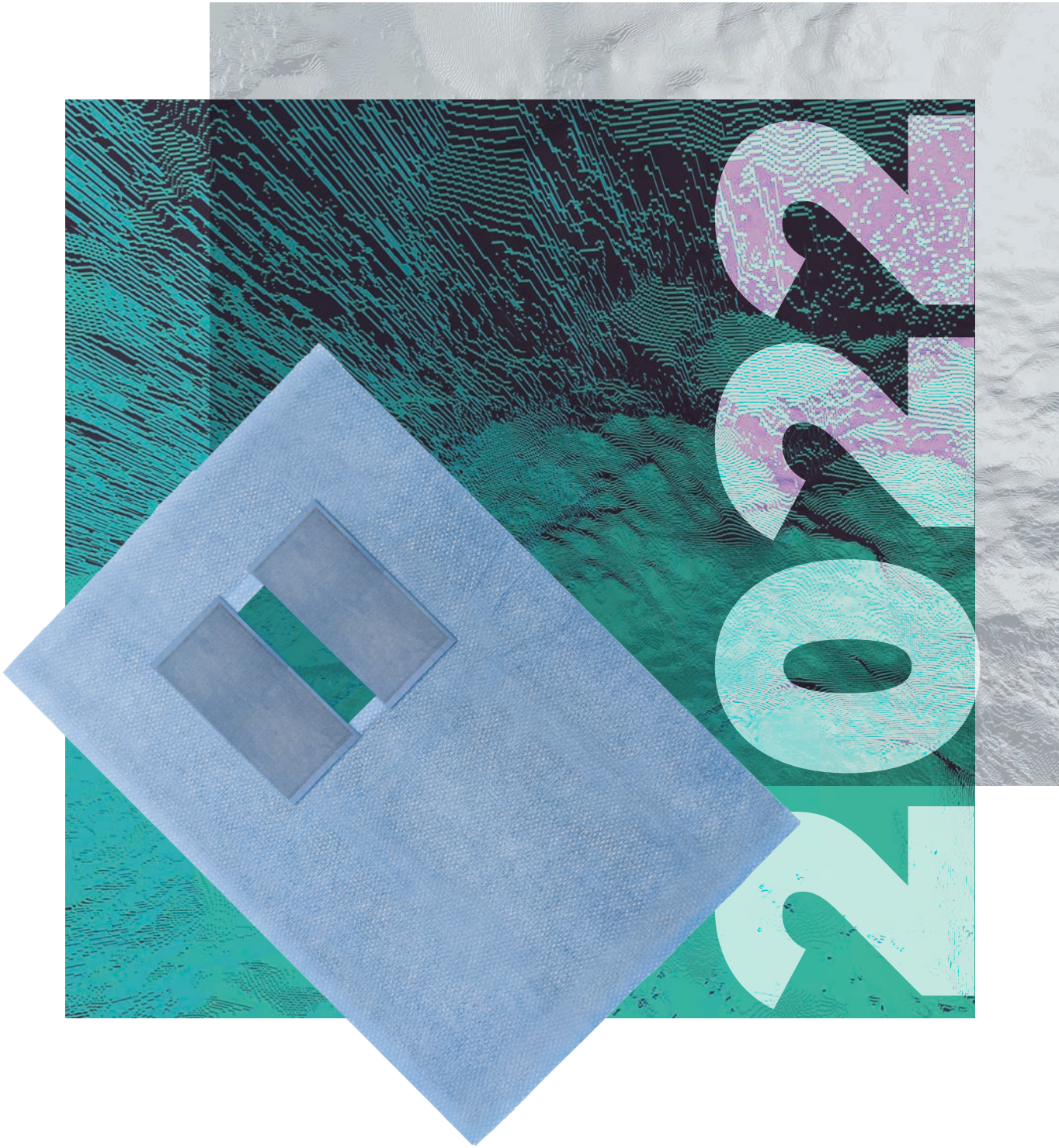
SCATTERGUARD

DRAPE CATALOG

PROTECH MEDICAL



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Scatterguard patient drapes are a weightless and disposable form of protection against scatter radiation. To ensure the best possible quality and protection, Scatterguard products are manufactured in a CLASS 10,000 clean room.

SCATTERGUARD DRAPES

Protech is proud to offer a line of disposable products that protect doctors and technicians alike from the harmful effects of exposure to radiation while reducing the occurrence of biological contamination. ScatterGuard is comprised of disposable Smart Caps (head protection), and disposable ScatterGuard Drapes.

SCATTER GUARD

SCATTER RADIATION

VERSUS DIRECT BEAM RADIATION

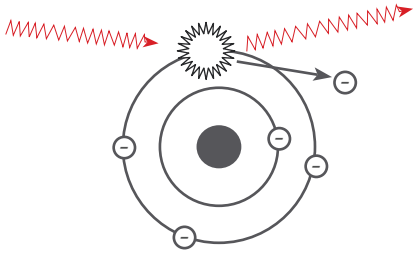
Image intensifiers have enabled surgeons to become technically more proficient and decrease the morbidity of the patient by minimizing area of operative field and decreasing operative time. Some over-use fluoroscopy, forgetting the principles of radiation protection, while others under-use it due to 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



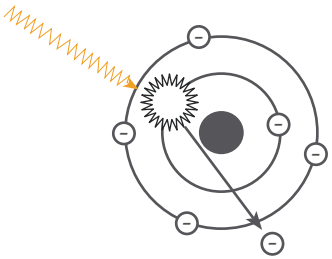
VERSUS

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 EFFECTS OF SCATTER

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].

WHO IS AT RISK?

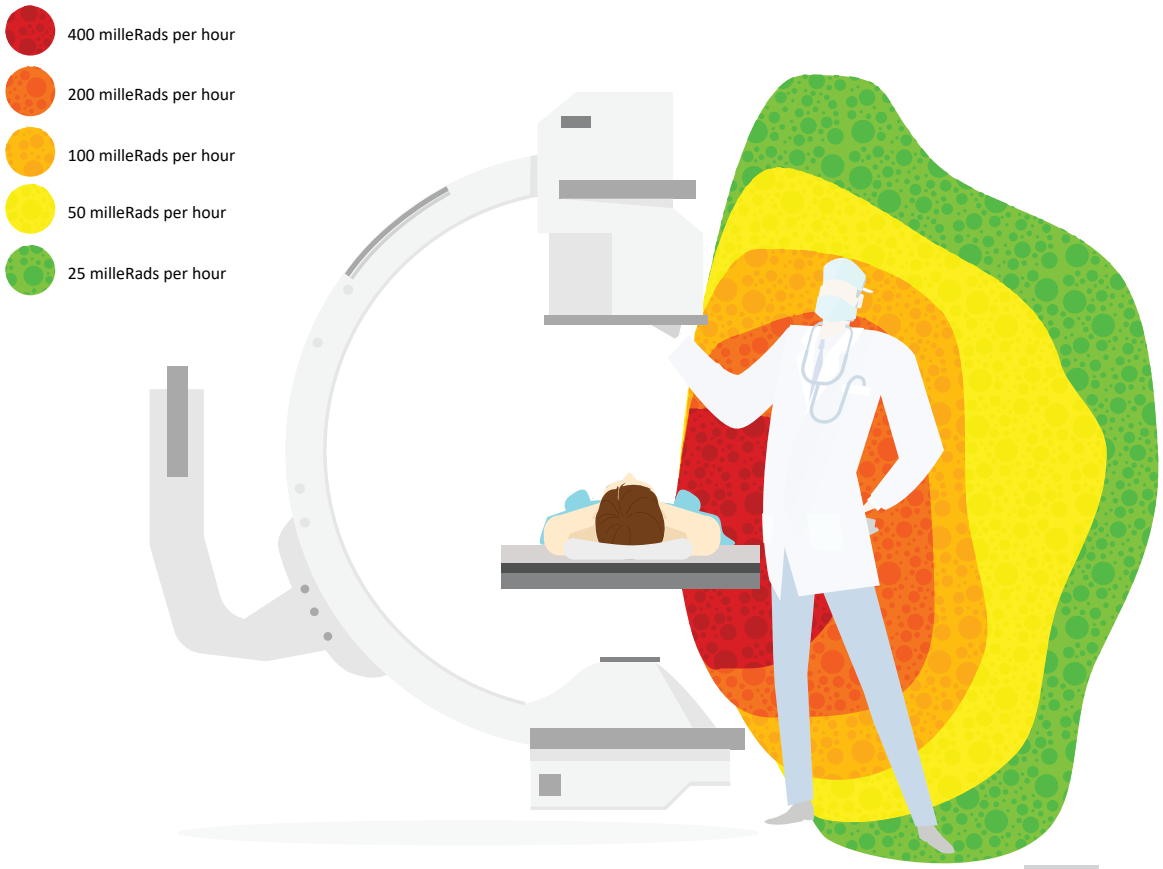
During procedures requiring fluoroscopy, direct beam radiation contacts a patient and "scatters" towards the surgeon and other personnel. This means surgeons and assistants are at maximum risk due to proximity to exposure area. "The scattered radiation from the patient comprises the main source of radiation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

[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

WEAR PROTECTION!

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]



SCATTER GUARD

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, powder-free drapes may be disposed of through normal waste and are custom designed for each procedure. The drape interior is made from our high-quality, Prolite lead-free core material comprised of bismuth and antimony while the exterior fabric is a USA-made, absorbent material with a laminated/sealed plastic inner layer. All Scatterguard drape models are sold by the box (10 per box).

CERTIFIED TO ASTM 2547-18 AND IEC 61331-1:2014 STANDARDS [CE 2895*]

PROTECTION PROPERTIES

Lead Equivalence (LE)	Attenuation @ 80kVp	Attenuation @ 100kVp
0.125mm	77.3%	68.9%
*0.25mm	91.9%	85.6%
0.375mm	96.4%	92.1%

ABSORBANCY

Fabric Type	Absorbant Rate	Weight	Absorbant Capacity
Corzorb	6.8 sec	62.7 gsm	650%

WEIGHTLESS PROTECTION

STERILE

LEAD FREE

LATEX FREE

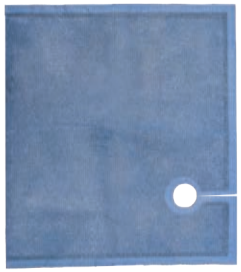
PREMIUM ADHESIVE

DISPOSABLE

#	MODEL	DESCRIPTION	FENESTRATION	DIMENSIONS	PROCEDURES
1	**SG-AD-125/250**	Angiography Drape	2” Circle	14.5” x 16.5”	Angiography, Coronary Catheterization, UFE, Pelvic Surgery and TACE
2	**SG-BSD-250**	Biliary Split Drape	5” Slit	14.5” x 16.5”	Transjugular intraheptic portosystematic shunt (TIPS)
3	**SG-DSD-250**	Dialysis Drape	4.5” x 9” Rectangle	32” x 50”	Dialysis access and declotting, Fistulagram
4	**SG-EPD-125/250**	EP Left Subclavian Drape	3.25” x 2.25” Scoop	13.5” x 17.5”	Bi-ventricular pacemaker implants, Bi-ventricular pacing and ICS procedures

1

Angiography Drape



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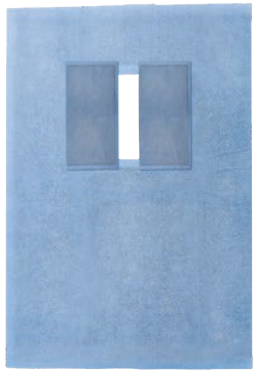
Biliary Split Drape

3

Dialysis Drape



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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**	Jugular Access/ TIPS Drape	5” Slit	13.5” x 17.5”	Transjugular intraheptic portosystematic shunt (TIPS)
8	**SG-MPD-125/250/375**	Multipurpose Drape	None	13.5 x” x 17.5”	Needle Biopsy or Puncture procedures

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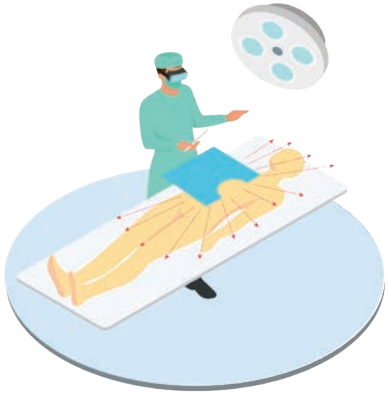
EP Drape - Large



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EP Drape - Small

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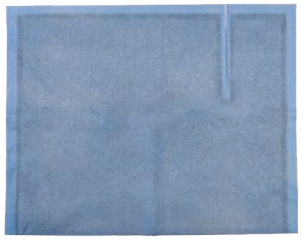
Jugular Access/TIPS Drape



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Multipurpose Drape

#	MODEL	DESCRIPTION	FENESTRATION	DIMENSIONS	PROCEDURES
9	**SG-MPDF-125/250/375**	Multipurpose Drape with Fenestration	3.5” x 2” Rectangle	13.5” x 17.5”	Needle Biopsy or Puncture procedures
10	**SG-PPD-125/250**	Peripheral Drape	None	11” x 34”	Peripheral procedures where access is through the femoral artery
11	**SG-DCAP-125/250/375**	Disposable Smart Cap	None	One size fits all	Any procedure involving fluoroscopy

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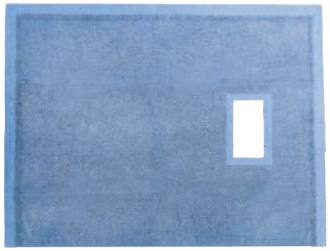
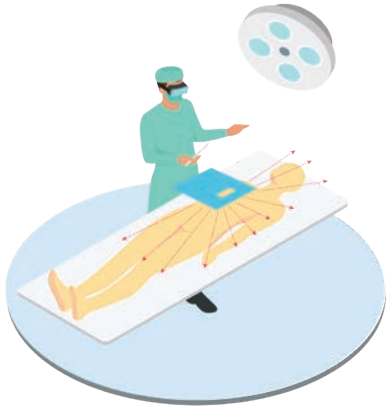
Multipurpose Drape with Fenestration





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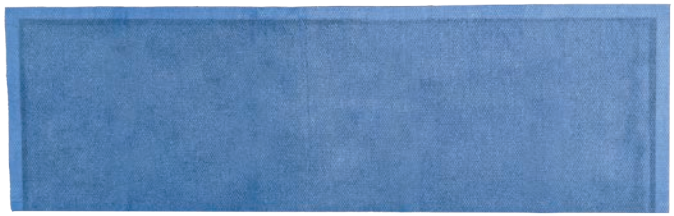
Peripheral Drape



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Disposable Smart Cap