

LOW DOSE CHEST Screening WITHOUT 16 Sensation

Indications	Majority of patients screened are between the ages of 55 and 80, Have a smoking history of 30 pack years					
	If no longer smoking, stopped smoking in the past 15 years, Persons who have undergone chest CT within 12 months should be excluded					
	Screening should be discontinued once a person has not smoked for 15 years or develops a health problem that substantially					
	limits life expectancy or the ability or willingness to have curative lung surgery.					
Diagnostic Task	Detect abnormalities that may represent lung cancer and may require further diagnostic evaluation. Detect nodules and masses.					
	For individuals with no known signs or symptoms of lung cancer that have appropriate risk factors, such as those recommended by					
	professional societies and health care organizations. See the ACR LungCancer Screening Resources webpage for more information.					
Scan mode	Helical					
Position/Landmark	Head -Supine Craniocaudal					
Topogram	AP 120 kv 30mA					
kVp/Reference mass	120kVp 35mas/Care Dose on					
Rotation time/pitch	0.5/pitch 1.2					
Detector Configuration	16x0.75					
Table Speed/Increment	14.4					
Dose reduction	CareDose 4D					
Allowed CTDI ranges*	0.25 mGy to 8 mGy					
XR29 Dose Notification value	8 mGy					
Helical Set	recon	body part	thickness spacing	kernel	window	recon destination
	1	chest	2mmx 2mm	31medium smooth	mediastinum	pacs
	2	lung	1.5mmx 1.5mm	70very sharp	lung	pacs
	3	lung	1mmx.8mm	B20f smooth	lung	mpr
	4	soft tissue	1mmx.8mm	31medium smooth	mediastinum	mpr
	5	coronal chest	2mmx2mm	31medium smooth	mediastinum	pacs
	6	sag chest	2mmx2mm	31medium smooth	mediastinum	pacs
	7	axial MIP lung	10mmx2mm	B20f smooth	lung	pacs
Scan Start/end location	lung apex lung base					
DFOV	35cm decrease appropriately					
IV contrast volume/type	na					
Scan delay	na					
Approximate Values for CT DIvol						
	Patient size	weight(kg)	weight(lbs)	CTDIvol(mGy)		
	SMALL	50-70	110-155	0.25-2.8		
	AVERAGE	70-90	155-200	0.5-4.3		
	LARGE	90-120	200-265	1.0-5.6		
	*The ACR Reference Dose for a "standard size patient" (by definition, is approximately 5' 7" and 155 lbs or 170 cm and 70 kg with a BMI of about 24) is a CT DIvol of less than 3 mGy.					
	*There is no AAPM recommended NEMA XR29 Dose Notification Value for lung screening scans. In general, lung screening exams should not have a CT DIvol greater than 7 mGy. Exams with CT DIvol values less than the minimum allowed range should not be performed unless approved by a radiologist.					