



Canadian Association of Radiologists Statement on Iodinated Contrast Media Shortage

June 3, 2022 - The Canadian Association of Radiologists (CAR) is aware of the global shortage of iodinated contrast media (ICM). The CAR has been monitoring the situation at a national level with both our radiologist members and industry partners. In addition, the CAR has met with Health Canada to gain a better understanding of its efforts to monitor and respond to the shortage, and we have made an outreach to the federal Minister of Health to request a coordinated national response and public statement on this issue.

The following statement provides updated information for the Canadian medical imaging community about Health Canada's mechanisms to monitor the shortage, and the efforts of manufacturers to mitigate the risk to Canadian patients. Additionally, it summarizes risk mitigation strategies relevant to this and any future shortages of ICM.

Canadian impact of the global shortage

The current global shortage of Iohexol and Iodixanol (Omnipaque, and Visipaque, GE Healthcare) has a significant impact on Canadian healthcare due to the significance of the GE Healthcare market share. Ongoing international supply chain issues were exacerbated by a GE Healthcare manufacturing shutdown in Shanghai, China due to COVID-19 related lockdowns, which impacted the production of Iohexol.¹ The other major location producing Iohexol and Iodixanol is in Cork, Ireland, which has already expanded production to operate at maximum capacity. As of June 2, 2022, GE Healthcare indicated that they expect the Shanghai manufacturing facility to return to 100% operating capacity by June 6 and that they are working to improve production and delivery times.²

By the first week of June, facilities in Ontario indicated that they have begun to delay non-urgent CT exams until the end of June, to prioritize major trauma, urgent GI, possible stroke, and critical care patients.³ In Nova Scotia, contrast-enhanced CTs are being re-triaged to unenhanced scans or alternative imaging modalities, where possible.

The situation is evolving rapidly and the timeline for resolution remains unclear. As more information becomes available, we will amend this statement and provide additional information to the Canadian medical imaging community as it becomes available.

Health Canada response

The [Drug Shortages Division of Health Canada](#) works very closely with the Provincial and Territorial Drug Shortages Task Team (PT DSTT) to assess various shortages of drugs, ingredients, and therapies – including contrast media - to determine the potential impact of those shortages on the health of Canadians.

When a shortage has the potential to impact Canada's drug supply and healthcare system, the Drug Shortages Division engages the Tier Assignment Committee (TAC) to make decisions on the severity of a supply disruption, and to inform decision-making on potential mitigation measures. The committee determines if the shortage should be assigned Tier 3 status, which is reserved for shortages with the greatest potential impact on Canadian healthcare systems.

Throughout the ICM shortage, Health Canada has been in contact with GE and other vendors for updates on the situation. Based on information available at the time of writing (June 2, 2022) – Health Canada is in the process of setting up a TAC meeting to discuss the gravity of the shortage, mitigation measures, and additional options for resolution. Addressing this shortage will necessitate a multi-stakeholder response. Health Canada will also set up stakeholder meetings including provincial and territorial representatives, market authorization holders, and clinical experts in order to facilitate active information sharing.

Industry response

Throughout the shortage, the CAR has been in contact with our corporate partners that supply ICM in Canada, (GE, Bracco, and Bayer), and we will continue to engage these stakeholders. Vendors are working on an equitable response to the shortage and are making every effort to ensure that their existing contracts are honoured and helping to deliver supply to other facilities to help address the shortage. In an effort to prevent hoarding, vendors are allocating supply based on historic sales.

For the most updated information relevant to each facility, please contact your local vendor representative. If you need additional support in contacting the relevant vendors, please email info@car.ca.

Risk mitigation strategies

Strategies for conserving the existing institutional supply of contrast and mitigating risks have been detailed elsewhere.⁴⁻⁶ The most prudent way forward is to coordinate and communicate with local, regional, and provincial leads.

Inventory supply

- Regularly evaluate the amount of contrast on-hand.
- Check with multiple vendors for supply and consider alternative versions of contrast for each clinical scenario.
- Coordinate within regional areas/health networks to determine if there are opportunities to share existing supplies of IV contrast during this time of limited availability.

Prioritize studies and procedures

- Delay non-urgent contrast-enhanced studies and procedures if possible, and as needed.
- Evaluate requisitions to determine if alternate imaging modalities can be used without sacrificing diagnostic quality.
- Discuss protocol options with other departments that use iodinated contrast to ensure that protocols are making the most appropriate use of available supply.

Adapt protocols

- Where feasible evaluate for the clinical indication, consider scanning without ICM.
- Where available, consider the implementation of imaging protocols that can optimize contrast dose (i.e. dual energy CT).
- Implement measures to minimize wastage of ICM
 - Optimize contrast dosages to limit waste;
 - Consider dosing according to patient body weight.



- Work with institutional pharmacies to determine whether higher volume single-dose vials can be repackaged into smaller dose vials to extend available supply.
- Avoid reducing ICM dose to an extent that will sacrifice image quality.

The bottom line

The recommendations detailed above are not exhaustive or prescriptive. They are intended as a resource for imaging providers and their institutions to continue to provide high-quality patient care during this time of ICM shortage. Radiologists, other medical imaging providers, and administrative leaders are encouraged to incorporate sound clinical judgment in any decision affecting patient care.

For the most updated information about supply and shortages, visit the Health Canada Drug Shortage website: <https://www.drugshortagescanada.ca/>, or contact your local manufacturer representative.

Should you experience any issues at your facility please reach out to us at info@car.ca.

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References

1. Drug Shortage Report for OMNIPAQUE 240. *Drug Shortages Canada*, <https://www.drugshortagescanada.ca/shortage/160522> (2022, accessed 1 June 2022).
2. GE Healthcare update on iodinated contrast media | GE News, <https://www.ge.com/news/press-releases/ge-healthcare-update-on-iodinated-contrast-media> (2022, accessed 1 June 2022).
3. Ontario hospitals monitor global shortage of contrast dye used for medical scans | CP24.com, <https://www.cp24.com/news/ontario-hospitals-monitor-global-shortage-of-contrast-dye-used-for-medical-scans-1.5928200> (accessed 2 June 2022).
4. Grist TM, Canon CL, Fishman EK, et al. Short-, Mid-, and Long-Term Strategies to Manage the Shortage of Iohexol. *Radiology* 2022; 221:183.
5. Cavallo J, Pahade J. Practice Management Strategies for Imaging Facilities Facing an Acute Iodinated Contrast Media Shortage. *American Journal of Roentgenology* 2022; AJR.22.27969.
6. Statement from the ACR Committee on Drugs and Contrast Media. *Contrast Media Shortage*, <https://www.acr.org/Advocacy-and-Economics/ACR-Position-Statements/Contrast-Media-Shortage> (2022, accessed 1 June 2022).





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