



# JOINT CAR/SOGC POSITION STATEMENT ON NON-MEDICAL USE OF FETAL ULTRASOUND

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*This Joint Policy Statement has been prepared by the Diagnostic Imaging Committee of the Society of Obstetricians and Gynaecologists of Canada and Point of Care Ultrasound Working Group of the Canadian Association of Radiologists and approved by the Executive and Council of the Society of Obstetricians and Gynaecologists of Canada and the Board of Directors of the Canadian Association of Radiologists.*

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## **DISCLOSURE STATEMENT**

Disclosure statements have been received from all members of the committee(s).

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Fetal ultrasound is a valuable tool in modern obstetrical care. This imaging technique is useful in assessing a fetus for anomalies, for ensuring fetal health, and assessing fetal growth and development if performed by properly trained individuals in a carefully monitored and medically supervised environment. It is also an important technology in education and research. This imaging technology uses high-frequency low-energy sound waves; it does not use ionizing radiation. The availability of ultrasound machines for purchase and use for non-clinical purposes has led to the proliferation of “entertainment” ultrasound units throughout Canada. With recent media coverage of non-medical clinics performing gender determination in the first trimester, the CAR and SOGC find it necessary to update their previous policy statements on this issue and to issue a new joint policy statement.

Although there is no definitive evidence of fetal abnormalities or harmful biological effects linked to diagnostic ultrasound in humans, the procedure involves targeted energy exposure to the fetus and therefore a theoretical risk for effects on fetal development, as suggested by studies of biological effects of ultrasound reported at or near diagnostic intensities in both human studies and animal models.<sup>(1–3)</sup> Of particular concern are recent studies in animal models that report subtle effects on the physiology and development of the fetal brain.<sup>(4–7)</sup>

With the non-medical use of fetal ultrasound, the maintenance of technical safeguards, operator training, qualifications, expertise, standards for infection control, and governing competency are no longer ensured. As a result, fetal energy exposure may not be appropriately monitored, and operators of the equipment may not be adequately trained to recognize fetal and placental abnormalities that may adversely affect fetal and maternal outcomes.

Other potential harms include false-positive diagnoses leading to unnecessary investigations and anxiety; false reassurance to the patient that everything is “normal”; and physical harm if unsafe levels of abdominal pressure and fetal maneuvering are used to obtain a suitable commercial product. The fetus should not be exposed to ultrasound for commercial and entertainment purposes, and it could be considered unethical to perform these scans.<sup>(8)</sup>

Both Health Canada <sup>(9)</sup> and the Food and Drug Administration (FDA) in the United States <sup>(10)</sup> have recommended against commercial and entertainment ultrasound. Health Canada recommends that ultrasound should not be used to take a picture of the fetus solely for non-medical reasons, to learn the sex of the fetus solely for non-medical reasons, or for commercial purposes, such as the display of pictures or videos of a fetus at trade shows.

The FDA states that people who promote, sell, or lease ultrasound equipment for making “keepsake” fetal videos should know that the FDA views this as an unapproved use of a medical device. In addition, the FDA cautions that those who subject individuals to ultrasound exposure using a diagnostic ultrasound device (a prescription device) without a physician’s order may be in violation of state or local laws or regulations regarding use of a prescription medical device. These recommendations have been endorsed nationally and internationally by reputable professional medical and sonographic organizations, many of which have recently updated their policies. <sup>(11–20)</sup>

The CAR and SOGC support the Health Canada recommendations and recommend that ultrasound be used prudently and only by qualified health professionals and that energy exposure be limited to the minimum that is medically necessary.

This technology should not be used for the sole purpose of determining fetal gender without a medical indication for that scan.

The CAR and SOGC strongly oppose the non-medical use of fetal ultrasound and encourage governments to join with our organizations to find appropriate means to deal with this public health issue.

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