

## Panel Discussion

### Management of Radioisotopes for Medicine

#### Management of Human Materials and Contaminated Waste

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Environmentally, there are various difficult problems with respect to managing radioisotopes and materials contaminated by them.

By questionnaire, the lecturer asked about the following problems of RI managers :

1. How are human material to be collected ?
2. How should we dispose of liquid and solid contaminated waste ?
3. How should dispose of or treat contaminated gases ?
4. How should we treat and prevent infections of radiological staff ?

Answers were obtained from 32 institutes, mainly universities, as follow :

1. Although it would be ideal to admit patients receiving diagnostic doses, this is impractical today.  
Use of nuclei with long half lives and

large volumes of nuclei with short half lives should be withheld.

2. Solid contamination should be retained until its radioactivity is reduced.  
Only heavily contaminated substances should be submitted to the RI association. With contaminated liquids, it is not only important to consider their dilution with large volume of water, but also their preservation and their discharge after reduction of their radioactivity.
3. The <sup>133</sup>Xenon trap is most effective though expensive. The National Aid Constitution should authorize expenditures for its use.
4. A suitable means should be established to prevent bacterial and viral infections among radiological staff.

#### How to Treat the Patient in the Clinical Nuclear Medicine ?

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When we administer radioisotope to the patient, it is very important not only to gather