

PUBLIC HEALTH

Fluoroscopes Too Strong

Many persons receiving fluoroscopic examinations are being exposed to as much as six times the needed radiation dose. This is an unnecessary danger, an expert reports.

MORE THAN ONE-HALF of the fluoroscopes now used in doctors' offices are exposing patients to more radiation than is necessary.

A survey of 80 fluoroscopes of all types in the Philadelphia area revealed that more than half of them were emitting six times the maximum radiation considered necessary, Dr. Richard N. Chamberlain of the University of Pennsylvania School of Medicine said at the American Medical Association meeting in Atlantic City. There is no reason to believe that these statistics do not apply to the entire country, he said.

Therefore, approximately one-half of these machines would not be considered acceptable unless safety modifications could be added, he explained.

Radiation from fluoroscopes and X-ray machines can be reduced by adding filters that provide a barrier and catch some harmful rays before they penetrate the patient. Or, doctors can learn how to reduce the area of the patient's body that is exposed to the rays.

Many times, only a small area need be

X-rayed; other areas receive radiation even though the doctor is only interested in a specific portion of his patient's body, he implied.

In addition, faster films now available can be used in a limited number of cases. Thus, the operating time for the machine can be kept to a minimum.

An exhibit by the U. S. Public Health Service at the meeting explained to doctors the various steps that members of the medical profession can take to reduce this hazard.

Just because a machine is old does not mean that it is dangerous, said Dr. Clifford E. Nelson, radiologist in the division of radiology of the USPHS. Many general practitioners have taken steps to improve their machines. However, the newest machines cut to a minimum the amount of radiation patients receive.

There are only between 5,000 and 6,000 qualified radiologists in the U. S. today. On the other hand there are more than 200,000 practicing physicians. More than one-fourth of these physicians operate their

own X-ray or fluoroscopic machines, Dr. Nelson said.

If all of the radiation work were turned over to the few radiologists now on hand, these people could not possibly do all of the work. Therefore, it is important that the practicing physician be carefully schooled to operate properly his machines at a maximum level of efficiency, the radiologist emphasized.

Advice to Avoid Fallout

FOOD CANS should be opened from the end that sat on the shelf.

This culinary advice to lessen the danger from radioactive fallout following a thermonuclear attack was presented to the Association meeting by an Army doctor. He said radioactive fallout material from a nuclear blast behaves like ordinary dust.

One danger of the fallout following bomb explosions, he said, is that this potentially lethal dust will be eaten.

Housewives preparing for possible nuclear attacks should provide water, food and shelter, Lt. Col. Ingalls H. Simmons of the Army Medical Service School, Fort Sam Houston, Texas, reported.

Safe emergency water supplies in the home can be stored in bottles in the refrigerator. Ice cubes can be melted in the event no water is available. The ordinary home water heater usually contains at least 25 gallons of water that can be drawn off from a tap at the bottom of the tank.

Safe emergency food supplies should consist of canned fruit, fruit juices, vegetables, meats, soup, canned or powdered milk, baby food, raisins, packaged cereals and dried foods.

Such supplies should be kept in the home at all times, Col. Simmons said. They can be rotated frequently to prevent deterioration.

Shelter should include not only buildings, but some sort of body covering such as blankets, clothes and sheets.

The safest spot in the house is under the cellar stairs or in a corner of the cellar where there is at least three feet of dirt between humans and the intensely radioactive fallout, he said. People caught outdoors during an attack should "hit the ditch" or any other cover that throws a shadow on the body.

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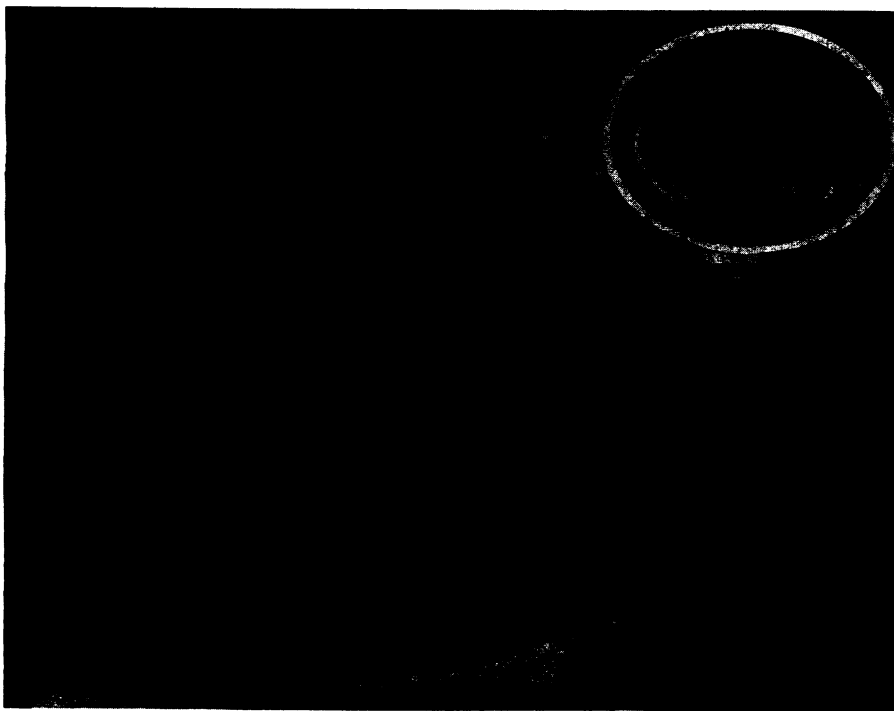
ARCHAEOLOGY

Prehistoric Indian Tools Found in Texas

EIGHT SMALL stone engraving tools that may have been used by prehistoric Indians along the Rio Grande about 4,000 B.C. have been found in the Diablo Dam area near Del Rio, Texas. Known as burins, such tools had never before been found so far south in North America. Others have been found in Alaska, Oregon and Canada.

The burins were discovered by Dr. Jeremiah F. Epstein of the University of Texas, Austin.

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METEOR HOLES—Violent whirlpools of hot gas that form within tiny pits and imperfections in the surfaces of meteorites could have gouged out the deep, smooth holes that long have puzzled scientists. Dr. Robert H. Johnson of General Electric Research Laboratory, Schenectady, N.Y., suggested that the whirlpools, which form during the meteorite's plunge through the earth's atmosphere, could also account for some of the meteors that fly apart before reaching the earth.