# Basics of radiation protection

How to achieve ALARA: Working tips and guidelines



Diagnostic Imaging and Laboratory Technology
Essential Health Technologies
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WORLD HEALTH ORGANIZATION

# Basics of Radiation Protection for Everyday Use How to achieve ALARA: Working Tips and Guidelines

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#### Foreword

Modern diagnostic imaging offers a vast spectrum of modalities and techniques, which enables us to study the function and morphology of the human body in details that approaches science fiction.

However, it should also be remembered that thousands of hospitals and institutions worldwide do not have the possibilities to perform the most fundamental imaging procedures, for lack of equipment, malfunction or break down of equipment, or insufficient diagnostic imaging skills.

Therefore, WHO in collaboration with The International Commission for Radiological Education (ICRE) of the International Society of Radiology (ISR) is creating a series of manuals and workbooks developed under the umbrella of the Global Steering Group for Education and Training in Diagnostic Imaging. The main issue is to assist and guide "end-users" responsible for diagnostic imaging, be it radiologists, physicians, radiographers, nurses or others to improve safety and quality of their work.

The full series of manuals and workbooks will primarily cover basic examination techniques and interpretation of radiography and ultrasonography as well as radiation safety aspects and basic quality assurance issues .

The manuals are authored by authorities in the specific fields dealt within each manual, supported by a group of collaborators, that together cover the experience, knowledge and needs, which are specific for different regions of the world.

It is our sincere hope that the manuals and workbooks will prove helpful in the daily routine, facilitating the diagnostic work up and hence the treatment, to the best benefit for the patient

Geneva, Switzerland and Lund, Sweden, May 2004 Harald Ostensen Holger Pettersson

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