The **RADPAD[®]** Security System[™] provides five degrees of defense

High proximity to prima	ry beam	Medium proximity		Low proximity
High exposure time	Medium exposure time			Low exposure time
RADPAD [®] Red™ (95% protection at 90kVp)	RADPAD [®] Orange™ (90% protection at 90kVp)	RADPAD [®] Yellow™ (75% protection at 90kVp)	RADPAD [®] Blue ™ (50% protection at 90kVp)	RADPAD [®] Green™ (25% protection at 90kVp)
Choose this level for the most severe radiation-exposure procedures such as TIPS, biventricular pacing, and lengthy biopsy-type procedures where proximity to the beam is close and the duration of procedure is long.	Chose this level for most procedures. Examples include: coronary cath/ angioplasty, dialysis shunt de-clotting, ablations, peripheral stents, biopsy (e.g. nephrostomy), and other procedures where proximity and exposure are high, but not extreme.	Chose this level for shorter duration procedures with less proximity to the beam. Examples could be coronary diagnostics, femoral-entry neuro/ head cases, pain management epidurals and similar procedures. This level is also ideal for protection of staff assisting interventional physicians.	Chose this level for moderate fluoro procedures and for high frequency, short duration procedures such as pain management. This shield can also be used for quick shunt and catheter checks.	Chose this level for PICC line insertion and other brief fluoro exposure procedures. Any fluoro procedure should have at least blue or green level radiation protection.

RADPAD® products have been studied and evaluated numerous times by physicians and radiation physicists and found to be extremely effective in multiple medical interventional specialties where x-radiation is utilized. Below are listed just a few of the many independent scientific articles and abstracts on RADPAD products. The complete journal article/abstract collection can be accessed at **www.radpad.com**.

Use of Sterile, Disposable, Radiation-Absorbing Shield Reduces Occupational Exposure to Scatter Radiation During Pectoral Device Implantation. Pacing and Clinical Electrophysiology 2004; 27 (Pt. 1): 726-729

- An 80% time-adjusted reduction of dose during pectoral implants. "For high volume operators, a large reduction in exposure can be achieved." GR Simons, MD et al.

Using a Sterile Disposable Protective Surgical Drape for Reduction of Radiation Exposure to Interventionalists. American Journal of Roentgenology: 178, January 2002

- The RADPAD Angio/Biopsy Shield reduced the "scatter radiation to physicians by... a 12-fold (reduction) for the eyes, 25-fold for the thyroid and 29-fold for the hands..." JN King, MD et al.

Reduction of Scatter Radiation During Percutaneous Coronary Interventions Using a Sterile, Disposable Radiation-Absorbing Shield. The Society for Cardiac Angiography and Interventions 2002, Abstract #124

- Even part-time use resulted in a 54% reduction in scatter radiation during percutaneous coronary interventions, compared to control. "Given the radiation safety principal of ALARA (As Low As Reasonably Achievable), RADPAD has become the standard in our laboratory for all interventional procedures. WS Shear, MD et al.

U.S. Patents: #5,278,219; #5,523,581; #6,674,087; #7,099,427; # 7,211,814; # 7,303,334; and other patents pending Canada Patent: #1,304,146

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For more information about RADPAD[®] contact your local distributor:





Radiation Roulette

eukemia

Burns

SOI

Harry

Stay in the game long enough and you'll lose more than just your hair.



Eventually **long-term radiation** makes everyone a loser.

Because exposure is cumulative, it is not going to "go away with time." Knowing this, physicians "vest up" before each procedure to protect vital organs and wear radiation badges to monitor exposure levels. When badge levels get too high physicians just stop doing procedures and retire at an early age...**Right!**

How are physicians dealing with scatter radiation exposure?

For some, retirement is a viable option. For most, practical retirement is years of work away. Many physicians who can't retire just take off their badges and keep working regardless of the damage being done to them with every procedure. Sad to say, many have developed the mindset of "out of sight-out of mind" or, "I'll worry about that later, I can't quit working now".

The recent National Toxicology Program's Report on Carcinogens stated "X-radiation is known to be a human carcinogen". For the typical patient who is exposed to radiation 5-10 times in their life it's not an issue. For the interventional physician exposed to radiation **5-10 times a day**, it may be a life or death issue. Multiple studies have shown that continued exposures can result in cancers of the thyroid, breast, lung, brain, skin, and leukemia, genetic mutations, radiation dermatitis, fibrosis, burns and hair loss.



Typical Radiation Exposure Levels

The question begs to be asked...

With the ever growing number of procedures involving radiation, why aren't hospitals and physicians doing more to protect themselves?

It's clear that all fluoro procedures involve some level of radiation exposure. **ALARA** requires that radiation exposure for medical personnel should be **As Low As Reasonably Achievable**.

Unfortunately, in today's environment, even well intentioned hospitals are forced to wrestle with the economic pressures of rising health care costs. Each patient procedure is heavily scrutinized to find ways to cut costs. Non-reimbursable physician protection often gets moved to the "unnecessary expenditure" pile. This "head in the sand" approach of choosing to save a minor expense now could have hospitals looking at major/catastrophic "losses" down the road in terms of physician disabilities, loss of production and liabilities.

There is a solution to the problem.

RADPAD[®] offers proven procedural protection at practical pricing.

First developed in 1996 as a lightweight pliable alternative to lead shielding, RADPAD[®] shields and drapes continue to lead the industry in technological development designed to reduce harmful scatter radiation by as much as 95%. Sterile and disposable RADPAD Shields have been tested in numerous independent studies and have proven to be the single most effective agent available in reducing scatter radiation in multiple medical intervention specialties utilizing x-radiation.

Sterile, lead-free and repositionable, RADPAD Shields are placed directly on the patient to provide the physician or technologist with moveable "shade" in which to work, protected from the ever-present scatter radiation. RADPAD technology and protection is available in a wide variety of shapes and sizes from general purpose to highly specialized shields developed for specific procedures like biopsy, femoral-entry angiography, dialysis declotting, biventricular pacing and many other interventional procedures.

The RADPAD[®] Shade reduces scatter radiation by up to 95%



Typical Radiation Exposure Levels with RADPAD[®] protection (blue) and without protection (red)

