



AAPM Dose Check Education Slides

Philips



Disclaimer

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Disclaimer

- Screen captures are **examples** of a common (or latest) software version only and all software versions are not represented
- The information contained herein is current as of the date shown on the title slide
- Modification of the content of these slides is **not allowed**.



User Access Controls

- **Access Control for Dose Notifications**
 - Add or make changes to the Dose Notification exam card setting in **Exam Card Manager**.
 - To limit access, enable the password feature in **Exam Card Manager**. Once the password feature is enabled, the system requires the password to make any exam card setting changes.
- **Access Control for Dose Alerts**
 - Make changes to Dose Alert settings by selecting **Preferences**, select **Dose Management**.
 - To limit access, choose **Change Password** from the **Dose Alert** settings screen. Once the password is enabled, the system requires the password to make changes.



Configuring Dose Notifications

Dose Notification

Dose Notification Value CTDI_{vol}: mGy

Dose Notification Value DLP: mGy*cm

Dose Notification value is set in **Exam Card Manager** and is available on all exam cards.

The Dose Notification setting alerts the user when the CTDI_{vol}/DLP of a single scan exceeds the threshold.

Philips does not have global setting



Configuring Dose Alerts

Dose Management

Dose Alert

Enter Password Change Password

Body accumulated upper limit CTDI _{vol}	<input type="text" value="1000"/>	mGy
Body accumulated upper limit DLP	<input type="text"/>	mGy*cm
Head accumulated upper limit CTDI _{vol}	<input type="text" value="1000"/>	mGy
Head accumulated upper limit DLP	<input type="text"/>	mGy*cm

Set the Dose Alert value in **Preferences** per region (head or body).

Dose Alert Setting alerts the user when accumulated CTDI_{vol} or DLP of an exam reaches the alert value.

If the Alert Value is exceeded when creating an Exam Card or while planning an exam, a Dose Alert message will display.



Acknowledging Notifications

Dose Notification

Attention: Scan 2 has a planned CTDI_{vol} of 48.3 mGy. This exceeds the recommended maximum of 5 mGy. DoseRight Index is 39.

Enter diagnostic reason:

If the CTDI_{vol} and/or DLP of a scan exceeds the set limit, the user will see this pop-up message. The scan will not start until:

- The user clicks **Confirm and proceed**; this will result in an entry in the Dose Log, or the user clicks **Go back and adjust scan parameters** in order to reduce the CTDI_{vol} and/or DLP below the set limit.
- The user may enter the diagnostic reason for exceeding the notification value, though this step is not requirement.

Note: If the scan parameters are adjusted so the notification values are not exceeded, a Dose Log entry will not be created.



Acknowledging Dose Alerts

Dose Alert - A dose alert value will be exceeded!

A dose alert value will be exceeded! The accumulated CTDIvol of the exam is 27.6 mGy. This accumulated value exceeds the upper limit of 5 mGy for head. High levels of radiation can be potentially injurious.

Enter user name: *

Enter diagnostic reason:

If the accumulated CTDI/ DLP Dose Alert setting is exceeded during an exam, the user will see this pop-up message. The scan will not start until:

- the User's name is entered; entering the diagnostic reason is optional.
- Click **Confirm and Proceed** to override the Alert warning, or click **Go back and adjust scan parameters**.

Note: An Optional Password can be enabled in **Preferences**. This password would be required when choosing **Confirm and Proceed**.

If the scan parameters are adjusted so the alert values are not exceeded, a Dose Log entry will not be created.



Turning off Dose Alert Feature

The screenshot shows a software interface for 'Dose Management'. Under the 'Dose Alert' section, there are two buttons: 'Enter Password' and 'Change Password'. Below these are four rows of settings, each with a text label, an input field, and a unit:

Setting	Input Field	Unit
Body accumulated upper limit CTDI _{vol}	<input type="text"/>	mGy
Body accumulated upper limit DLP	<input type="text"/>	mGy*cm
Head accumulated upper limit CTDI _{vol}	<input type="text"/>	mGy
Head accumulated upper limit DLP	<input type="text"/>	mGy*cm

CTDI_{vol} values are included in the factory default settings ; DLP values have not been set .

CTDI_{vol} values have been set at 1000mGy, which is consistent with FDA suggested values, and would deliver approximately half the dose associated with the onset of skin injury.

To Turn off **Dose Alerts**, remove the value from Dose Alert in **Preferences**.



Location of alert/notification log

The **Dose Log Viewer** can be accessed under Home in the **Utilities** tab



Utilities

- Log Viewer
- BugRep
- Backup Restore
- Voice Manager
- Dose Log Viewer**
- Enable Remote Access
- Resend Analyzer



Export to... Alert and Notification Values List

Study ID	Date	Time	Age Group	Protocol Name
155	06 Sep 2012	11:48 AM	Adult	Brain Perfusion

Dose Notification/Alert Text											User Name	Diagnostic Reason
Attention: Scan 2 has a planned DLP of 1304 mGy*cm. This exceeds the recommended maximum of 1200 mGy*cm. DoseRight Index is 20.											---	
Attention: Scan 2 has a planned CTDIVol of 328 mGy. This exceeds the recommended maximum of 250 mGy. DoseRight Index is 20.											---	

Accumulated Head CTDIVol	Accumulated Body CTDIVol	Accumulated Head DLP	Accumulated Body DLP	Body Alert Value CTDIVol	Body Alert Value DLP	Head Alert Value CTDIVol	Head Alert Value DLP
328	0	1312	0	1000	None	1000	None

Step Index	Step Type	Actual CTDIVol	Actual DLP	Dose Notification CTDIVol	Dose Notification DLP	mAs	Avg mAs	Min mAs	Max mAs	DoseRight	DoseRight Index	kV	Phantom Size
1	surview	0.1	4.2	None	None	---	---	---	---	No	---	120	CTDIVol Body Phantom 32cm
2	axial	328	1312	None	1200	208	---	---	---	Yes	20	80	CTDIVol Head Phantom 16cm

Study ID	Date	Time	Age Group	Protocol Name
158	06 Sep 2012	11:54 AM	Adult	Brain Perfusion

Dose Notification/Alert Text											User Name	Diagnostic Reason
Attention: Scan 2 has a planned DLP of 1272 mGy*cm. This exceeds the recommended maximum of 1200 mGy*cm. DoseRight Index is 20.											---	
Attention: Scan 2 has a planned CTDIVol of 320 mGy. This exceeds the recommended maximum of 250 mGy. DoseRight Index is 20.											---	

Accumulated Head CTDIVol	Accumulated Body CTDIVol	Accumulated Head DLP	Accumulated Body DLP	Body Alert Value CTDIVol	Body Alert Value DLP	Head Alert Value CTDIVol	Head Alert Value DLP
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- All alert and notification events are kept in the Dose Log for one year.
- The user may export the Dose Log to a removable disk. To export, click on the **Export to...** button in the top left corner of the **Dose Log Viewer**.
- The user may display all alert and notification values set on the scanner via the Dose Log Viewer screen.