

Revision of TRS 398

Survey of dosimetry equipment used in the clinic

Introduction

The IAEA would like to thank everyone who completed the survey on the update of TRS 398 in 2016. Your comments were very useful and have been considered in the revision of this International Code of Practice. However we would like to call upon you again; to complete the calculations and measurements needed for the revision of TRS 398 it would be useful to know the equipment commonly used in the clinic. The IAEA would be grateful if you could spend some of your valuable time to complete the questions below.

Thank you for your support in this important project.

01 Department Details

01.01 Department Name		
01.02 Address	Street	
	PO Box	
	City	
	ZIP	
	Country	
01.03 Medical Physicist		
01.04 Email address		

02 High Energy Photon Beams

02.01 Ionization chambers used in your clinic for reference dosimetry		
Ionization chamber type	Manufacturer	Frequency of use
02.02 Phantoms used in your clinic for reference dosimetry		
Phantom material type	Manufacturer	Frequency of use
02.03 Phantoms used in your clinic for calibration of machine output		
Phantom material type	Manufacturer	Frequency of use

02.04 Electrometer		
Electrometer type	Manufacturer	
02.05 Dosimeter Calibration		
02.05.01 Where was your chamber calibrated?		
02.05.02 What are the uncertainties quoted in your calibration certificate?		
02.05.03 Calibration coefficients	$N_{D,w}$	NK
02.05.04 If Nk please give details of conversion to absorbed dose to water		
03 High Energy Electron Beams		
03.01 Ionization chambers used in your clinic for reference dosimetry		
Ionization chamber type	Manufacturer	Frequency of use
03.02 Phantoms used in your clinic for reference dosimetry		
Phantom material type	Manufacturer	Frequency of use
03.03 Phantoms used in your clinic for relative dosimetry or QA		
Phantom material type	Manufacturer	Frequency of use
03.04 Electrometer		
Electrometer type	Manufacturer	
03.05 Dosimeter Calibration		
03.05.01 Where was your chamber calibrated?		
03.05.02 What are the uncertainties quoted in your calibration certificate?		
03.05.03 Calibration coefficients	$N_{D,w}$	NK
03.05.04 If Nk please give details of conversion to absorbed dose to water		

04 Low Energy Kilovoltage Beams			
04.01 Ionization chambers used in your clinic for reference dosimetry			
Ionization chamber type	Manufacturer	Energy range	
		kVp	HVL
04.02 Do you use build-up foils?	Yes	No	
Details of build-up foils			
04.03 Dosimeter Calibration			
04.03.01 Where was your chamber calibrated?			
04.03.02 What are the uncertainties quoted in your calibration certificate?			
04.03.03 Is your chamber calibrated with build-up foils?		Yes	No
04.03.04 Is your chamber calibrated on the surface of a phantom?		Yes	No
04.03.05 Calibration coefficients:		$N_{D,w}$	NK
04.03.06 If NK please give details of conversion to absorbed dose to water			
04.04 Reference dosimetry in the clinic			
04.04.01 Where is the dose prescribed in the clinic?		Surface 2 cm deep in water	
04.04.02 Where is the reference dosimetry performed in the clinic?		in air at a depth in water	
04.04.03 What depth in water?		(cm)	
04.05 Phantoms used in your clinic for reference dosimetry			
Phantom material type	Manufacturer	Frequency of use	
04.06 Phantoms used in your clinic for relative dosimetry or QA			
Phantom material type	Manufacturer	Frequency of use	
04.07 Electrometer			
Electrometer type	Manufacturer		

04.08 Beam qualities used in the clinic			
KVp	HVL (mm)	Added filtration	
Manufacturer of X-ray tube			
04.09 X-ray tube type model number			
04.10 Applicators - field size range		(cm)	
05 Medium Energy Kilovoltage Beams			
05.01 Ionization chambers used in your clinic for reference dosimetry			
Ionization chamber type	Manufacturer	Energy range	
		kVp	HVL
05.02 Dosimeter Calibration			
05.02.01 Where was your chamber calibrated?			
05.02.02 What are the uncertainties quoted in your calibration certificate?			
05.02.03 Calibration coefficients:		$N_{D,w}$	NK
05.02.04 If Nk please give details of conversion to absorbed dose to water			
05.03 Reference dosimetry in the clinic			
05.03.01 Where is the dose prescribed in the clinic?		Surface 2 cm deep in water	
05.03.02 Where is the reference dosimetry performed in the clinic?		in air at a depth in water	
05.03.03 What depth in water?		(cm)	
05.04 Phantoms used in your clinic for reference dosimetry			
Phantom material type	Manufacturer	Frequency of use	
05.05 Phantoms used in your clinic for relative dosimetry or QA			
Phantom material type	Manufacturer	Frequency of use	

05.06 Electrometer		
Electrometer type	Manufacturer	
05.07 Manufacturer of X-ray tube		
05.08 X-ray tube type model number		
05.09 Beam qualities used in the clinic		
KVp	HVL (mm)	Added filtration
05.10 Applicators - field size range		(cm)
06 Proton Beams		
06.01 Ionization chambers used in your clinic for reference dosimetry		
Ionization chamber type	Manufacturer	Energy range
06.02 Phantoms used in your clinic for reference dosimetry		
Phantom material type	Manufacturer	Frequency of use
06.03 Phantoms used in your clinic for relative dosimetry or QA		
Phantom material type	Manufacturer	Frequency of use
06.04 Electrometer		
Electrometer type	Manufacturer	
06.05 Dosimeter Calibration		
06.05.01 Where was your chamber calibrated?		
06.05.02 What are the uncertainties quoted in your calibration certificate?		
06.05.03 Calibration coefficients:		
	$N_{D,w}$	NK

06.05.04 If Nk please give details of conversion to absorbed dose to water		
06.06 Is your clinical beam scanned:		Yes No
07 Carbon Ion Beams		
07.01 Ionization chambers used in your clinic for reference dosimetry		
Ionization chamber type	Manufacturer	Energy range
07.02 Phantoms used in your clinic for reference dosimetry		
Phantom material type	Manufacturer	Frequency of use
07.03 Phantoms used in your clinic for relative dosimetry or QA		
Phantom material type	Manufacturer	Frequency of use
07.04 Electrometer		
Electrometer type	Manufacturer	
07.05 Dosimeter Calibration		
07.05.01 Where was your chamber calibrated?		
07.05.02 What are the uncertainties quoted in your calibration certificate?		
07.05.03 Calibration coefficients:		$N_{D,w}$ NK
07.05.04 If Nk please give details of conversion to absorbed dose to water		
07.06 Is your clinical beam scanned:		Yes No