

# **Society of Interventional Radiology**

in cooperation with Indiana University School of Medicine

## **End Stage Renal Disease— The Keystone Conference: Bridging Scholarship and Care**

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### ***REDUCING OPERATOR RADIATION EXPOSURE DURING DIALYSIS ACCESES PROCEDURES***

**Objective:** To measure the effectiveness of a commercially available dialysis access drape that includes a radiation protective barrier.

**Materials & Methods:** A sterile, disposable, lead-free drape designed to decrease the amount of scatter radiation received by individuals performing dialysis access procedures was evaluated. Using the UNFORS EDD-30 dosimeter, measurements of hand and eye cumulative doses during dialysis access procedures were recorded with and without the protective drape in order to determine the effectiveness of x-ray attenuation.

**Results:** Cumulative scatter radiation to physicians was reduced by 81% at the hand and 50% at the eye level when the radiation protective dialysis drape was used as compared to control studies performed with a standard non-attenuating drape.

**Conclusions:** Use of this radiation protective drape can significantly reduce the radiation dose to physicians performing dialysis access procedures, and provides a method to insure that the clinical working environment adheres to the ALARA principle.