PROTE

MEDICAL



Products made in the USA since 1994



Scatterguard Drapes

SCATTERGUARD^{ActiV} PATIENT DRAPES

ScatterGuard Patient Drapes protect surgeons and technicians from the harmful effects of scatter radiation during surgical procedures without any added weight.

Our lead-free, latex-free drapes are uniquely designed to provide tailored coverage for a variety of procedures. Scatterguard drapes are made from our Prolite core material which is specially formulated to provide over 20% more protection at higher exposures than the competition. The drape exterior features our highly-absorbant ActiV material with a plastic, laminated inner layer. In addition, high quality 3M adhesive ensures secure positioning of the drape.

ABSORBANCY

Fabric Type	Weight	Absorbancy Rate (sec/ml)	Absorbant Capacity
Leading Competitor 1	109 gsm	1.9 sec/ml	526%
Leading Competitor 2	130 gsm	2.5 sec/ml	600%
ActiV Absorbant	120 gsm	1.2 sec/ml	620%

PROTECTION PROPERTIES

Lead Equivalence	0.060mm	0.125mm	0.25mm*	0.375mm
Attenuation at 90kVp	50%	75%	90%	95%+

*Certified to ASTM 2547-18 and IEC 61331-1:2014 Standards [CE 2895]



DISPOSABLE



ATEX FREE



3M ADHESIVE



ECO-FRIENDLY



ABSORBAN



STERILE



SCATTER RADIATION

SCATTER VERSUS DIRECT BEAM RADIATION

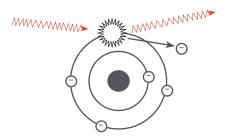
Image intensifiers have enabled surgeons to become technically more proficient and decrease the morbidity of the patient by minimizing area of operative field and decreasing operative time. Some over-use fluoroscopy, forgetting the principles of radiation protection, while others under-use it due to unfounded fears. In general, surgeons lack awareness about the radiation exposure they are getting and its effects on health.

SCATTER RADIATION

These X-ray photons remove an outer shell electron from its orbit, thereby ionizing the atom. Low energy radiation interacts with body tissue then scatters in different directions.

LOW ENERGY - SCATTERED

Compton Effect

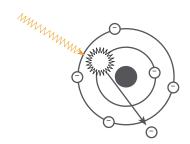


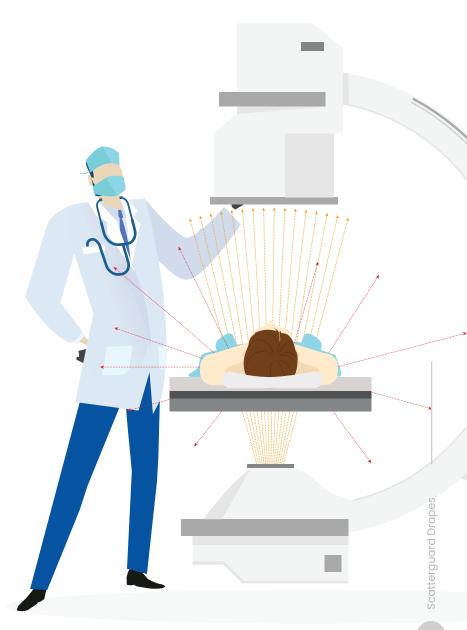
DIRECT BEAM RADIATION

These X-ray photons carry enough energy to eject an inner shell electron from its orbit. The High energy radiation penetrates and passes through the patient for imaging.

HIGH ENERGY - ABSORBED

Photoelectric Effect





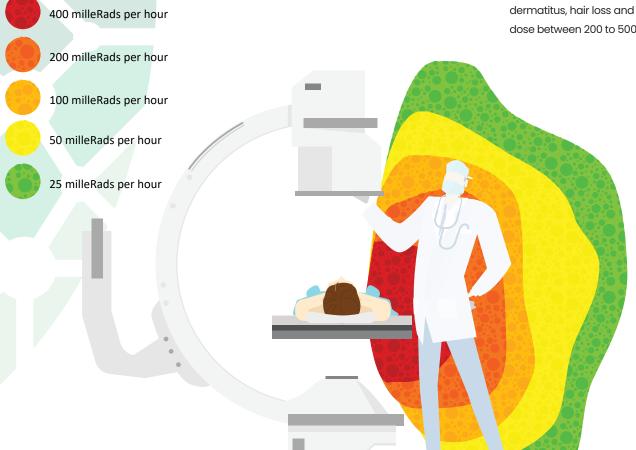
THE DANGERS OF SCATTER RADIATION

During procedures requiring fluoroscopy, direct beam radiation contacts a patient and "scatters" towards the surgeon and other personnel. This means surgeons and assistants are at maximum risk due to proximity to exposure area. "The scattered radiation from the patient comprises the main source of radiation dose to staff."

[1]

According to the National & International Conferences on Radiation Protection (ICRP & NCRP), "Lens/Eye Dose should be limited to 15 RADs per year." Based on an average Lens/Eye Dose of 62 milleRads per hour and an average of 576 hours of Fluoroscopy per year some clinicians are receiving doses of 35.7 RADs per year. In a 30 year career this amounts to 1,071 RADs, if the operator is standing upright; far more if crouched or seated (about 5,184 RADs).

The energy absorbed from ionizing radiation can cause cataracts, tumors, skin dermatitus, hair loss and germ cell mutations. In fact, "Cataracts occur with cumulative dose between 200 to 500 RADS." [2].



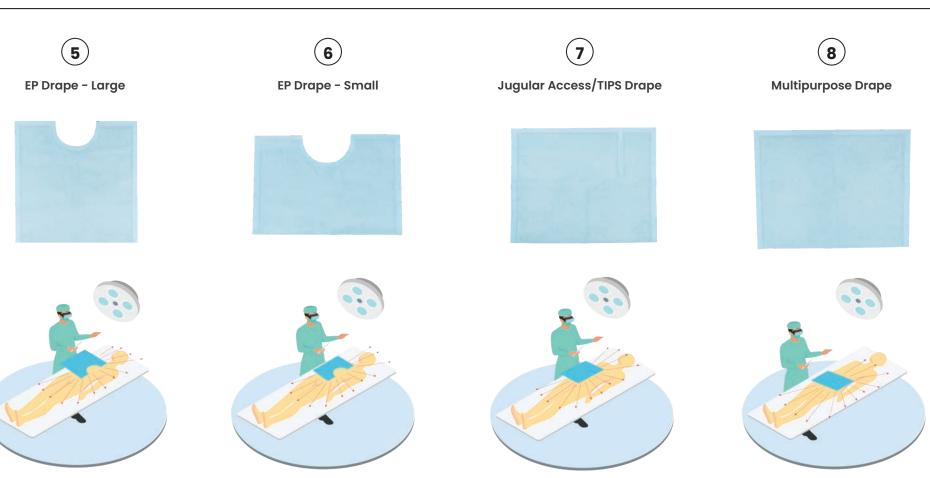
LONG STORY SHORT...

A SIR published study concluded "...leaded glasses and scatter-draping drapes substantially reduced lens dose by factors of 9.5 and 12 respectively. Maximal eye drapeing was achieved by the use of both leaded glasses and scatter-draping drapes." [3]

- [1] International Atomic Energy Agency
- [2] National & International Conferences on Radiation Protection
- [3] Drs. Dauer & Thorton, Memorial Sloan Kettering Medical Center, Society of Interventional Radiology 2009

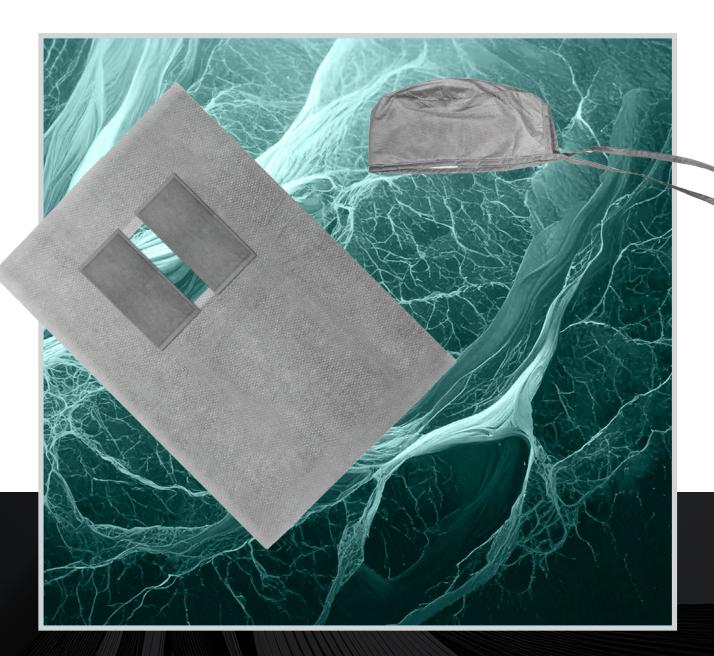
1 Angiography Drape	2 Biliary Split Drape	3 Dialysis Drape	4 EP Left Subclavian Drape

#	Model	Description	Fenestration	Dimensions	Procedures
5	SG-EPDC-LG-250	EP Drape - Large	5.75" x 3" Scoop	16" x 16"	Bi-ventricular pacemaker implants, Bi-ventricular pacing and ICS procedures
6	SG-EPDC-SM-250	EP Drape - Small	5.75" x 3" Scoop	11" x 16"	Bi-ventricular pacemaker implants, Bi-ventricular pacing and ICS procedures
7	SG-JUG-125/250/375	Jugular Access/ TIPS Drape	5″ Slit	13.5" x 17.5"	Transjugular intraheptic portosystematic shunt (TIPS)
8	SG-MPD-060/125/250/375	Multipurpose Drape	None	13.5 x" x 17.5"	Needle Biopsy or Puncture procedures



#	Model	Description	Fenestration	Dimensions	Procedures
9	SG-MPDF-060/125/250/375	Multipurpose Drape w/ Fenestration	3.5" x 2" Rectangle	13.5" x 17.5"	Needle Biopsy or Puncture procedures
10	SG-PPD-125/250/375	Peripheral Drape	None	12" x 35"	Peripheral procedures w/ access through the femoral artery
11	SG-DCAP-060/125/250/500	Disposable Smart Cap	N/A	SM, MD, LG	Any procedure involving fluoroscopy
12	SG-DTHY-125/250/500	Disposable Thyroid Collars	N/A	Regular, Large	Any procedure involving fluoroscopy





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