What's NEXT?

The Nationwide Evaluation of X-ray Trends (NEXT) is a national program conducted annually to measure the x-ray exposure that a standard patient receives for selected x-ray examinations. This program is conducted jointly by the Conference of Radiation Control Program Directors (CRCPD), an association of state and local radiation control agencies, and the Food and Drug Administration's (FDA) Center for Devices and Radiological Health (CDRH).

Facilities are randomly selected and the surveys are performed by personnel from the participating states. Each projection is surveyed utilizing a clinically validated exposure equivalent phantom representing a standard reference patient. This standard NEXT patient stands 172 cm (5 ft, 8 in) in height, and weighs 74.5 kg (164 lbs). The phantom used for the fluoroscopy survey is equivalent to a patient thick-ness, measured P/A, of 23 cm (9 in).

In 1996 the selected examination was upper gastro-intestinal fluoroscopy. Over 300 facilities were surveyed, with the sample divided nearly equally between hospital and non-hospital facilities. Specific information was obtained pertaining to the equipment, facility work load, and radiographic technique. Information related to dose was also collected such as film/screen combination, grid use, beam quality, x-ray output, and the quality of film processing. The procedure followed in 1996 was essentially the same as that used for the 1991 fluoroscopy study.

The information contained herein is for guidance. The implementation and use of the information and re-commendations are at the discretion of the user. The mention of commercial products, their sources, or their use in connection with material reported is not to be construed as either an actual or implied endorsement by CRCPD or CDRH.

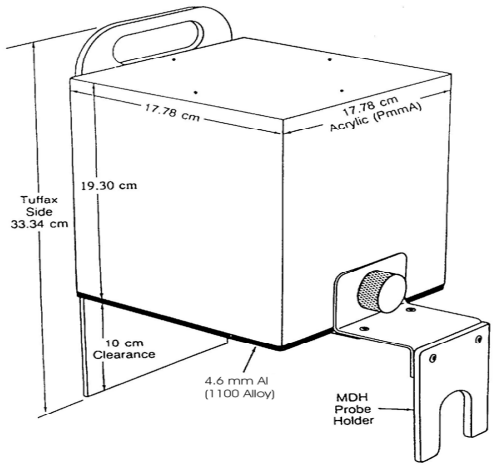
CRCPD, 1030 Burlington Lane, Suite 4B, Frankfort, KY 40601
www.crcpd.org

SURVEY RESULTS

YOUR FACILITY

entrance exposure rate (R/min)	_____
fluoroscopic mA	_____
fluoroscopic kVp	_____
half-value layer	_____
spot film ESE	_____
# of spot films	_____
total spot film exp	_____
weekly workload	_____
recording mode	_____
film processing	
STEP* Test Result	_____
holes visible	_____
meshes visible	_____

*Sensitometric Technique for the Evaluation of Processing



Nationwide Evaluation of X-Ray Trends (NEXT)

1996 Upper G.I. Fluoroscopy Survey

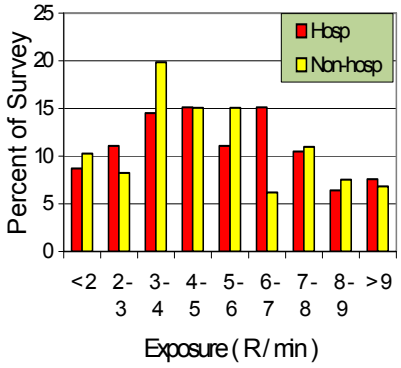
Conference of Radiation Control Program Directors

and

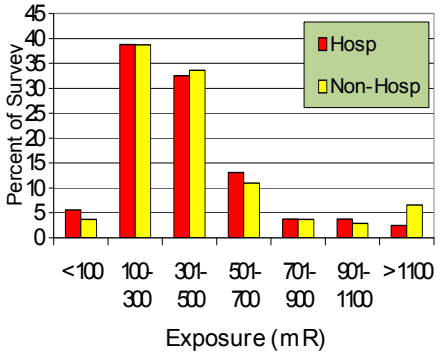
The Center for Devices and Radiological Health

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Public Health Service
Food and Drug Administration

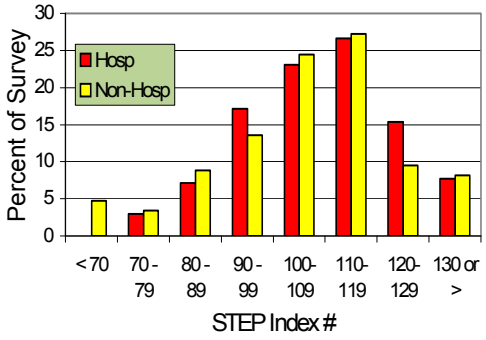
Fluoro Entrance Skin Exposure



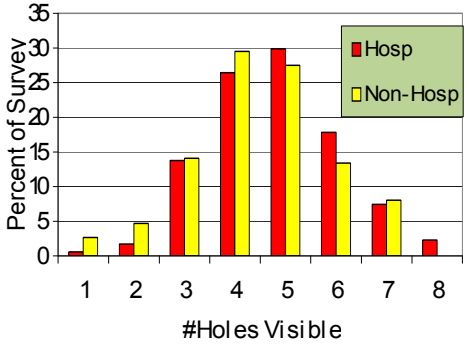
Single Spot Film Exposure



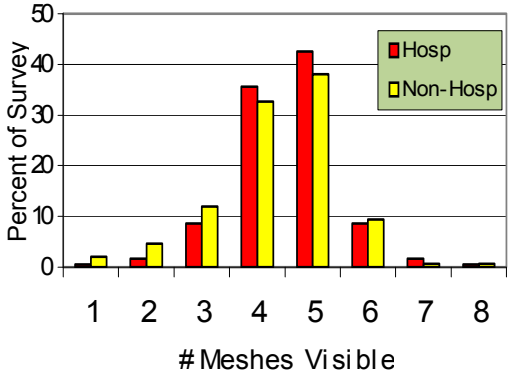
Film Processing Speed



Low Contrast Objects Score



High Contrast Objects Score



Contrast Technique

	Number	Percent
single only	67	19.5
double only	107	31
both/ mostly contrast media	35	10
both/ mostly air	55	16
both equally	75	22

Data Summary

	Mean	Std Dev
fluoro EER (R/min)	5.2	2.4
fluoro tube current	2.3	1.1
fluoro kVp	99	14
HVL (mm Al)	4.4	1.0
spot film ESE (mR)	420	356
total # of spot films	12	5.5
total spot ESE (R)	4.956	5.093
weekly workload	12	10.5
processing speed *	107	19
# of holes visible	5.47	1.37
# of meshes visible	5.54	1.07

* normal processing range = 80-120

Recording Modes Available

	Number	Percent
spot film	300	87
photo spot film	68	20
VCR	45	13
Digital	53	15