camh
Brain Health Imaging Centre

PET Centre Cyclotrons Public Information and Disclosure Protocol

Last revised, December 2021

CAMH Brain Health Imaging Centre cyclotrons

CAMH is licensed by the Canadian Nuclear Safety Commission (CNSC) to operate two cyclotrons at its College Street location. The cyclotrons are particle accelerators that produce the short-lived positron emitting radionuclides for Positron Emission Tomography (PET), a technique that allows imaging of the brain chemistry. For nearly three decades, CAMH has been a world leader in the application of cyclotrons and PET imaging to advance the understanding and improve the treatment of mental illnesses and addiction. Our discoveries are communicated to other scientists through scientific publications and conferences, and to the general public via the media and CAMH web site.

To ensure full public safety, the CAMH cyclotrons are enclosed in thick concrete bunkers to shield the public from the radiation they produce when they are in operation. Small amounts of airborne short-lived radioactive gases may be released from time to time from a vent located on the top of the building about 50 meters above ground, so that the gases are widely dispersed and diluted before reaching ground level. As a result, members of the public are exposed to only negligible short-lived radiation levels that are far below natural radiation levels and regulatory limits.

Public information

CAMH provides regular information to the public and specific stakeholders about the activities of its Brain Health Imaging Centre and their impact on the lives of individuals with mental illness or addictions. That information includes scientific and medical advances, funding announcements, and expansion of the program. CAMH also provides information related to the health and safety of persons living near the Brain Health Imaging Facility and to the environment.

Categories of information

The information that CAMH communicates to the public can be broadly divided as:

- High priority disclosure (within 24 hrs)

  Emergency events that might affect the safety or health of individuals. For example, release of airborne radioactivity in excess of regulatory limits.

  Events that might be perceived as posing a risk to individuals. For example, a fire in or near the PET Centre that does not involve the cyclotron or radioactive materials but might create concerns in the community.

  Another event, unrelated to the activities of the PET Centre, would be the quenching of the liquid helium in the MRI scanner. The resulting rapid release of the helium would

likely alarm the immediate neighbours and reassurance about the lack of risk shall be provided rapidly.

- Nonpriority disclosure

  Scientific activities and discoveries: the dissemination to a lay audience of our research projects and of results published in academic journals.

  Educational material describing the PET Centre and its activities. This category also includes public information about cyclotrons and PET methodology including safety issues.

  Items of general interest not falling into the previous categories. Examples would be acquisition of major equipment or alterations to the facility; awards; special public events.

CAMH communicates this information through varied channels:

- CAMH web site www.camh.ca
- Media releases to news organization
- Media interviews (newspaper, radio, and television)
- Direct communications to specific stakeholders
- Public events (e.g. tours)
- Direct response to a query by a CAMH spokesperson or subject matter expert

In case of an event that might have, or be perceived to have, an impact on the health, safety or security of persons or the environment or generates increased interest or concerns, CAMH is committed to inform the public promptly by selecting the most appropriate communication channels to reach the intended audience in a timely manner. CAMH will also notify the Canadian Nuclear Safety Commission about those events.

Obtaining more information about CAMH Brain Imaging Centre

If you wish to obtain more information about the CAMH cyclotrons and their use in medical research, please explore the Research area the CAMH web site, www.camh.ca, or contact CAMH Public Affairs by telephone at 416 535-8501 or 1 800 463-6273 (toll-free), or by e-mail to public.affairs@camh.ca.