

The right dose of expertise

Reducing radiation dose for pediatric and neonatal patients



Smaller patients need bigger care

Your smallest patients are a big priority at Agfa HealthCare. Children are more sensitive to radiation and its cumulative effects. Yet, over the course of treatment premature infants can undergo as many as 30-40 examinations, and dose management is an important consideration. We design our dedicated pediatric and neonatal digital radiography solutions to deliver the optimum balance between low radiation dose and high image quality. We've been a world leader in medical imaging for over 100 years, so you can be confident in our expertise, for image quality and dose control.

Up to 60% less dose

Advanced technologies are making it happen. Our dose-efficient Cesium detectors are available with both direct radiography (DR) and computed radiography (CR) systems. They can help you reduce dose for pediatric and neonatal applications up to 60%, depending on the examination and conditions.*

And our patented MUSICA image processing software plays a role, too, providing excellent image quality and greater diagnostic confidence with low-dose pediatric images.

Dedicated to pediatric imaging

One size does not fit all in imaging! Your pediatric and neonatal patients come with special requirements, and our solutions are dedicated to meeting them.

Agfa HealthCare's small and large DR and CR Cesium-based detectors are the right choice, offering you:

The right dose

- For the low dose needs of pediatric radiography
- A dose reduction of up to 60% **

The right size

- Lightweight design
- A range of formats accommodating all pediatric imaging applications and NICU incubators

The right resolution

- Market-leading spatial resolution for exams requiring fine detail, such as newborn skeletal and pediatric skeletal surveys, premature chest and abdominal imaging
- High resolution detectors providing a pixel size of 125 micron (for DR) or 100 micron (for CR)

The right fit

- Mobile and fixed-room solutions, which can be shared throughout your facility for maximum versatility and cost-effectiveness

Dose: a question of management

Reducing dose to the minimum while maintaining high image quality takes careful management. We make sure you have the tools you need to monitor and control patient dose:

- **Track and monitor:** Our MUSICA multimodality workstation offers centralized dose monitoring capabilities and tools. The color-coded exposure bar clearly, visually and instantly shows you whether the radiation exposure is 'acceptable', 'slightly out of range' or 'significantly out of range'. You can also track and monitor exposure parameters for quality control programs, and display or store them on the PACS for radiologists. And Dose Area Product (DAP) meters are available with all our DR systems.
- **Monitor Exposure Changes:** We were the first company to fully implement in all our modalities the exposure index standard, which helps reduce the possibility of exposure errors. Introduced by the International Electrotechnical Commission (IEC) and the American Association of Physicists in Medicine, the standard means technologists only need to remember one method for monitoring exposure changes.
- **Record and analyze:** Track, store and perform analyses on radiation dose data across multiple modalities, departments and institutions, with our optional radiation exposure monitoring solution. The solution allows disparate data to be structured, shared and used for further analysis. Its simple integration with other radiology department systems means dose history can be accessed from anywhere.

* Reductions up to 60% have been seen on neonatal examinations under some conditions.

** Testing with board certified radiologists has determined that Cesium Bromide (CR) and Cesium Iodide (DR) Detectors when used with MUSICA processing can provide dose reductions of between 50 to 60% when compared to traditional Barium Fluoro Bromide CR systems. Contact Agfa for more details.



Focus on the patient with MUSICA

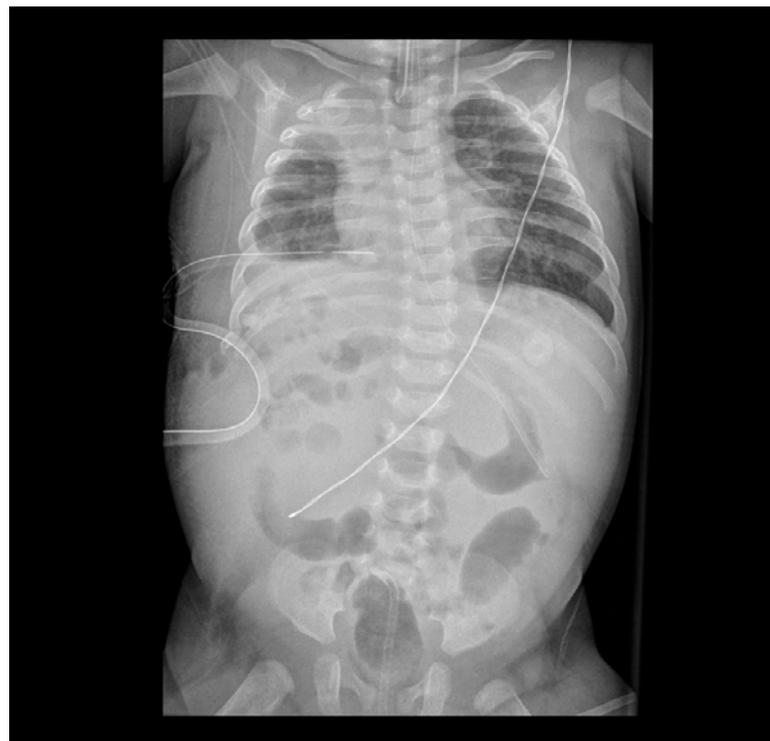
Specially adapted for pediatric and neonatal needs, our patented MUSICA image processing offers excellent image quality and greater diagnostic confidence for low-dose pediatric images. It offers specialized neonatal and pediatric pre-sets, as well as Catheter Processing that increases the visibility of catheters and other low contrast structures.

Now in its third generation

- Its revolutionary new process brings multi-scaled image processing to a new level of excellence that significantly improves the visualization of the fine details in pediatric images.
- It is easy to set up and use, and virtually eliminates the need for time-consuming window leveling or re-processing of images, increasing productivity for both technologists and physicians.

One look at MUSICA image quality and you will see why we say "the diagnosis is in the details".

MUSICA



DX-D 100: Mobile performance, instant imaging

The DX-D 100 is the ideal mobile solution for pediatric and neonatal use. Easily moved to and within small rooms with incubators, it can be connected wirelessly to the RIS & PACS for a fast workflow. The integrated filtration wheel lets you select the optimum level of filtration for each exam, for additional dose reduction potential.

Insight. Delivered.

Agfa HealthCare is a global leader in the fast growing market of integrated IT and imaging systems, offering healthcare facilities a seamless flow of information and a 360° view of patient care. The company has a unique, holistic approach, enabling it to provide in-depth clinical know-how and fully integrated hospital-wide solutions. These specialized solutions integrate IT and imaging systems for Radiology, Cardiology, Mammography and Orthopaedics. Agfa HealthCare's Services offers additional services to ensure the reliability and functionality of Agfa HealthCare's Direct Radiography solutions – providing peace of mind for radiologists, their staff and their patients. ■

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