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Questions and Answers from the BORN/PSO Fetal Blood Group Genotyping Webinar (Oct 28, 2026)

Fetal *RHD* Screening & Allo-FBGG Requisitions	
What CPSO number should Physician Assistants use?	The supervising physician's CPSO number should be used.
Can Midwives use their CMO#?	Yes
Why is an additional stamp or label required in Section D if the provider's information is completed in Section C1?	Section D must be completed by the individual who collected the blood sample, even if that individual is also the ordering provider. This information is required by the laboratory to document who performed the specimen collection.
ABO/RhD Group & Antibody Screen Testing	
Can Fetal *RHD* screening and Allo-FBGG be ordered if the ABO/RhD group and Antibody Screen were done before 8 weeks gestation?	Yes, Fetal *RHD* screening and Allo-FBGG can be ordered if the ABO/RhD group and Antibody Screen were done before 8 weeks gestation. **Note:** Please refer to SOGC Guideline No. 448 (April 2024) for recommendations regarding the timing of Group and Screen testing.
Do the testing labs require the ABO/RhD group and antibody screen test report?	No, a copy of the ABO/RhD group and antibody screen report is not required.
Blood Sample Collection Requirements	
What is the temperature requirements for samples.	Specimens for both tests must be maintained at room temperature from the time of collection until receipt by the testing laboratory.
What type of blood collection tube should be used, and how much blood should be collected?	Fetal *RHD* screen: 6mLs in one EDTA tube (pink/lavender top); avoid using multiple smaller tubes. Allo-FBGG test: 16mLs in EDTA tubes (pink/lavender top); multiple tubes are needed for the 16mL quantity. Specimen requirements can be found on the requisition: https://www.prenatalscreeningontario.ca/news/requisitions-and-ordering-guides/

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Can blood be drawn at Lifelabs, Dynacare and any other community labs?	In Ontario, samples can be collected at Alpha, Bio-Test, Dynacare, Eglington Diagnostics, LifeLabs, Med-Health and Medical Laboratories of Windsor. **Note:** Lifelabs does not collect specimens for the two FBGG tests on Fridays.
Are there special collection considerations? Patients have reported that they have been turned away from some Lifelabs locations.	We are aware that some patients have experienced challenges accessing blood collection services at some community laboratory locations. We encourage providers to continue referring eligible patients for testing and, if any collection issues are encountered, please have patients or yourself report them to the PSO Information line (1-833-351-6490) so we can continue to work with our laboratory partners to address issues as they arise. **Note:** Lifelabs does not collect specimens for the two FBGG tests on Fridays.
Does Dynacare in Central Ontario only draw these tests Monday to Thursday?	Dynacare has confirmed that both FBGG tests can be performed Monday to Friday.
How are hospitals transporting specimens to CBS and MSH?	PSO and its partners are actively working on a process to better support sample transportation directly from hospitals where possible. In the interim, patients should have their blood drawn at our funded community laboratory partners including Alpha, Bio-Test, Dynacare, Eglington Diagnostics, LifeLabs, Med-Health and Medical Laboratories of Windsor.
Can samples be collected in Northern Ontario?	We are working closely with our laboratory and healthcare partners to support sample collection in Northern Ontario. In the meantime, sample collection can occur at the nearest Lifelabs or Dynacare location. We would welcome the opportunity to learn more about sample collection challenges in your area. Please reach out to the PSO Information line (1-833-351-6490; pso@bornontario.ca) to discuss your experience.
Fetal *RHD* screening at late gestational ages	
Can Fetal *RHD* screening be done at the same time as oral glucose tolerance test (OGTT) testing?	Yes, the Fetal *RHD* screening sample can be collected at the same time as the oral glucose tolerance test (OGTT), and the OGTT will not affect the Fetal *RHD* screening result. **Note:** The turnaround time for this test is 10-14 business days. Until a Fetal *RHD* result is available, RhIG should

	continue to be administered at all clinically indicated times and should not be delayed while awaiting results.
Fetal *RHD* screening after RhIG administration	
Can Fetal *RHD* screening be done after administering RhIG?	Fetal *RHD* screening can be performed in pregnancies that have already received RhIG. The administration of RhIG, and any resulting passive anti-D antibodies do not affect the accuracy of this test.
Would Allo-FBGG testing or Fetal *RHD* screening be appropriate for a patient who had RhIG for a potentially sensitizing event and subsequently tests positive for anti-D antibodies?	If passive anti-D is suspected, Fetal *RHD* screening is appropriate. If immune anti-D is suspected, Allo-FBGG is appropriate. If uncertain, Allo-FBGG can be performed at 16 weeks' gestation for anti-D. The predicted fetal RhD type can be considered along with the antibody reported from the pregnant individual to guide clinical management. **Note:** PSO is unable to provide case-specific clinical management recommendations. For guidance on individual patient management, please consult a Maternal-Fetal Medicine Specialist or submit an eConsult as per your usual practice.
Is Allo-FBGG testing available for patients with passive anti-D, D variant, weak D, or naturally developed anti-D?	If immune anti-D (RhD alloimmunization) is identified, Allo-FBGG testing is available as of 16 weeks' gestation. For patients with presumed passive anti-D (from RhIG administration), Fetal *RHD* screening can still be performed as of 11 weeks' gestation. A known weak D phenotype or *RHD* variant is a contraindication to FBGG testing.
Does RhIG cause a weak anti-D?	RhIG does not cause weakened expression of the RhD antigen. A known weak D phenotype is a contraindication to Fetal *RHD* screening.
Multiple Gestations and Fetal Demise	
Can testing be done on multiple gestations?	Fetal *RHD* screening <u>cannot</u> be performed on multiple gestations. Allo-FBGG <u>can be</u> performed on multiple gestations.

Can testing be done on a fetal demise of one twin?	No. Allo-FBGG and Fetal *RHD* screening cannot be performed in these situations because cell-free DNA from the demised twin can lead to false-positive results.
Partner Testing	
Should partner testing be done for cases where an antibody is identified?	For anti-D,C,c,E and K(Kell), partner testing is not required if Allo-FBGG is performed. Partner testing could be considered in the context of other clinically significant antibodies.
Should Fetal *RHD* screening be ordered in cases where paternity is certain and the father's blood type is RhD negative?	In situations where paternity is certain and the biological father's RhD negative status has previously been confirmed, decisions about testing may come down to individual choice through shared decision-making between the patient and provider.
Test Results & Reporting Delays	
Who receives a copy of the test results?	Results are faxed to the ordering provider and sent to the Ontario Laboratory Information System (OLIS). **Note:** To have FBGG results from OLIS automatically delivered to the provider's inbox, please contact your EMR vendor to set up a query between your EMR and OLIS.
Where can providers document that testing has been done? There is no place to document in the OPR.	The Provincial Council for Maternal and Child Health (PCMCH) is close to releasing a revised version of the OPR that includes Fetal *RHD* screening and Allo-FBGG. In the meantime, please document this test and results in the "Additional investigations as indicated" section on page 2 of the 2017 version.
Are results available in Connecting Ontario?	Yes. Clinicians can use clinical viewers including Connecting Ontario to review the test results that are sent to OLIS. **Note:** To have test results from OLIS automatically delivered to your inbox, please contact your EMR vendor to set up a query between your EMR and OLIS.
What is the best way to communicate fetal *RHD* screening results and RhIG recommendations among health-care providers involved in a patient's care?	Fetal *RHD* screening results include guidance on RhIG administration.
What are the reasons for receiving an inconclusive test result?	An inconclusive result may occur because of a low fetal fraction/insufficient DNA, weak D or *RHD* variants, or assay limitations. In these cases, the test report will indicate next steps.

Fetal *RHD* Screening Reporting Delays	
Fetal *RHD* screening results are taking longer than the stated 14 day turnaround time? When can we expect to receive results?	CBS and PSO are pleased by the strong early adoption of Fetal *RHD* screening; however, the demand has exceeded initial projections. This has led to some delays in testing processes and the release of test results. Patient safety is our priority. CBS is working with PSO to quickly and safely address these issues. Until a Fetal *RHD* screening result is available, RhIG should continue to be administered at all clinically indicated times and should not be delayed while awaiting results. RhIG should remain part of the patient's care plan until a result has been received.
Fetal *RHD* screening technology	
What assay is being used to perform Fetal *RHD* screening?	Fetal *RHD* screening is performed using the Health Canada-licensed Devyser *RHD* assay.
Test Performance	
What are the performance metrics for Fetal *RHD* screening and Allo-FBGG?	**Fetal *RHD* screening:** Fetal *RHD* screening has a 99.86% negative predictive value, indicating it is highly reliable in identifying RhD negative fetuses. The Devyser Fetal *RHD* assay demonstrated 99.99% sensitivity in peer-reviewed studies from 10 weeks' gestation (https://doi.org/10.2450/2023.0267-22). **Allo-FBGG:** Allo-FBGG has a >99% negative predictive value. PSO will be sharing Ontario-specific performance metrics when volumes can support a robust measurement.
Ordering Alloimmunized Fetal Blood Group Genotyping (Allo-FBGG)	
What testing should be ordered for someone who is RhD positive, antibody screen positive?	A pregnant individual may be RhD positive and have a positive antibody screen. If the identified antibody is anti-C, c, E, or K, Allo-FBGG can be performed.
When might both Fetal *RHD* screening and Allo-FBGG be required?	Both tests may be indicated when an individual is RhD negative and is alloimmunized to Rh C, c, E, and/or Kell (K). In these cases, Fetal *RHD* screening can guide RhIG administration, while Allo-FBGG can help assess the risk of HDFN related to the alloantibody.
If a patient is tested for one antibody, and subsequently needs to be tested for a	If Allo-FBGG testing is requested for another antibody later in pregnancy, a new blood sample must be collected.

separate antibody, is a second blood sample needed?	
What is the process for testing for anti-K (Kell) with Allo-FBGG?	If Allo-FBGG is being performed for Kell (K), testing can be done after 20 weeks' gestation. If the initial result predicts the fetus to be K negative, repeat testing is recommended at 28 weeks' gestation to confirm the result. **Important:** Pregnant individuals with anti-K should be referred to Maternal-Fetal Medicine (MFM).
Antibody Titres	
How is a significant increase in antibody titre defined when monitoring serial titres? Is it based on the initial titre or the previous titre result?	A significant rise in titre is defined as an increase of more than one dilution compared with the previous titre result (e.g., a titre increasing from 2 to 8). Regan F, Veale K, Robinson F, et al. *Guideline for the investigation and management of red cell antibodies in pregnancy: A British Society for Haematology guideline*. *Transfusion Medicine*. 2025; 35(1): 3-23. doi:10.1111/tme.13098
What if there's a critical titre, but the Allo-FBGG test comes back negative?	Clinical management may be guided by the fetal antigen status. The Allo-FBGG test report includes clinical management recommendations. Confirmation of the neonatal antigen status after delivery should continue. **Note:** For Kell (K) antigen testing, if the initial result predicts the fetus is K-negative, repeat testing at 28 weeks' gestation is recommended to confirm the result. **Note:** PSO is unable to provide case-specific clinical management recommendations. For guidance on individual patient management, please consult a Maternal-Fetal Medicine Specialist or submit an eConsult as per your usual practice.
Cord Blood Testing	
Is cord blood testing required for pregnancies where the fetus is reported as RhD positive or negative?	Yes. Cord blood testing practices should continue for all RhD negative pregnant individuals, regardless of the fetal RhD blood group status. As with any laboratory testing service, ongoing quality assurance is essential. Continuing current cord-blood testing practices allow us to confirm that Fetal *RHD* screening is performing as intended, at scale.

If a discrepant result between cord blood and Fetal *RHD* screening is identified, who notifies the testing lab?	Any provider may contact the testing laboratory to report a discrepancy; however, whenever possible, discrepancies should be reported directly by the laboratory that performed the cord blood testing.
Eligibility for Publicly Funded Testing	
Are patients that do not have OHIP eligible for publicly-funded testing?	Yes. Fetal *RHD* screening and Allo-FBGG are publicly funded for pregnant women/individuals living in Ontario who meet eligibility criteria, regardless of OHIP status.
FBGG Testing in Other Provinces/Territories	
Is Fetal *RHD* screening testing available in other provinces and territories?	The current program is funded by the government of Ontario. Requests for testing for patients residing in other jurisdictions are outside of our program's purview. Please contact the testing labs directly for any information about expanded access.
General Inquiries	
How do I reach the Fetal *RHD* screening lab?	Fetal *RHD* Screening Laboratory – Canadian Blood Services Tel: 905-494-5234; fetalRHD@blood.ca
How do I reach the Allo-FBGG lab?	Diagnostic Medical Genetics, Pathology and Laboratory Medicine Tel: (416) 586-4800 x 5974; FBGG.MSH@sinaihealth.ca
Who do I contact with general questions?	The PSO Information Line (1-833-351-6490; pso@bornontario.ca) is available to answer questions from patients and providers.
Does PSO want to be informed of situations where patients are having difficulty accessing testing?	Yes. Please reach out to the PSO Information Line (1-833-351-6490; pso@bornontario.ca) with this information so we can continue to work with our laboratory partners to address issues as they arise.
FBGG Resources	
How can I access this presentation?	A recording will be shared with all registrants and available here https://www.bornontario.ca/initiatives-resources/webinars/on-demand/.
Are the resources shown in this presentation available online?	Yes. Resources can be found on the PSO website: https://www.prenatalscreeningontario.ca/provider-resources/.
Additional Resources	Fung-Kee-Fung, K., et al. (2024). Guideline No. 448: Prevention of RhD alloimmunization. Journal of Obstetrics and Gynaecology Canada, 46 (4), 1–10. https://doi.org/10.1016/j.jogc.2024.102449

	Lieberman, L., et al. (2025). Guidance for prenatal, postnatal and neonatal immunohematology testing in Canada: Consensus recommendations from a modified Delphi process. Journal of Obstetrics and Gynaecology Canada, 47 (9), 1–10. https://doi.org/10.1016/j.jogc.2025.103088 Robitaille, N., et al. (2025). National consensus statements for the prevention of maternal Rhesus D alloimmunization and management of alloimmunized pregnancies: A modified Delphi process. Journal of Obstetrics and Gynaecology Canada. Advance online publication. https://doi.org/10.1016/j.jogc.2025.103113