
PHSA Laboratories

BCCDC Public Health Laboratory

December 23, 2022

Re: Detection of Circulating H1N1 Influenza A strains in BC

Dear BC Medical Microbiology and Public Health Colleagues,

As you know, recently an alert was issued regarding potential for false negative results on Roche COBAS testing platform for H1N1 Influenza A strains currently circulating world-wide.

The BCCDC PHL sequenced a subset of H1N1 strains currently circulating and detected in BC. Of these, ~80% contained C124A or C124A plus G141A mutations. These are the strains that have been flagged for their potential to produce false negative results. Overall, H1N1 strains currently account for ~5% of all Influenza A strains detected by BC laboratories this fall-winter respiratory season.

Several commercial platforms, as well as laboratory developed NAT tests, are used for influenza A detection across the province.

The following platforms are used in BC:

1. Cepheid Xpert
2. Biofire Filmarray
3. Hologic Panther Fusion
4. Seegene Allplex
5. Luminex NxTAG
6. Roche Cobas
7. Laboratory developed tests

An investigation, in collaboration with all BC laboratories, has confirmed that platforms 1-5 above, and the currently used laboratory-developed tests, are not compromised in their ability to detect H1N1 strains with C124A or C124A plus G141A mutations.

Roche COBAS was able to detect these H1N1 strains in samples with high viral load, with false negative results for samples with lower viral loads. Roche COBAS NAT tests are not widely used to detect influenza A in BC; they are in use for Influenza testing only in VCH Health Authority and risk assessment and mitigation strategies are underway in the affected laboratory.

We thank all our colleagues for a speedy and collaborative investigation into this issue.

Sincerely,



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