

Face masks that contain graphene may pose health risks

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Starting date:	April 2, 2021
Type of communication:	Advisory
Subcategory:	Medical Device
Source of recall:	Health Canada
Issue:	Product Safety
Audience:	General Public, Healthcare Professionals, Hospitals
Identification number:	RA-75309

Last updated: 2021-04-02

Summary

- **Product:** Face masks labelled to contain graphene or biomass graphene.
- **Issue:** There is a potential that wearers could inhale graphene particles from some masks, which may pose health risks.
- **What to do:** Do not use these face masks. Report any health product [adverse events \(https://www.canada.ca/en/health-canada/services/drugs-health-products/medeffect-canada/adverse-reaction-reporting.html\)](https://www.canada.ca/en/health-canada/services/drugs-health-products/medeffect-canada/adverse-reaction-reporting.html) or [complaints \(http://healthycanadians.gc.ca/apps/radar/MD-IM-0005.08.html\)](http://healthycanadians.gc.ca/apps/radar/MD-IM-0005.08.html) to Health Canada.

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Issue

Health Canada is advising Canadians not to use face masks that contain graphene because there is a potential that they could inhale graphene particles, which may pose health risks.

Graphene is a novel nanomaterial (materials made of tiny particles) reported to have antiviral and antibacterial properties. Health Canada conducted a preliminary scientific assessment after being made aware that masks containing graphene have been sold with COVID-19 claims and used by adults and children in schools and daycares. Health Canada believes they may also have been distributed for use in health care settings.

Health Canada's preliminary assessment of available research identified that inhaled graphene particles had some potential to cause early lung toxicity in animals. However, the potential for people to inhale graphene particles from face masks and the related health risks are not yet known, and may vary based on mask design. The health risk to people of any age is not clear. Variables, such as the amount and duration of exposure, and the type and characteristics of the graphene material used, all affect the potential to inhale particles and the associated health risks. Health Canada has requested data from mask manufacturers to assess the potential health risks related to their masks that contain graphene.

Until the Department completes a thorough scientific assessment and has established the safety and effectiveness of graphene-containing face masks, it is taking the precautionary approach of removing them from the market while continuing to gather and assess information. Health Canada has directed all known distributors, importers and manufacturers to stop selling and to recall the affected products. Additionally, Health Canada has written to provinces and territories advising them to stop distribution and use of masks containing graphene. The Department will continue to take appropriate action to stop the import and sale of graphene face masks.

Products affected

Face masks labelled as containing graphene or biomass graphene.

What you should do

- Do not use face masks labelled to contain graphene or biomass graphene.
- Consult your health care provider if you have used graphene face masks and have health concerns, such as new or unexplained shortness of breath, discomfort or difficulty breathing.
- Report any health product [adverse events \(https://www.canada.ca/en/health-canada/services/drugs-health-products/medeffect-canada/adverse-reaction-reporting.html\)](https://www.canada.ca/en/health-canada/services/drugs-health-products/medeffect-canada/adverse-reaction-reporting.html) or [complaints \(https://health.canada.ca/en/health-canada/services/drugs-health-products/compliance-enforcement/problem-reporting/health-product-complaint-form-0317.html\)](https://health.canada.ca/en/health-canada/services/drugs-health-products/compliance-enforcement/problem-reporting/health-product-complaint-form-0317.html) regarding graphene face masks to Health Canada.

Media enquiries

Health Canada

(613) 957-2983

hc.media.sc@canada.ca (<mailto:hc.media.sc@canada.ca>)

Public enquiries

(613) 957-2991

1-866 225-0709

hcinfo.infosc@canada.ca (<mailto:hcinfo.infosc@canada.ca>)

For more information

- [COVID-19 medical masks and respirators \(https://www.canada.ca/en/health-canada/services/drugs-health-products/covid19-industry/medical-devices/personal-protective-equipment/medical-masks-respirators.html\)](https://www.canada.ca/en/health-canada/services/drugs-health-products/covid19-industry/medical-devices/personal-protective-equipment/medical-masks-respirators.html)
- [Canada.ca/coronavirus \(http://www.canada.ca/coronavirus\)](http://www.canada.ca/coronavirus)

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