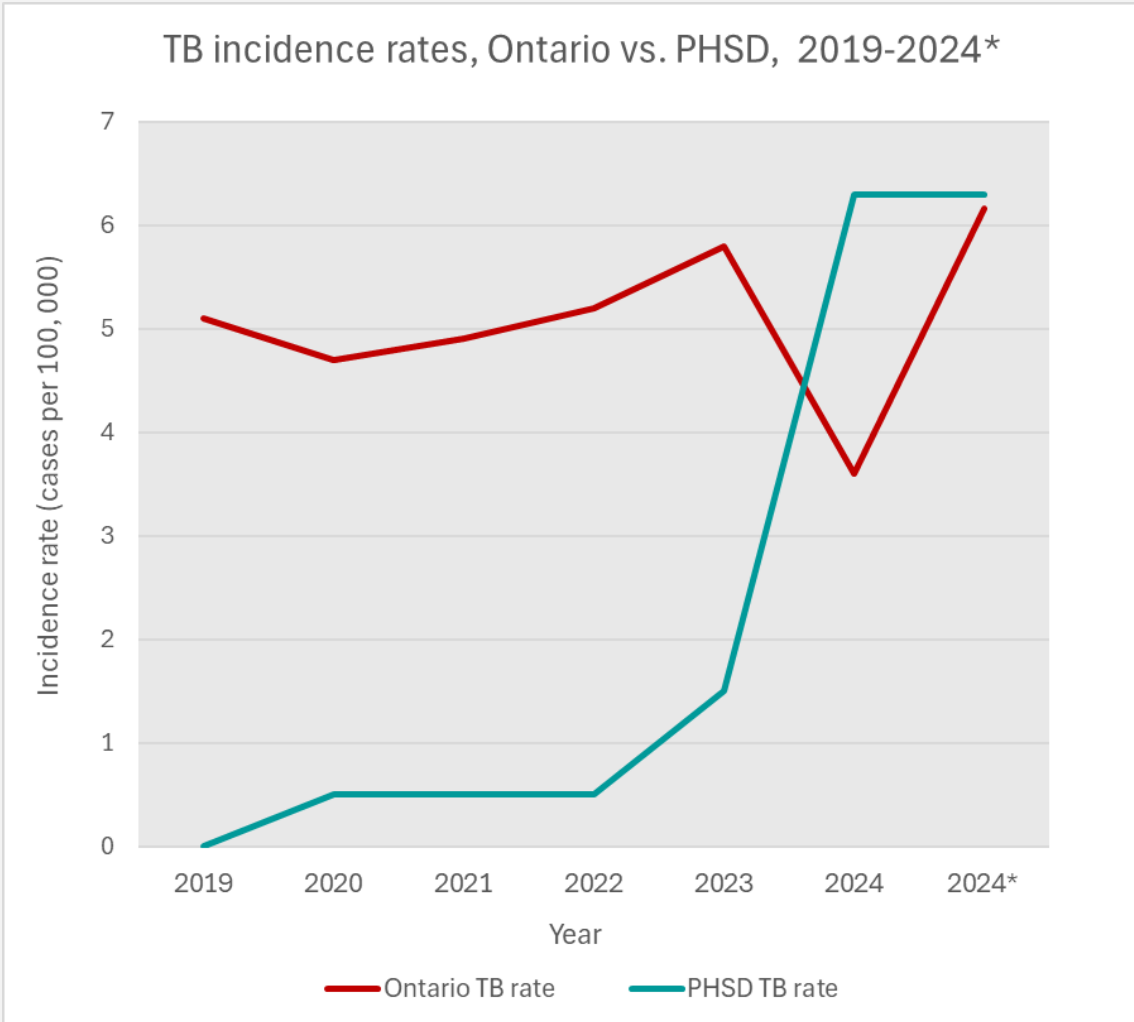
Respiratory & Vaccine Preventable DOPHS Trends



Sexually-transmitted and Blood Borne illness case count, over time, Public Health

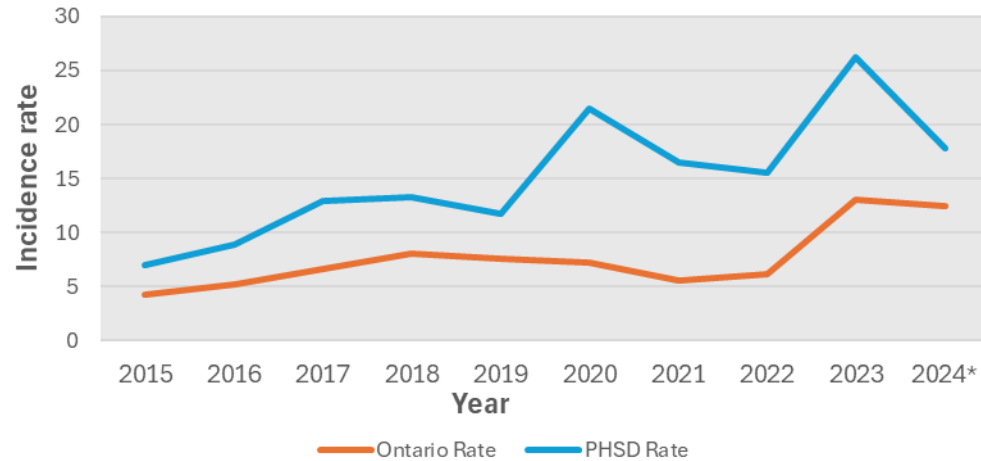


Tuberculosis, Ontario vs. Public Health, 2019-2024*

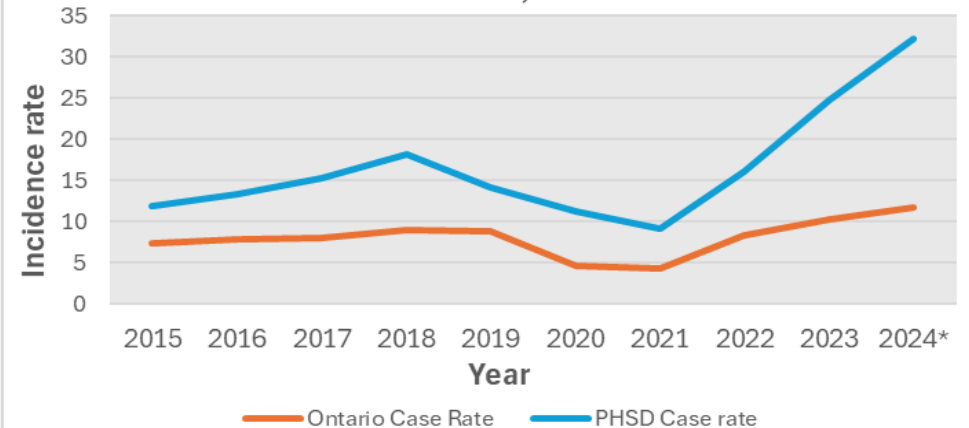


Other Respiratory DOPHS

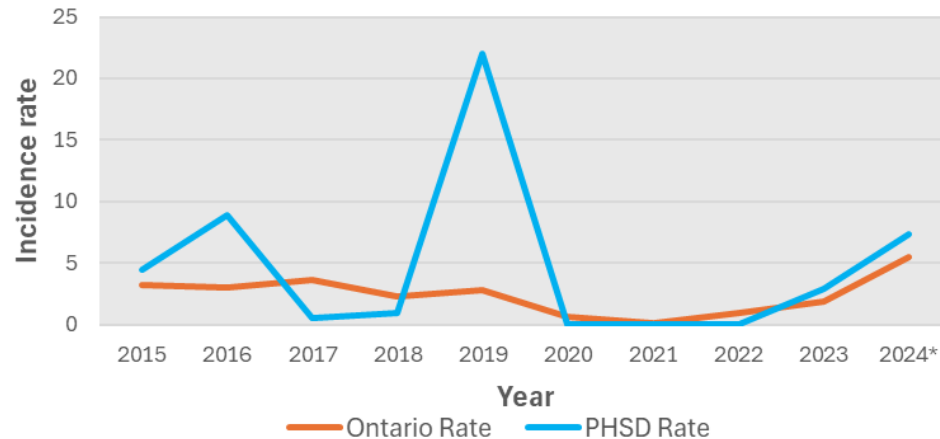
iGAS incidence rates, Ontario vs. PHSD, 2015-2024



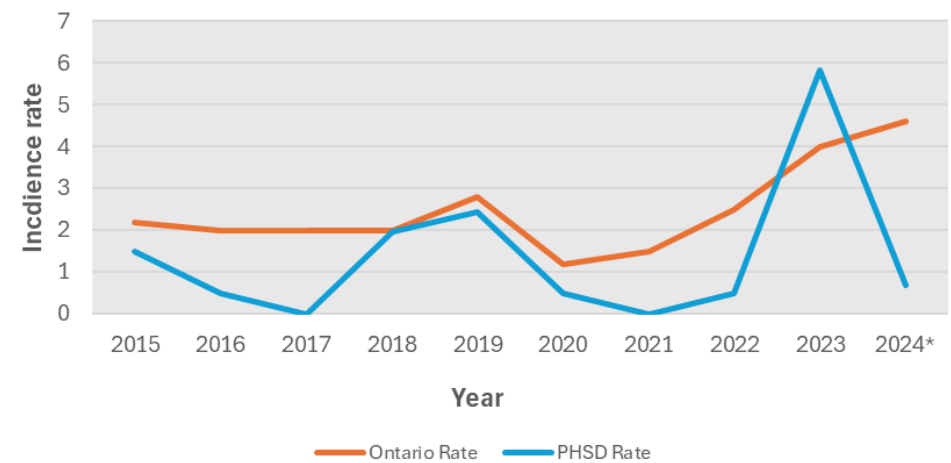
Invasive pneumococcal disease incidence rate, PHSD vs Ontario, 2015-2024*



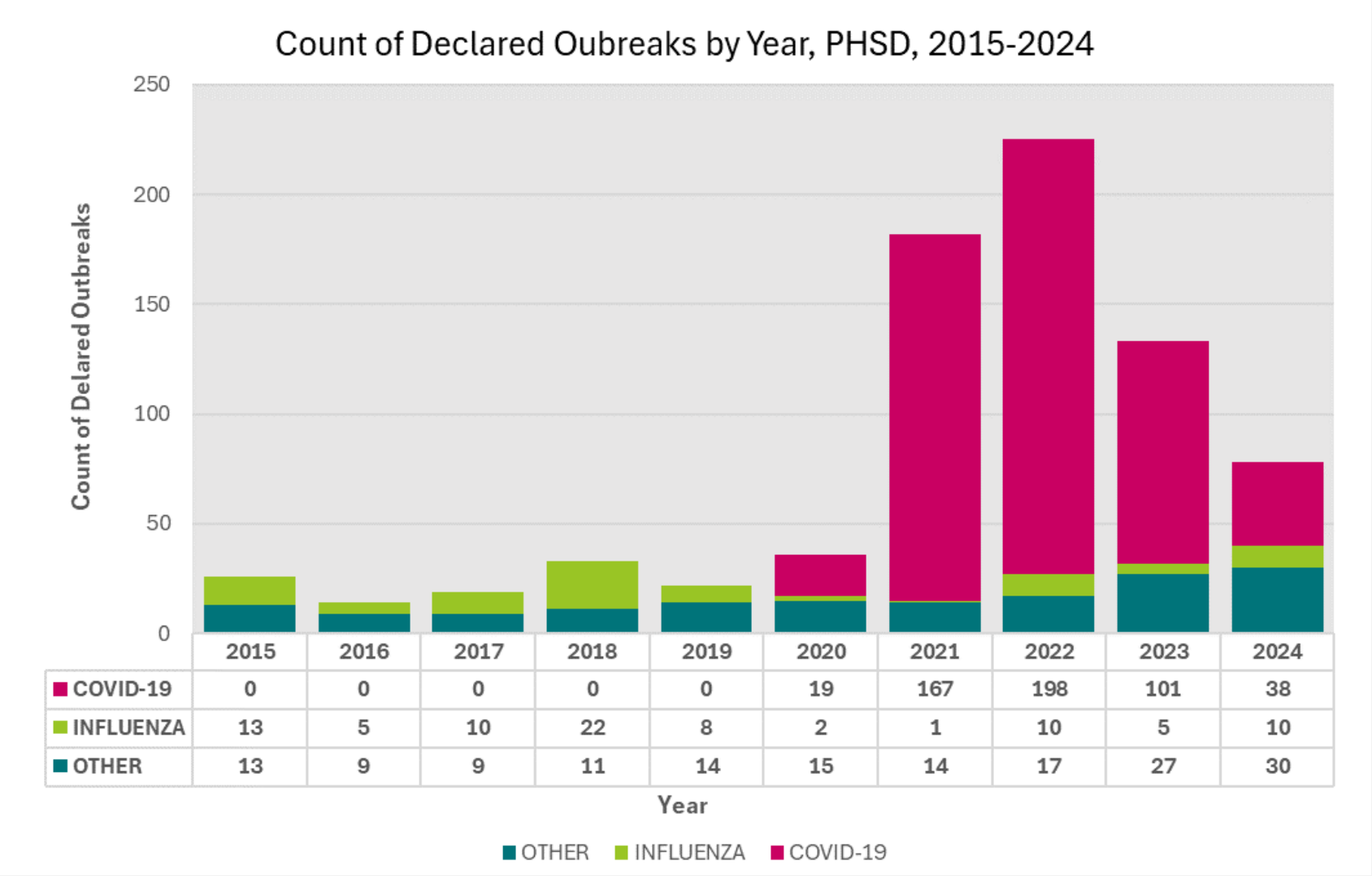
Pertussis incidence rate, PHSD vs Ontario, 2015-2024*



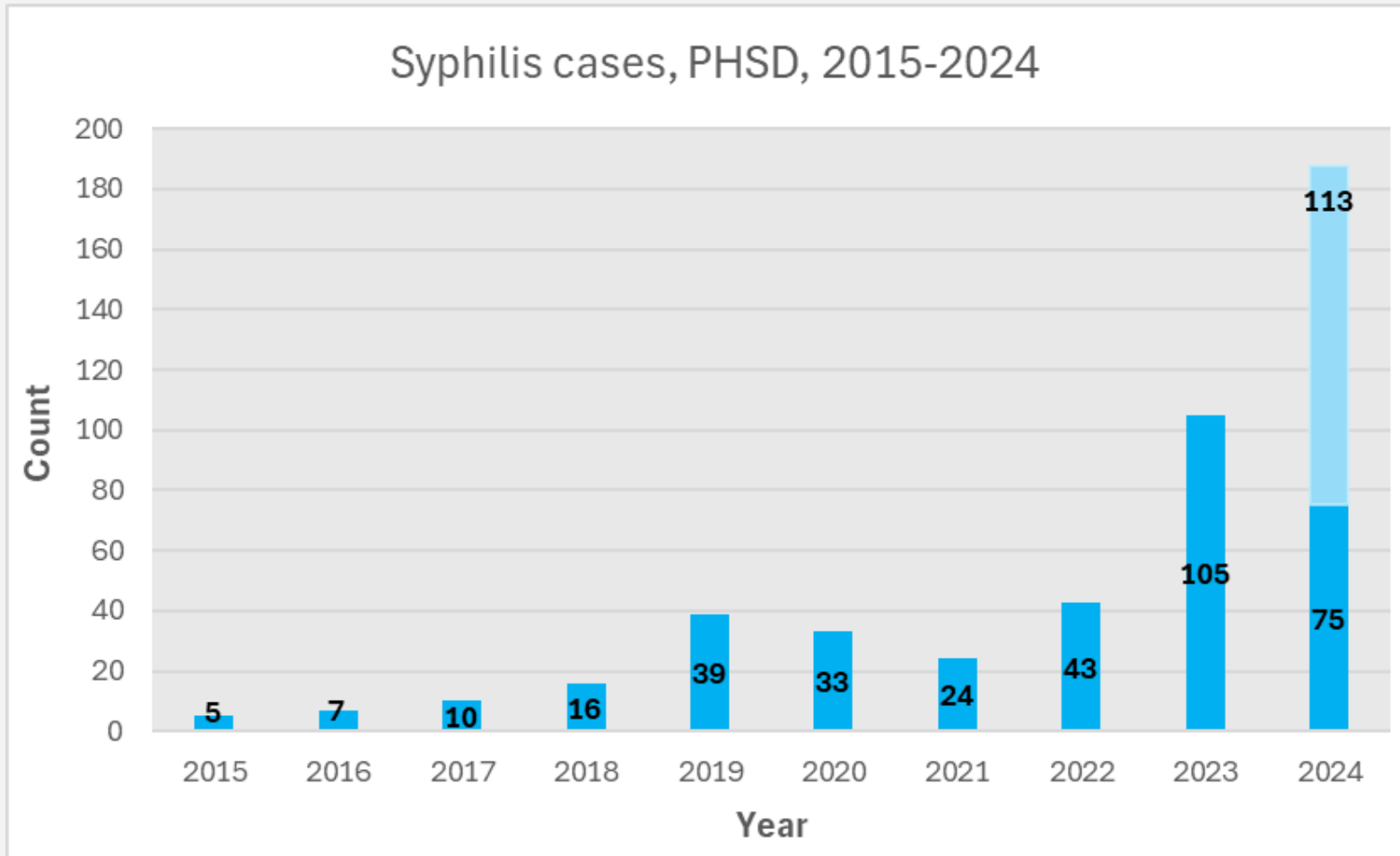
Varicella incidence rate, PHSD vs. Ontario, 2015-2024*



Respiratory Outbreak Trend



Syphilis, PHSD, 2015-2024



- Public Health has the sixth highest year-to-date rate among all health regions, at 52.22 cases per 100,000 pop.
- Syphilis counts have increased dramatically in the last decade, from just 5 cases in 2015 to 105 in 2023. Projecting the year-to-date 2024 count, local case counts may rise to 113 cases by the end of 2024.

Increasing VPD Program Pressures

VPD program has become increasingly complex with the introduction of new vaccine programs, changing provincial expectations and requirements and funding

- COVID-19 vaccine administration
- COVID-19 cold chain responsibilities
- RSV program
 - Expanded eligibility of the older adult program
 - Introduction of the infant and high-risk children program
- Changing demographic (international records and complex catch up schedules)
- Vaccine hesitancy and misinformation

Final thoughts

- Respiratory and STBBI infections are increasing within the region –particularly TB, invasive pneumococcal disease, iGAS, and syphilis infections. These increasing trends are also being observed across the province.
- Program impacts are being observed, with an increase in both investigation number and complexity.
- The teams continue to explore ways to streamline processes. VPD team continues to prioritize vaccination of eligible persons routinely as per the publicly funded schedule and to susceptible persons as part of contact investigation.
- With increasing case load and outbreak management, existing CID and SH teams are beyond the capacity of the current staffing levels.
- Given the minimum investigation requirements per the OPHS, and provincial data entry requirements, the Executive Committee is exploring options to manage the workload associated with increases in case loads.



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