



NQI #1 Iatrogenic Pneumothorax in Neonates

Provider-Level Indicator

Numerator

Discharges among cases meeting the inclusion and exclusion rules for the denominator with ICD-9-CM code for iatrogenic pneumothorax in any secondary diagnosis field.

ICD-9-CM Iatrogenic Pneumothorax diagnosis code:

5121 IATROGENIC PNEUMOTHORAX

Denominator

All surgical and medical discharges of neonates defined by specific DRGs or MS-DRGs.

See *Pediatric Quality Indicators Appendices*:

- Appendix B – Surgical Discharge DRGs
- Appendix C – Surgical Discharge MS-DRGs
- Appendix D – Medical Discharge DRGs
- Appendix E – Medical Discharge MS-DRGs
- Appendix I – Definitions of Neonate, Newborn, Normal Newborn, and Outborn
- Appendix L – Low Birth Weight Categories

Include cases:

- neonates with birth weight less than 2500 grams

Exclude cases:

- neonates with birth weight less than 500 grams (Birth Weight Category 1)
- with ICD-9-CM code for iatrogenic pneumothorax in the principal diagnosis field
- with any diagnosis code of chest trauma or pleural effusion
- with an ICD-9-CM code of thoracic surgery, lung or pleural biopsy diaphragmatic surgery repair , OR cardiac surgery
- normal newborn
- MDC 14 (pregnancy, childbirth, and puerperium)

ICD-9-CM Chest Trauma diagnosis codes:

80700 FRACTURE RIB NOS-CLOSED

80701 FRACTURE ONE RIB-CLOSED

80702	FRACTURE TWO RIBS-CLOSED	86221	BRONCHUS INJURY-CLOSED
80703	FRACTURE THREE RIBS-CLOS	86222	ESOPHAGUS INJURY-CLOSED
80704	FRACTURE FOUR RIBS-CLOSE	86229	INTRATHORACIC INJ NEC-CL
80705	FRACTURE FIVE RIBS-CLOSE	86231	BRONCHUS INJURY-OPEN
80706	FRACTURE SIX RIBS-CLOSED	86232	ESOPHAGUS INJURY-OPEN
80707	FRACTURE SEVEN RIBS-CLOS	86239	INTRATHORACIC INJ NEC-OPEN
80708	FX EIGHT/MORE RIB-CLOSED	8628	INTRATHORACIC INJ NOS-CL
80709	FX MULT RIBS NOS-CLOSED	8629	INTRATHORACIC INJ NOS-OPEN
80710	FRACTURE RIB NOS-OPEN	8750	OPEN WOUND OF CHEST
80711	FRACTURE ONE RIB-OPEN	8751	OPEN WOUND CHEST-COMPL
80712	FRACTURE TWO RIBS-OPEN	8760	OPEN WOUND OF BACK
80713	FRACTURE THREE RIBS-OPEN	8761	OPEN WOUND BACK-COMPL
80714	FRACTURE FOUR RIBS-OPEN	9010	INJURY THORACIC AORTA
80715	FRACTURE FIVE RIBS-OPEN	9011	INJ INNOMIN/SUBCLAV ART
80716	FRACTURE SIX RIBS-OPEN	9012	INJ SUPERIOR VENA CAVA
80717	FRACTURE SEVEN RIBS-OPEN	9013	INJ INNOMIN/SUBCLAV VEIN
80718	FX EIGHT/MORE RIBS-OPEN	90140	INJ PULMONARY VESSEL NOS
80719	FX MULT RIBS NOS-OPEN	90141	INJURY PULMONARY ARTERY
8072	FRACTURE OF STERNUM-CLOS	90142	INJURY PULMONARY VEIN
8073	FRACTURE OF STERNUM-OPEN	90181	INJ INTERCOSTAL ART/VEIN
8074	FLAIL CHEST	90182	INJ INT MAMMARY ART/VEIN
8075	FX LARYNX/TRACHEA-CLOSED	90183	INJ MULT THORACIC VESSEL
8076	FX LARYNX/TRACHEA-OPEN	90189	INJ THORACIC VESSEL NEC
8090	FRACTURE TRUNK BONE-CLOS	9019	INJ THORACIC VESSEL NOS
8091	FRACTURE TRUNK BONE-OPEN	9110	ABRASION TRUNK
8600	TRAUM PNEUMOTHORAX-CLOSE	9111	ABRASION TRUNK-INFECTED
8601	TRAUM PNEUMOTHORAX-OPEN	9118	SUPERFIC INJU TRUNK NEC
8602	TRAUM HEMOTHORAX-CLOSED	9119	SUPERFIC INJU TRUNK NEC-INF
8603	TRAUM HEMOTHORAX-OPEN	9220	CONTUSION OF BREAST
8604	TRAUM PNEUMOHEMOTHOR-CL	9221	CONTUSION OF CHEST WALL
8605	TRAUM PNEUMOHEMOTHOR-OPN	9223	BACK CONTUSION
86100	HEART INJURY NOS-CLOSED	92231	BACK CONTUSION
86101	HEART CONTUSION-CLOSED	92233	INTERSCPLR REG CONTUSION
86102	HEART LACERATION-CLOSED	9228	MULIPLE CONTUSION TRUNK
86103	HEART CHAMBER LACERAT-CL	9229	CONTUSION OF TRUNK
86110	HEART INJURY NOS-OPEN	92611	CRUSHING INJURY BACK
86111	HEART CONTUSION-OPEN	92619	CRUSHING INJ TRUNK NEC
86112	HEART LACERATION-OPEN	9268	MULT CRUSHING INJ TRUNK
86113	HEART CHAMBER LACER-OPN	9269	CRUSHING INJ TRUNK NOS
86120	LUNG INJURY NOS-CLOSED	9290	CRUSH INJ MULT SITE NEC
86121	LUNG CONTUSION-CLOSED	9299	CRUSHING INJURY NOS
86122	LUNG LACERATION-CLOSED	9541	INJ SYMPA NERVE NEC
86130	LUNG INJURY NOS-OPEN	9548	INJURY TRUNK NERVE NEC
86131	LUNG CONTUSION-OPEN	9549	INJURY TRUNK NERVE NOS
86132	LUNG LACERATION-OPEN	95911	INJURY OF CHEST WALL NEC
8620	DIAPHRAGM INJURY-CLOSED	95919	TRUNK INJURY-SITES NEC
8621	DIAPHRAGM INJURY-OPEN	9599	INJURY-SITE NOS

ICD-9-CM Pleural Effusion diagnosis codes:

0101	TUBERCULOUS PLEURISY IN PRIMARY PROGRESSIVE TUBERCULOSIS	01014	TPIPPT, TUBERCLE BACILI NOT FOUND BY MICROSCOPY BUT BY BACTERIAL CULTURE
01010	TUBERCULOUS PLEURISY IN PRIMARY PROGRESSIVE TUBERCULOSIS, UNSPECIFIED	01015	TPIPPT, TUBERCLE BACILI NOT FOUND BY BACTERIOLOGICAL BUT CONFIRMED HISTOLOGICALLY
01011	TPIPPT, BACTERIAL OR HISTOLOGICAL EXAM NOT DONE	01016	TPIPPT, TUBERCLE BACILI NOT FOUND BY BACTERIOLOGICAL OR HISTOLOGICAL BUT CONFIRMED OTHER METHODS
01012	TPIPPT, BACTERIAL OR HISTOLOGICAL EXAM UNKNOWN	0117	TUBRCULOUS PNEUMOTHORAX
01013	TPIPPT, TUBERCLE BACILI FOUND BY MICROSCOPY		

01170	TUBRCULOUS PNEUMOTHORAX, UNSPECIFIED	01203	TP, TUBERCLE BACILI FOUND BY MICROSCOPY
01171	TPNEU, BACTERIAL OR HISTOLOGICAL EXAM NOT DONE	01204	TP, TUBERCLE BACILI NOT FOUND BY MICROSCOPY BUT BY BACTERIAL CULTURE
01172	TPNEU, BACTERIAL OR HISTOLOGICAL EXAM UNKNOWN	01205	TP, TUBERCLE BACILI NOT FOUND BY BACTERIOLOGICAL BUT CONFIRMED HISTOLOGICALLY
01173	TPNEU, TUBERCLE BACILI FOUND BY MICROSCOPY	01206	TP, TUBERCLE BACILI NOT FOUND BY BACTERIOLOGICAL OR HISTOLOGICAL BUT CONFIRMED OTHER METHODS
01174	TPNEU, TUBERCLE BACILI NOT FOUND BY MICROSCOPY BUT BY BACTERIAL CULTURE	1972	SECOND MALIG NEO PLEURA
01175	TPNEU, TUBERCLE BACILI NOT FOUND BY BACTERIOLOGICAL BUT CONFIRMED HISTOLOGICALLY	5111	WITH EFUSION, WITH MENTION OF A BACTERIAL CAUSE OTHER THAN TUBERCULOSIS
01176	TPENU, TUBERCLE BACILI NOT FOUND BY BACTERIOLOGICAL OR HISTOLOGICAL BUT CONFIRMED OTHER METHODS	5118	OTHER SPECIFIED FORM OF EFFUSION, EXCEPT TUBERCULOUS
0120	TUBERCULOUS PLEURISY	51181	MALIGNANT PLEURAL EFFUSION OCT08-
01200	TUBERCULOUS PLEURISY, UNSPECIFIED	51189	OTHER SPECIFIED FORMS OF EFFUSION, EXCEPT TUBERCULOSIS OCT08-
01201	TP, BACTERIAL OR HISTOLOGICAL EXAM NOT DONE	5119	UNSPECIFIED PLEURAL EFFUSION
01202	TP, BACTERIAL OR HISTOLOGICAL EXAM UNKNOWN		

ICD-9-CM Thoracic Surgery procedure codes:

0522	SYMPATHECTOMY CERVICAL	3229	OTHER LOCAL EXCISION OR DESTRUCTION OF LESION OR TISSUE OF LUNG
0523	SYMPATHECTOMY LUMBAR	323	SEGMENTAL RESECTION OF LUNG
0529	OTHER SYMPATHECTOMY AND GANGLIONECTOMY	3230	THORAC SEG LUNG RESECT
0780	THYMECTOMY, NOT OTHERWISE SPECIFIED	3239	OTH SEG LUNG RESECT NOS
0781	OTHER PARTIAL EXCISION OF THYMUS	324	LOBECTOMY OF LUNG
0782	OTHER TOTAL EXCISION OF THYMUS	3241	THORAC LOBECTOMY LUNG
0783	THORACOSCOPIC PARTIAL EXCISION OF THYMUS	3249	OTHER LOBECTOMY OF LUNG
0784	THORACOSCOPIC TOTAL EXCISION OF THYMUS	325	COMPLETE PNEUMONECTOMY
3121	MEDIASTINAL TRACHEOSTOMY	3250	THORACOSPC PNEUMONECTOMY
3145	OPEN BIOPSY OF LARYNX OR TRACHEA	3259	OTHER PNEUMONECTOMY NOS
3173	CLOSURE OF OTHER FISTULA OF TRACHEA	326	RADICAL DISSECTION OF THORACIC STRUCTURES
3179	OTHER REPAIR AND PLASTIC OPERATIONS ON TRACHEA	329	OTHER EXCISION OF LUNG
3199	OTHER OPERATIONS ON TRACHEA	330	INCISION OF BRONCHUS
3209	OTHER LOCAL EXCISION OR DESTRUCTION OF LESION OR TISSUE OF BRONCHUS	331	INCISION OF LUNG
321	OTHER EXCISION OF BRONCHUS	3320	THORACOSCOPC LUNG BIOPSY
3220	THORAC EXC LUNG LESION	3325	OPEN BIOPSY OF BRONCHUS
<u>Local excision or destruction of lesion or tissue of lung</u>		3326	CLOSE [PERCUTANEOUS][NEEDLE] BIOPSY OF LUNG
3221	PLICATION OF EMPHYSEMATIOUS BLEB	3327	CLOSED ENDOSCOPIC BIOPSY OF LUNG
3222	LUNG VOLUME REDUCTION SURGERY	3328	OPEN BIOPSY OF LUNG
3223	OPEN ABLTN LUNG LES/TISS OCT06-	3331	DESTRUCTION OF PHRENIC NERVE FOR COLLAPSE OF LUNG (NO LONGER PERFORMED)
3224	PERC ABLTN LUNG LES/TISS OCT06-	3332	ARTIFICIAL PNEUMOTHORAX FOR COLLAPSE OF LUNG
3225	THOR ABLTN LUNG LES/TISS OCT06-	3334	THORACOPLASTY
3226	ABLTN LUNG TISS NEC/NOS OCT06-	3339	OTHER SURGICAL COLLAPSE OF LUNG
3228	ENDOSCOPIC EXCISION OR DESTRUCTION OF LESION OR TISSUE OF LUNG	<u>Repair and plastic operation on lung and bronchus</u>	
		3341	SUTURE OF LACERATION OF BRONCHUS

3342	CLOSURE OF BRONCHIAL FISTULA	3481	EXCISION OF LESION OR TISSUE OF DIAPHRAGM
3343	CLOSURE OF LACERATION OF LUNG	3482	SUTURE OF LACERATION OF DIAPHRAGM
3348	OTHER REPAIR AND PLASTIC OPERATIONS ON BRONCHUS	3483	CLOSURE OF FISTULA OF DIAPHRAGM
3349	OTHER REPAIR AND PLASTIC OPERATIONS ON LUNG	3484	OTHER REPAIR OF DIAPHRAGM
<hr/>		3485	IMPLANTATION OF DIAPHRAGMATIC PACEMAKER
<u>Lung transplant</u>		3489	OTHER OPERATIONS ON DIAPHRAGM
335	LUNG TRANSPLANTATION	3493	REPAIR OF PLEURA
3350	LUNG TRANSPLANTATION, NOS	3499	OTHER OPERATIONS ON THORAX, OTHER
3351	UNILATERAL LUNG TRANSPLANTATION	<hr/>	
3352	BILATERAL LUNG TRANSPLANTATION	<u>Operations on thoracic duct</u>	
336	COMBINED HEART-LUNG TRANSPLANTATION	4061	CANNULATION OF THORACIC DUCT
3392	LIGATION OF BRONCHUS	4062	FISTULIZATION OF THORACIC DUCT
3393	PUNCTURE OF LUNG	4063	CLOSURE OF FISTULA OF THORACIC DUCT
3398	OTHER OPERATIONS ON BRONCHUS	4064	LIGATION OF THORACIC DUCT
3399	OTHER OPERATIONS ON LUNG	4069	OTHER OPERATIONS ON THORACIC DUCT
3329	OTHER DIAGNOSTIC PROCEDURE ON LUNG AND BRONCHUS	<hr/>	
3333	PNEUMOPERITONEUM FOR COLLAPSE OF LUNG	<u>Esophagotomy</u>	
3401	INCISION OF CHEST WALL	4201	INCISION OF ESOPHAGEAL WEB
3402	EXPLORATORY THORACOTOMY	4209	OTHER INCISION OF ESOPHAGUS
3403	REOPENING OF RECENT THORACOTOMY SITE	4210	ESOPHAGOSTOMY, NOS
3405	CREATION OF PLEUROPERITONEAL SHUNT	4211	CERVICAL ESOPHAGOSTOMY
3409	OTHER INCISION OF PLEURA	4212	EXTERIORIZATION OF ESOPHAGEAL POUCH
341	INCISION OF MEDIASTINUM	4219	OTHER EXTERNAL FISTULIZATION OF ESOPHAGUS
<hr/>		4221	OPERATIVE ESOPHAGOSCOPY BY INCISION
<u>Diagnostic procedures on chest wall, pleura, mediastinum, and diaphragm</u>		4225	OPEN BIOPSY OF ESOPHAGUS
3420	THORACOSCOPIC PLEURAL BX	4231	LOCAL EXCISION OF ESOPHAGEAL DIVERTICULUM
3421	TRANSPLEURAL THORACOSCOPY	4232	LOCAL EXCISION OF OTHER LESION OR TISSUE OF ESOPHAGUS
3422	MEDIASTINOSCOPY	<hr/>	
3423	BIOPSY OF CHEST WALL	<u>Excision of esophagus</u>	
3424	PLEURAL BIOPSY	4239	OTHER DESTRUCTION OF LESION OR TISSUE OF ESOPHAGUS
3425	CLOSED [PERCUTANEOUS][NEEDLE] BIOPSY OF MEDIASTINUM	4240	ESOPHAGECTOMY, NOS
3426	OPEN BIOPSY OF MEDIASTINUM	4241	PARTIAL ESOPHAGECTOMY
3427	BIOPSY OF DIAPHRAGM	4242	TOTAL ESOPHAGECTOMY
3428	OTHER DIAGNOSTIC PROCEDURES ON CHEST WALL, PLEURA, AND DIAPHRAGM	<hr/>	
3429	OTHER DIAGNOSTIC PROCEDURES ON MEDIASTINUM	<u>Intrathoracic anastomosis of exophagus</u>	
343	EXCISION OR DESTRUCTION OF LESION OR TISSUE OF MEDIASTINUM	4251	INTRATHORACIC ESOPHAGUESOPHAGOSTOMY
344	EXCISION OR DESTRUCTION OF LESION OF CHEST WALL	4252	INTRATHORACIC ESOPHAGOGASTROSTOMY
3451	DECORTICATION OF LUNG	4253	INTRATHORACIC ESOPHAGEAL ANASTOMOSIS W/ INTERPOSITION OF SMALL BOWEL
3452	THORACOSCOPIC DECORT LUNG	4254	OTHER INTRATHORACIC ESOPHAGOENTEROSTOMY
3459	OTHER EXCISION OF PLEURA	4255	INTRATHORACIC ESOPHAGEAL ANASTOMOSIS W/ INTERPOSITION OF COLON
<hr/>		4256	OTHER INTRATHORACIC ESOPHAGOCOLOSTOMY
<u>Repair of chest wall</u>		4258	INTRATHORACIC ESOPHAGEAL ANASTOMOSIS W/ OTHER INTERPOSITION
3471	SUTURE OF LACERATION OF CHEST WALL	4259	OTHER INTRATHORACIC ANASTOMOSIS OF ESOPHAGUS
3472	CLOSURE OF THORACOSTOMY		
3473	CLOSURE OF OTHER FISTULA OF THORAX		
3474	REPAIR OF PECTUS DEFORMITY		
3479	OTHER REPAIR OF CHEST WALL		
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<u>Operations on diaphragm</u>			

<u>Antesternal anastomosis</u>			
4261	ANTESTERNAL ESOPHAGOESOPHAGOSTOMY	4281	INSERTION OF PERMANENT TUBE INTO ESOPHAGUS
4262	ANTESTERNAL ESOPHAGOGASTROSTOMY	4282	SUTURE OF LACERATION OF ESOPHAGUS
4263	ANTESTERNAL ESOPHAGEAL ANASTOMOSIS W/ INTERPOSITION OF SMALL BOWEL	4283	CLOSURE OF ESOPHAGOSTOMY
4264	OTHER ANTESTERNAL ESOPHAGOENTEROSTOMY	4284	REPAIR OF ESOPHAGEAL FISTULA, NEC
4265	ANTESTERNAL ESOPHAGEAL ANASTOMOSIS W/ INTERPOSITION OF COLON	4285	REPAIR OF ESOPHAGEAL STRICTURE
4266	OTHER ANTESTERNAL ESOPHAGOCOLOSTOMY	4286	PRODUCTION OF SUBCUTANEOUS TUNNEL W/O ESOPHAGEAL ANASTOMOSIS
4268	OTHER ANTESTERNAL ESOPHAGEAL ANASTOMOSIS W/ INTERPOSITION	4287	OTHER GRAFT OF ESOPHAGUS
4269	OTHER ANTESTERNAL ANASTOMOSIS OF ESOPHAGUS	4289	OTHER REPAIR OF ESOPHAGUS
<u>Other repair of esophagus</u>		4465	ESOPHAGOGASTROPLASTY
427	ESOPHAGOMYOTOMY	4466	OTHER PROCEDURES FOR CREATION OF ESOPHAGOGASTRIC SPHINCTERIC COMPETENCE
		8104	DORSAL AND DORSO-LUMBAR FUSION, ANTERIOR TECHNIQUE
		8134	REFUSION OF DORSAL AND DORSOLUMBAR SPINE, ANTERIOR TECHNIQUE

ICD-9-CM Lung or Pleural Biopsy procedure codes:

3326	CLOSED [PERCUTANEOUS] [NEEDLE] BIOPSY OF LUNG	3328	OPEN BIOPSY OF LUNG
		3424	PLEURAL BIOPSY

ICD9-CM Diaphragmatic Surgery Repair codes:

537	ABD REPAIR-DIAPHR HERNIA	5380	THOR REP-DIAPH HERN NOS
5371	LAPAROSCOPIC REPAIR OF DIAPHRAGMATIC HERNIA, ABDOMINAL APPROACH OCT08-	5381	DIAPHRAGMATIC PPLICATION
5372	OTHER AND OPEN REPAIR OF DIAPHRAGMATIC HERNIA, ABDOMINAL APPROACH OCT08-	5382	PARASTERN HERNIA REPAIR
5375	REPAIR OF DIAPHRAGMATIC HERNIA, ABDOMINAL APPROACH, NOS OCT08-	5583	LAPAROSCOPIC REPAIR OF DIAPHRAGMATIC HERNIA, WITH THORACIC APPROACH OCT08-
		5584	OTHER AND OPEN REPAIR OF DIAPHRAGMATIC HERNIA, WITH THORACIC APPROACH OCT08-

ICD9-CM Cardiac Procedure codes:

3510	OPEN HEART VALVULOPLASTY WITHOUT REPLACEMENT, UNSPECIFIED VALVE	3522	OTHER REPLACEMENT OF AORTIC VALVE
3511	OPEN HEART VALVULOPLASTY OF AORTIC VALVE WITHOUT REPLACEMENT	3523	REPLACEMENT OF MITRAL VALVE WITH TISSUE GRAFT
3512	OPEN HEART VALVULOPLASTY OF MITRAL VALVE WITHOUT REPLACEMENT	3524	OTHER REPLACEMENT OF MITRAL VALVE
3513	OPEN HEART VALVULOPLASTY OF PULMONARY VALVE WITHOUT REPLACEMENT	3525	REPLACEMENT OF PULMONARY VALVE WITH TISSUE GRAFT
3514	OPEN HEART VALVULOPLASTY OF TRICUSPID VALVE WITHOUT REPLACEMENT	3526	OTHER REPLACEMENT OF PULMONARY VALVE
3520	REPLACEMENT OF UNSPECIFIED HEART VALVE	3527	REPLACEMENT OF TRICUSPID VALVE WITH TISSUE GRAFT
3521	REPLACEMENT OF AORTIC VALVE WITH TISSUE GRAFT	3528	OTHER REPLACEMENT OF TRICUSPID VALVE
		3531	OPERATIONS ON PAPILLARY MUSCLE
		3532	OPERATIONS ON CHORDAE TENDINEAE
		3533	ANNULOPLASTY
		3534	INFUNDIBULECTOMY
		3535	OPERATIONS ON TRABECULAE CARNEAE CORDIS

3539	OPERATIONS ON OTHER STRUCTURES ADJACENT TO VALVES OF HEART	3613	(AORTO)CORONARY BYPASS OF THREE CORONARY ARTERIES
3550	REPAIR OF UNSPECIFIED SEPTAL DEFECT OF HEART WITH PROSTHESIS	3614	(AORTO)CORONARY BYPASS OF FOUR OR MORE CORONARY ARTERIES
3551	REPAIR OF ATRIAL SEPTAL DEFECT WITH PROSTHESIS, OPEN TECHNIQUE	3615	SINGLE INTERNAL MAMMARY-CORONARY ARTERY BYPASS
3553	REPAIR OF VENTRICULAR SEPTAL DEFECT WITH PROSTHESIS, OPEN TECHNIQUE	3616	DOUBLE INTERNAL MAMMARY-CORONARY ARTERY BYPASS
3554	REPAIR OF ENDOCARDIAL CUSHION DEFECT WITH PROSTHESIS	3617	ABDOMINAL -CORONARY ARTERY BYPASS
3560	REPAIR OF UNSPECIFIED SEPTAL DEFECT OF HEART WITH TISSUE GRAFT	3619	OTHER BYPASS ANASTOMOSIS FOR HEART REVASCULARIZATION
3561	REPAIR OF ATRIAL SEPTAL DEFECT WITH TISSUE GRAFT	362	HEART REVASCULARIZATION BY ARTERIAL IMPLANT
3562	REPAIR OF VENTRICULAR SEPTAL DEFECT WITH TISSUE GRAFT	3631	OPEN CHEST TRANSMYOCARDIAL REVASCULARIZATION
3563	REPAIR OF ENDOCARDIAL CUSHION DEFECT WITH TISSUE GRAFT	3632	OTHER TRANSMYOCARDIAL REVASCULARIZATION
3570	OTHER AND UNSPECIFIED REPAIR OF UNSPECIFIED SEPTAL DEFECT OF HEART	3639	OTHER HEART REVASCULARIZATION
3571	OTHER AND UNSPECIFIED REPAIR OF ATRIAL SEPTAL DEFECT	3691	REPAIR OF ANEURYSM OF CORONARY VESSEL
3572	OTHER AND UNSPECIFIED REPAIR OF VENTRICULAR SEPTAL DEFECT	3699	OTHER OPERATIONS ON VESSELS OF HEART
3573	OTHER AND UNSPECIFIED REPAIR OF ENDOCARDIAL CUSHION DEFECT	370	PERICARDIOCENTESIS
3581	TOTAL REPAIR OF TETRALOGY OF FALLOT	3710	INCISION OF HEART, NOT OTHERWISE SPECIFIED
3582	TOTAL REPAIR OF TOTAL ANOMALOUS PULMONARY VENOUS CONNECTION	3711	CARDIOTOMY
3583	TOTAL REPAIR OF TRUNCUS ARTERIOSUS	3712	PERICARDIOTOMY
3584	TOTAL CORRECTION OF TRANSPOSITION OF GREAT VESSELS, NOT ELSEWHERE CLASSIFIED	3731	PERICARDIECTOMY
3591	INTERATRIAL TRANSPOSITION OF VENOUS RETURN	3732	EXCISION OF ANEURYSM OF HEART
3592	CREATION OF CONDUIT BETWEEN RIGHT VENTRICLE AND PULMONARY ARTERY	3733	EXCISION OR DESTRUCTION OF OTHER LESION OR TISSUE OF HEART, OPEN APPROACH
3593	CREATION OF CONDUIT BETWEEN LEFT VENTRICLE AND AORTA	3735	PARTIAL VENTRICULECTOMY
3594	CREATION OF CONDUIT BETWEEN ATRIUM AND PULMONARY ARTERY	3736	EXCISION OR DESTRUCTION OF LEFT ATRIAL APPENDAGE (LAA) OCT08-
3595	REVISION OF CORRECTIVE PROCEDURE ON HEART	3741	IMPLANTATION OF PROSTHETIC CARDIAC SUPPORT DEVICE AROUND THE HEART
3598	OTHER OPERATIONS ON SEPTA OF HEART	3749	OTHER REPAIR OF HEART AND PERICARDIUM
3599	OTHER OPERATIONS ON VALVES OF HEART	3751	HEART TRANSPLANTATION
3603	OPEN CHEST CORONARY ARTERY ANGIOPLASTY	3752	IMPLANTATION OF TOTAL REPLACEMENT HEART SYSTEM
3610	AORTOCORONARY BYPASS FOR HEART REVASCULARIZATION, NOT OTHERWISE SPECIFIED	3753	REPLACEMENT OF REPAIR OF THORACIC UNIT OF TOTAL REPLACEMENT HEART SYSTEM
3611	(AORTO)CORONARY BYPASS OF ONE CORONARY ARTERY	3754	REPLACEMENT OR REPAIR OF OTHER IMPLANTABLE COMPONENT OF TOTAL REPLACEMENT HEART SYSTEM
3612	(AORTO)CORONARY BYPASS OF TWO CORONARY ARTERIES	3755	REMOVAL OF INTERNAL BIVENTRICULAR HEART REPLACEMENT SYSTEM OCT08-
		3760	IMPLANTATION OR INSERTION OF BIVENTRICULAR EXTERNAL HEART ASSIST SYSTEM OCT08-
		3761	IMPLANT OF PULSATION BALLOON
		3762	INSERTION OF NON-IMPLANTABLE HEART ASSIST SYSTEM
		3763	REPAIR OF HEART ASSIST SYSTEM
		3764	REMOVAL OF HEART ASSIST SYSTEM

3765	IMPLANT OF EXTERNAL HEART ASSIST SYSTEM	3865	EXCISION OF LESION OTHER THORACIC VESSEL
3766	INSERTION OF IMPLANTABLE HEART ASSIST SYSTEM	3884	LIGATION , DIVISION OF AORTA
3767	IMPLANTATION OF CARDIOMYOSTIMULATION SYSTEM	3885	LIGATION, DIVISION OF OTHER THORACIC VESSELS
3791	OPEN CHEST CARDIAC MASSAGE	390	SYSTEMIC TO PULMONARY ARTERY SHUNT
3804	INCISION OF VESSEL, AORTA	3921	CAVAL-PULMONARY ARTERY ANASTOMOSIS
3805	INCISION OF VESSEL, OTHER THORACIC	3922	AORTA-SUBCLAVIAN-CAROTID BYPASS
3844	RESECTION OF ABDOMINAL AORTA WITH GRAFT REPLACEMENT	3923	OTHER INTRATHORACIC VASCULAR SHUNT OR BYPASS
3845	RESECTION OF THORACIC VESSEL WITH GRAFT REPLACEMENT		
3864	EXCISION OF LESION OF AORTA		