Project Overview

First responders face many dangers, but one of the greatest health risks is from cardiac events. Sudden cardiac death accounts for 42% of all on duty fatalities in American fire fighters. According to the American Heart Association, the average age of a police officer who suffers a heart attack is 49 years old, compared to 67 years old for the general public. Despite this, there are currently no standardized mandated cardiac screenings for first responders in BC.

By providing comprehensive cardiovascular screening to BC first responders, this program hopes to detect underlying cardiovascular disease, assess cardiovascular risk in participants and use the data collected to research health concerns specific to these occupations.
Testing Procedures

Testing will be carried out by the staff and doctors at SportsCardiologyBC. The testing will consist of the following:

- **General and Family Health Questionnaire**
  This will be sent to you two weeks prior to the first day of screening. This questionnaire will contain questions about your personal and family health history, cardiovascular symptoms, physical activity levels, injuries, medications and level of stress.

- **Height, Weight and Waist Circumference**
  These measurements will be used to provide indication of health risk due to obesity.

- **Resting 12-lead Electrocardiogram**
  A non-invasive test conducted by a trained professional that records your heart rate and rhythm. The test will be conducted in a private area, with female technicians available for female participants.

- **Resting Blood Pressure**
  Your blood pressure will be measured with an automated blood pressure machine.

- **Blood Analysis**
  Blood samples taken from a finger prick will be used to measure blood lipids, cholesterol and blood sugar.

- **Exercise Stress Test**
  Ten electrodes will be attached to your chest and you will be asked to cycle on a stationary bike with increasing resistance until you feel like you can no longer continue. This test will look at your heart function while it is under exercise stress.

- **Medical Consultation**
  You will have a consultation with a medical consultant to discuss your results and to identify any concerns that warrant follow-up. The entire program is overseen by Dr. Saul Isserow (Cardiologist and SCBC Medical Director).

Project Information

The First Responders Cardiology Research Education and Early Detection program is:

- **Private** – All of the information collected for screening purposes will be confidential, and your personal health results will never be made accessible to your department nor any third party without your informed and written consent.

- **Convenient** – The SportsCardiologyBC team will conduct screenings at your place of work to ensure maximum participation and ease of access.

- **Personalized** – You will be provided with a personalized health report containing all of your results. You will be able to share this report with your family doctor/health care provider.

If you have any questions about the screening program or study please contact the SportsCardiologyBC team at 604 822 9494 or by email at scbc.research@vch.ca