

Zero-Gravity™

The suspended radiation
protection system



ZERO-GRAVITY™

a CFI MEDICAL System

IMPROVING EFFICACY

Workplace SAFETY

The growth in utilization and complexity of fluoroscopic procedures has increased workload for interventionalists, resulting in cumulative radiation doses and orthopedic strains that can be limiting or career ending.¹

Potential occupational health hazards include:

- Cranial Tumors
- Cataracts
- Herniated Discs
- Chronic Pain
- Cancer



It's time to take care of OUR CLINICIANS

Introducing **Zero-Gravity**—the suspended radiation protection system that provides greater protection, resulting in healthier, happier clinicians.

Ultra Protection

Zero-Gravity surpasses the partial radiation protection of conventional apparel.

Virtual Weightlessness

Zero-Gravity eliminates body strain inherent to conventional protective apparel:

Back // Neck // Shoulders // Hips // Knees // Ankles

Ease of Movement

The suspended body shield provides freedom of movement, and can be easily engaged/disengaged relative to use of radiation, all while maintaining sterility.



Greater Care for Our Caregivers

Stop accepting excessive doses of radiation and the skeletal burden of protective apparel. Hospitals can't afford not to create a safer working environment for their most valuable resource—clinicians.

Radiation PROTECTION

Any radiation dose carries with it an associated risk of cancer induction, and the risk increases linearly with increasing dose.⁴ Compared to conventional lead aprons with under-table shields or ceiling-mounted shields, Zero-Gravity provides superior operator protection during fluoroscopy.





Optimal SCATTER PROTECTION

During a typical month of work, an interventionalist can receive more than the equivalent of 60 skull x-rays from unshielded scatter.⁵

Because Zero-Gravity moves with the operator, it is always positioned optimally with regard to scatter geometry and cranial shielding.

Thicker Lead ENHANCED SAFETY

1.00-mm-Pb-equivalent materials result in a 2/3 reduction in measured under-lead radiation exposures.⁶

Zero-Gravity acts as a continuous lead barrier that delivers an 87-100% reduction in radiation exposure over various body parts compared to lead aprons with conventional table shields and movable shields.¹

TAKE COMFORT in Knowing You're Protected

- | A body shield with a 1.00 mm Pb lining
- | A clear 0.5-mm-Pb-acrylic head shield

Protects body parts normally exposed when wearing conventional lead aprons and a thyroid shield:

- | Proximal Arm // Axilla // Distal Leg // Neck // Head

The lead-acrylic head shield provides:

- | A barrier to scatter to the head and neck
- | Direct, unimpeded line of sight to the monitor
- | Prevention of secondary radiation to the eyes^{2,3}
- | Protection of cranial anatomy vulnerable when only wearing leaded glasses^{2,3}



Zero-Gravity vs. Conventional Lead Shields

Comparison of operator eye exposures when working from femoral region, side or head of patient.⁷

HEAD

215 Fluoroscopy
Minutes

0.022 Operator Exposures
(microSV/min)

SIDE

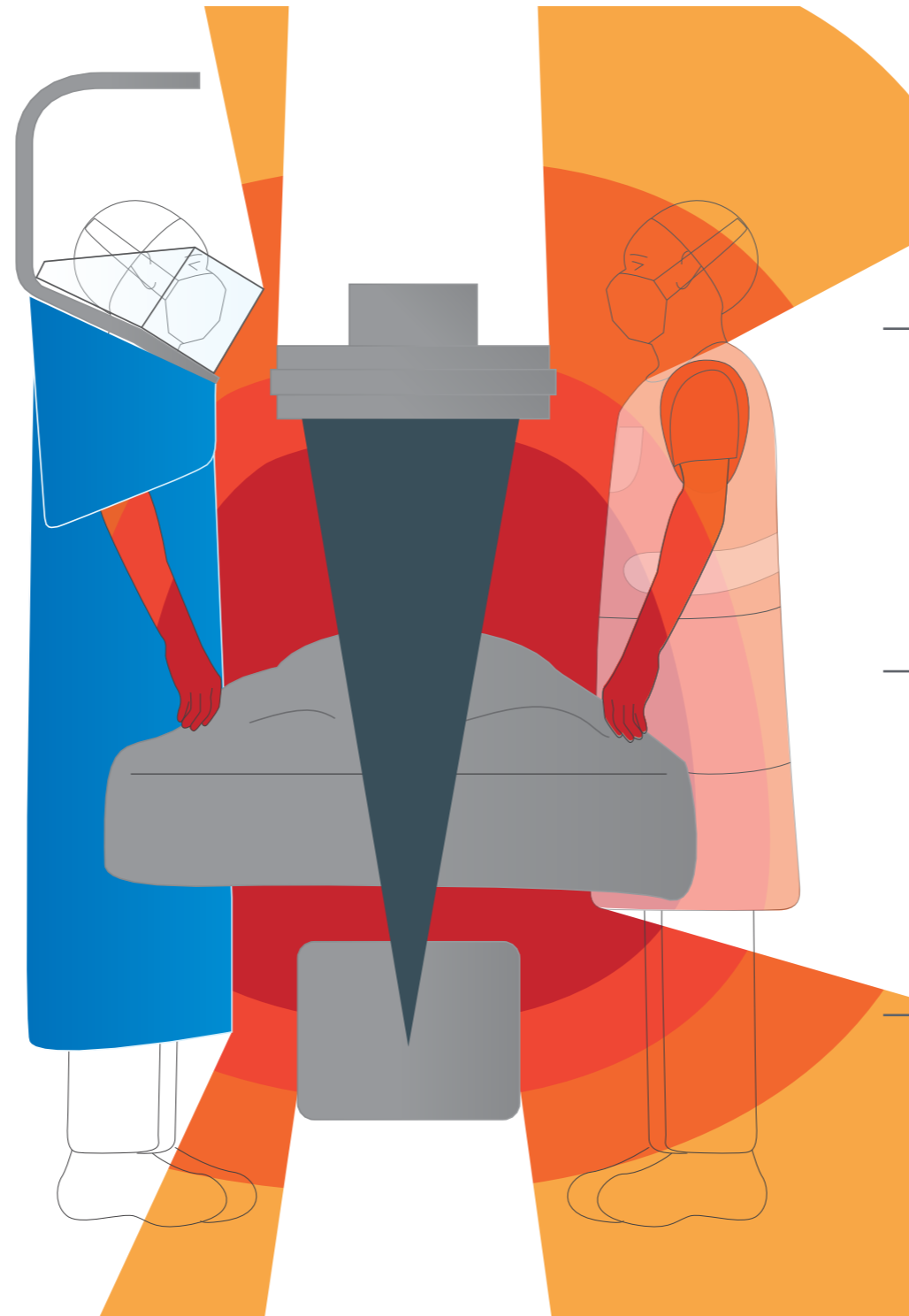
67 Fluoroscopy
Minutes

0.035 Operator Exposures
(microSV/min)

FEMORAL

47 Fluoroscopy
Minutes

0.013 Operator Exposures
(microSV/min)



HEAD

97 Fluoroscopy
Minutes

1.817 Operator Exposures
(microSV/min)

SIDE

32 Fluoroscopy
Minutes

4.762 Operator Exposures
(microSV/min)

FEMORAL

35 Fluoroscopy
Minutes

3.466 Operator Exposures
(microSV/min)



Orthopedic PROTECTION

Clinicians working with fluoroscopy are predisposed to orthopedic injuries resulting from the cumulative adverse effects of bearing the weight of personal protective apparel.⁴ Zero-Gravity reduces fatigue and orthopedic injuries resulting from routinely wearing heavy protective apparel without compromising radiation protection.

Unimpeded PATIENT ACCESS

Poorly designed laboratory environments promote awkward and ergonomically unsound postures.⁴

Zero-Gravity offers clinicians freedom of movement, especially during challenging procedures.

Designed for IMPROVED WORKFLOW

Zero-Gravity allows operators to perform procedures without potentially obstructive shields.

Lightweight aprons are frequently shown to provide inferior protection with results counter to the apron labels.⁸



Protect yourself with the
Zero-Gravity
suspended radiation protection system.

Visit www.cfimedical.com
for more information.

Call **810-750-5300** to learn about
purchase or lease options.

References:

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