



# Transfusion Camp for Nurse Practitioners Program

# LEARNING OBJECTIVES

Upon completion of Transfusion Camp for nurse practitioners, the learners will be able to:

## **INDICATIONS FOR BLOOD PRODUCTS**

1. Appropriately prescribe components (RBC, plasma, platelets, and cryoprecipitate)
2. Perform a preoperative bleeding history
3. Interpret coagulation testing results
4. Have a reasonable approach to the correction of coagulation prior to procedures

## **BLOOD BANK TESTING**

5. Summarize basics about blood bank tests and pre-transfusion compatibility testing
6. Explain the implications of a positive antibody screen
7. Know when to screen patients for platelet alloimmunization

## **RISKS OF TRANSFUSION**

8. Obtain informed consent for transfusion
9. Prevent, diagnose, manage and report acute and delayed transfusion reactions
10. State the current risks of transfusion-transmitted infections
11. Describe challenges to transfusion safety (getting the right blood to the right patient)

## **INDICATIONS FOR MANUFACTURED BLOOD PRODUCTS**

12. Appropriately prescribe some fractionated blood products (coagulation factor concentrates)

## **SPECIAL TRANSFUSION SITUATIONS – For Acute Care NPs**

13. Know when to order irradiated blood components
14. Develop an approach to patients with congenital or acquired bleeding disorders (including reversal of common anticoagulants)
15. Manage a massively hemorrhaging patient, including surgical, trauma and obstetric patients, with discussion of hemostatic medications (antifibrinolytics)

## TARGET AUDIENCE

This course is targeted at nurse practitioners in adult, geriatric, and/or pediatric care, and in acute care, who are looking to obtain competency to prescribe blood components and blood products.

Transfusion Camp is hosted by experts at Vancouver Coastal Health Authority and Fraser Health Authority. However, learners from any British Columbia health authority/jurisdiction can register for the course.

Depending on location and mode of delivery, there may be a maximum number of attendees allowed per Transfusion Camp.

## ATTENDEE EXPECTATIONS

### PARTICIPATION

Learners are expected to:

1. Attend all sessions.
2. Actively participate during lectures and team-based learning seminars.
3. Refrain from excessive use of interruption devices (mobile phones).
4. Arrange not to be on call the night before; and the days of the Camp.
5. Complete evaluations.

### COST

1. Registering for the course is free (except PCN NPs).

### REGISTRATION

1. Learners must have their local program administrator's approval to register.
2. Register by contacting your local program administrator and Taranjeet Dhaliwal ([taranjeet.dhaliwal@fraserhealth.ca](mailto:taranjeet.dhaliwal@fraserhealth.ca)) or Edrene Jiang ([edrene.jiang@fraserhealth.ca](mailto:edrene.jiang@fraserhealth.ca))

# COURSE INFORMATION

## CONTENT

- Transfusion Camp consists of three modules with the third module covering acute care topics.
- Course materials are prepared by the Transfusion Camp for Non-Physician Prescribers Steering Committee (TCNPP) (see membership below).
- Course materials leverages content developed for another Transfusion Camp which is targeted at post-graduate medical trainees and which is developed by transfusion experts at the University of Toronto.

## FORMAT

Transfusion Camp consists of three modules, each module can be completed in one day and include pre-readings, pre-recorded lectures and team-based learning seminars.

- The timing of each Transfusion Camp is tailored to a group (e.g. modules may be delivered over 3 consecutive days, over a week, or a couple of months).
- Learners read the pre-readings prior to completing a module, view the lectures on their own or in groups, and attend team-based learning seminars in groups.
- The delivery of each Transfusion Camp is tailored to a group and is dependent on the circumstances (e.g. groups may meet in person or remotely via webcast/conferencing).
- Learners are informed of the format of their Transfusion Camp well in advance of the first session. Enquiry about timing, delivery format and location can be made to your local program administrator or Taranjeet Dhaliwal ([taranjeet.dhaliwal@fraserhealth.ca](mailto:taranjeet.dhaliwal@fraserhealth.ca)) or Edrene Jiang ([edrene.jiang@fraserhealth.ca](mailto:edrene.jiang@fraserhealth.ca)) or [transfusioncamp@blood.ca](mailto:transfusioncamp@blood.ca).

## MATERIAL & CERTIFICATION

- Learners will be provided with access to a **course portal** to access pre-reading materials, lectures (slides and recordings), seminar guide and questions, and additional transfusion medicine resources. Access is provided a minimum of two weeks prior to start of module 1. Access is removed one year after completion of last module.
- Course materials **must not be used or distributed** outside of Transfusion Camp without the consent of the Transfusion Camp organizers.
- Course materials are provided for **educational purposes only**. They are not intended to be a substitute for the advice of a physician and should be assessed in the context of the applicable medical, legal and ethical requirements in any individual case.
- Learners will be provided with a **Certificate of Course Completion**. Community learners must complete modules 1 & 2 and Acute Care learners must complete modules 1, 2 and 3, and complete both the pre-test and post-test exams to obtain a certificate.

# COURSE SCHEDULE

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### Module 1: BLOOD COMPONENT INDICATIONS & ADMINISTRATION – January 25, 2023

Pre-course exam

Dr. Jeannie Callum	Red Cell Transfusion (pre-recorded lecture, 45 minutes)
Dr. Yulia Lin	Basic Blood Bank Testing (pre-recorded lecture, 30 minutes)
Dr. Katerina Pavenski	Platelet Transfusion (pre-recorded lecture, 45 minutes)
Dr. Aditi Khandelwal	Plasma, PCC, & Fibrinogen Replacement (pre-recorded lecture, 60 minutes)
Module 1 Seminar A: RBC & Platelet Transfusion Cases (75 minutes)	
Module 1 Seminar B: Plasma, PCC & Fibrinogen Cases (60 minutes)	

### Module 2: TRANSFUSION REACTIONS & COMPLICATIONS – February 1, 2023

Dr. Cserti-Gazdewich	Acute Non-infectious Reactions (pre-recorded lecture, 45 minutes)
Dr. Steven Drews	Acute & Delayed Transfusion Transmitted Infections (pre-recorded lecture, 30 minutes)
Dr. Marissa Laureano	Informed Consent (pre-recorded lecture, 30 minutes)
Dr. Nadine Shehata	Alloimmunization & Anemia in Pregnancy (pre-recorded lecture, 30 minutes)
Dr. Yulia Lin	Pre-operative Patient Blood Management (pre-recorded lecture, 45 minutes)
Module 2 Seminar A: Transfusion Reactions (90 minutes)	
Module 2 Seminar B: Consent and Patient Blood Management (90 minutes)	

### Module 3: BLEEDING MANAGEMENT & MASSIVE HEMORRHAGE PROTOCOLS – February 8, 2023

Dr. Natasha Rupani	Introduction to Congenital Bleeding Disorders
Dr. Carolyn Elbaz	Reversal of antiplatelets & direct anticoagulants (pre-recorded lecture, 40 minutes)
Dr. Jeannie Callum	Massive Hemorrhage: Pathophysiology & Evidence based management (60 minutes)
Dr. Katerina Pavenski	Massive Hemorrhage Protocol: Translation to the Real World (pre-recorded lecture, 60 minutes)
Module 3 Seminar A: Bleeding Assessment and Anticoagulants/Antiplatelets (90 minutes)	
Module 3 Seminar B: Massive Transfusion (90 minutes)	
OPTIONAL LECTURE TO VIEW ON YOUR OWN:	
Dr. Lani Lieberman	Neonatal & Pediatric Transfusion (pre-recorded lecture, 30 minutes)
Post-course exam	

#### Notes:

*Pre-and post-course exams consist of online electronic surveys emailed to all learners prior to completing module 1 and after completing their last module, respectively.*

*A list of pre-reading materials and recorded lectures for each module are shared on the course portal.*

## STEERING COMMITTEE

**Andrew Shih, MD, FRCPC**  
*University of British Columbia*

**Douglas Morrison, MD, FRCPC**  
*Provincial Health Services Authority*

**Jennifer Beaveridge MScN, DNP,  
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*Vancouver Coastal Health Authority*

**Kevin Chen, MN, NP(F)**  
*Vancouver General Hospital*

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