



**Ontario
Health**

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To: Health System Partners

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Re: Global shortage of iodinated contrast media for medical imaging

Background

Many health care organizations have received notification from suppliers signalling shortages in the availability of injectable iodinated contrast agents due to global supply chain issues.

Injectable iodinated contrast agents are used in some imaging applications, including computed tomography (CT) and angiography, to help delineate areas of interest, help a radiologist's ability to assess disease, and/or help guide therapeutic interventions by interventional radiologists, cardiologists, and other proceduralists.

Issue Summary

Iohexol and Iodixanol (Omnipaque, and Visipaque, GE Healthcare) are the predominately used iodinated contrast agents in North America. Global shortages of the contrast agents were signalled to healthcare providers in May due to the main manufacturing site in Shanghai, China reducing production following COVID-related lockdowns. As well, supply chain issues associated with the lockdown have created delays in distribution and transportation. The other major location producing Iohexol and Iodixanol is in Ireland, which has already expanded production to operate at maximum capacity.

As of May 27, 2022, GE Healthcare is indicating they expect the Shanghai manufacturing facility to be operating at 75% production capacity within the next two weeks and are also working to optimize productions and accelerate deliveries.

<https://www.ge.com/news/press-releases/ge-healthcare-update-on-iodinated-contrast-media>

However, the situation and impacts to Ontario facilities continues to rapidly evolve and timelines to resolution are not yet clear.

Current Recommendations

All hospitals and other health care facilities, including those who use non-GE contrast, are being asked to immediately institute emergency conservation strategies and patient triage. This includes:

1. Regularly evaluate the amount of contrast media on-hand (inventory)
2. Delay non-urgent studies/procedures if possible and as needed
3. Evaluate incoming imaging requisitions requesting contrast media to determine if an alternate imaging modality can be utilized
4. Discuss protocol options with radiology and ordering physicians including, but not limited to, Emergency Department physicians, cardiologists, oncologists and outpatient imaging providers to ensure protocols are evaluated for the appropriate use of contrast media
5. Consider contrast injection protocols with ICM doses tailored to patient body weight
6. Where appropriate, consider adjusting scanning protocols to scan without contrast and injector protocols to reduce the amount of contrast dose
7. Where available, consider implementation of imaging protocols that can optimize contrast dose (i.e. dual energy CT).
8. Implement measures to minimize wastage of ICM

Next Steps

In order to support a province wide approach to equitable access to care, Ontario Health will be undertaking the following:

1. Establishing a protocol for organizations to assess and report on current inventory
2. Activation of Regional response structures to determine potential for redistribution of contrast media if needed and where possible
3. Immediate establishment of a provincial clinical advisory panel to develop guidance around conservation strategies and other potential options, providing real-time input and support sharing best practices in managing the shortage

Contact

Please notify your Ontario Health Chief Regional Officer of any critical issues that may impact patient care.

Resources

The following resources may be useful for institutions if they are experiencing shortages. These are not intended as formal or comprehensive guidance, and should be considered in the context of Ontario healthcare and local or institutional factors.

Drug Shortages Canada Website: Provides up-to-date information on product shortages and potential product shortages. Once there, search for the word “Omnipaque.” <https://www.drugshortagescanada.ca/>

Canadian Association of Radiologists (CAR): Via email communication to its members, CAR has indicated they are monitoring the situation with their ‘radiologist members and industry partners’ and has been in contact with Health Canada. They have, “recommended that all radiology centers continue to manage supply responsibly and follow the contrast guidelines for procedures regarding appropriate utilization and dosage levels. More information can be found here on the use of contrast:”

<https://car.ca/news/contrast-agent-use-in-medical-imaging-a-roadmap-for-patients/#more-14986>

<https://www.ajronline.org/doi/pdf/10.2214/AJR.22.27969>

American College of Radiologists (ACR): The ACR has collated information including both ACR-developed and “Peer-to-Peer” (i.e., relevant peer organizations) developed resources, including considerations for facilities operating during a time of iodinated contrast media shortages:

<https://www.acr.org/Clinical-Resources/Contrast-Manual/Contrast-Shortage-Information>