

# High Resolution Chest 16 Emotion

<b>Indications</b>	Cough, interstitial lung disease, emphysema, bronchiectasis, asbestosis, restrictive lung disease					
<b>Diagnostic Task</b>	Detect nodules or masses and characterize their size and shape, abnormal fluid collections in chest					
<b>Scan mode</b>	Helical/Axial					
<b>Position/Landmark</b>	Head first-Supine 1cm to shoulders/inspiration					
<b>Topogram</b>	AP 50mA 120kV130					
<b>kVp/Reference mass</b>	helical120kv 120mas/axial 130kv/140mas					
<b>Rotation time/pitch</b>	helical 0.5/0.8 axial full 0.5s					
<b>Detector Configuration</b>	helical 16x1.2/ axial 4x0.6					
<b>Table Speed/Increment</b>	helical 19.2 /axial cycle time 3.0s					
<b>Dose reduction</b>	CareDose 4D					
<b>Allowed CTDI ranges*</b>	7mGy-50mGy					
<b>XR29 Dose Notification value</b>	50mGy					
<b>Helical Set Routine Chest</b>	body	thickness		recon		
	recon	part	spacing	kernel	window	recon destination
	1	chest	2mmx 2mm	31medium smooth	mediastinum	pac
	2	lung	1.5mmx 1.5mm	70very sharp	lung	pac
	3	thin chest	1.5mmx.8mm	31medium smooth	mediastinum	super D
	4	coronal chest	2mmx2mm	31medium smooth	mediastinum	pac
	5	sag chest	2mmx2mm	31medium smooth	mediastinum	pac
6	axial <b>MIP</b> lung	10mmx2mm	b20f smooth	lung	pac	
<b>1ST axial set supine expiration</b>	body	thickness		recon		
	recon	part	spacing	kernel	window	recon destination
1	Bilat Lung high res	1.2mmx20mm	70very sharp	Lung	pac	
<b>2ND axial set prone inspiration</b>	body	thickness		recon		
	recon	part	spacing	kernel	window	recon destination
1	Bilat Lung high res	1.2mmx20mm	70very sharp	Lung	pac	
<b>Scan Start/end location</b>	lung apices lung base					
<b>DFOV</b>	35cm on full chest/FOV limited to just lungs on lung views					
	Approximate Values for CTDIvol					
	Patient size	weight(kg)	weight(lbs)	CTDIvol(mGy)		
	SMALL	50-70	110-155	4-10		
	AVERAGE	70-90	155-200	8-16		
	LARGE	90-120	200-265	14-22		
<b>NOTE*</b>	*The AAPM recommended NEMA XR29 Dose Notification Value for an adult torso is 50mGy. Dose Notification levels less than the AAPM recommended can be set. The maximum CTDI vol should match the dose notification value. Exams with CTDI vol values less than the minimum allowed range should not be performed unless approved by a radiologist.					

