



## Have-A-Heart Campaign Aims to Improve Paediatric Cardiac Imaging



Following the recent publication of *Radiation Safety in Children With Congenital and Acquired Heart Disease: A Scientific Position Statement on Multimodality Dose Optimization* from the Image Gently Alliance, the organisations concerned have joined forces on a campaign to improve use of cardiac imaging in children.

The Have-A-Heart campaign is a multi-society effort to help providers appropriately use and optimise performance of computed tomography (CT), fluoroscopy and nuclear medicine exams in diagnosing and treating heart disease in children.

The Have-A-Heart campaign includes tools and resources to:

- Help providers ensure ordering patterns comply with latest evidence-based medical guidelines
- Help providers explain to parents/caregivers why an imaging scan is (or is not) necessary
- Help parents ask questions to inform decision making if their child is prescribed a cardiac imaging exam
- Help imaging professionals understand and optimise exam radiation dose

Donald Frush, MD, chair of the Image Gently Alliance said in a media statement, "This Image Gently Campaign is another opportunity for medical professionals to work together to equip providers with the latest information to guide medical decisions and help parents take an active, informed role in their child's healthcare."

Children with congenital and acquired heart disease often require many medical imaging procedures, most of which involve radiation exposure. This exposure poses risks to the patient, including an increased lifetime risk of cancer. Cardiologists and radiologists should consider the risks and benefits of imaging procedures, the patient's previous radiation exposure, and the family's wishes when deciding on different imaging modalities," said Aimee Armstrong, MD, FACC, who leads the American College of Cardiology's radiation safety initiative within the National Cardiovascular Data Registry IMPACT Registry.

### Guidance

#### For Physicians

- Know when an imaging test is (and is not) necessary
- Explain why a CT scan, fluoroscopy or nuclear medicine exam is (or is not) the right choice

- Discuss the benefits as well as the risks of the scan
- Child-size the imaging radiation dose (where necessary and/or possible)

#### For Parents

Be your child's advocate: Ask these questions if your child is prescribed a cardiac imaging exam.

- How will this exam improve my child's care?
- What are the benefits of having this test?
- Are there any risks of having this scan?
- What will my child's experience be before and after the exam?
- Are there alternative tests that don't use radiation?
- Will the radiation dose in this exam be child-sized?

#### For Imaging Providers

When appropriate, choose heart ultrasound, MRI or another exam that does not use radiation

Child-size CT, fluoroscopy and nuclear medicine exams

And, during catheterization

Lower the frame rate

Manage dose settings

Increase image receptor field of view (reduce electronic magnification)

Lower the image receptor to the patient

Reduce size of X-ray field (collimate)

"As the medical personnel who perform these procedures, radiologic technologists serve a key role in optimising medical radiation dose by applying correct protocol for size and body type of the patient. This campaign allows us to reinforce technologists with resources to help them continue to provide excellent care," said Michael Latimer, MSRS, RT(R), president of the American Society of Radiologic Technologists (ASRT).

Imaging exams provide vital information to help diagnose and treat cardiac conditions "including heart disease. Providers need a firm understanding of the physics of these technologies to select imaging parameters that optimize radiation dose and minimize any potential risks," said Bruce H. Curran, MEng, FAAPM, FACMP, chair of the American Association of Physicists in Medicine (AAPM).

Source: [American College of Radiology](#)

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