

STS General Thoracic Surgery Data Summary

January 2002 - June 2003 Procedures

All patients

Number of operations submitted, discharge mortality, and 30-day mortality, by year

| Year | Operations Submitted | Discharge Mortality | | 30-Day Mortality | |
|-------|----------------------|---------------------|------|------------------|------|
| | | # / Eligible | % | # / Eligible | % |
| 2002 | 2,039 | 73 / 2,027 | 3.6% | 58 / 743 | 7.8% |
| 2003 | 2,496 | 60 / 2,323 | 2.6% | 53 / 985 | 5.4% |
| Total | 4,535 | 133 / 4,350 | 3.1% | 111 / 1,728 | 6.4% |

Primary procedure (N = 4,535), 25 Most Frequent

| Procedure | Incidence | | Discharge Mortality | | 30-Day Mortality | |
|--------------------------------------|-----------|----------|---------------------|-------|------------------|-------|
| | # | % of all | # / Eligible | % | # / Eligible | % |
| Lobectomy | 658 | 14.5 | 8 / 633 | 1.3% | 4 / 322 | 1.2% |
| Wedge Resection, single | 433 | 9.5 | 12 / 425 | 2.8% | 9 / 177 | 5.1% |
| Mediastinoscopy | 334 | 7.4 | 1 / 325 | 0.3% | 1 / 100 | 1.0% |
| Wedge Resection, multiple | 296 | 6.5 | 9 / 289 | 3.1% | 6 / 116 | 5.2% |
| [Missing data] | 243 | 5.4 | 9 / 210 | 4.3% | 9 / 84 | 10.7% |
| Resection, esophagus (esophagectomy) | 216 | 4.8 | 13 / 210 | 6.2% | 4 / 65 | 6.2% |
| Flexible Bronchoscopy | 206 | 4.5 | 5 / 204 | 2.5% | 5 / 28 | 17.9% |
| Pleurodesis | 123 | 2.7 | 6 / 116 | 5.2% | 8 / 50 | 16.0% |
| Decortication | 105 | 2.3 | 6 / 97 | 6.2% | 5 / 49 | 10.2% |
| Other Tracheobronchial procedure | 87 | 1.9 | 0 / 86 | 0.0% | 0 / 13 | 0.0% |
| Segmentectomy | 87 | 1.9 | 1 / 75 | 1.3% | 1 / 33 | 3.0% |
| Tracheostomy | 82 | 1.8 | 14 / 81 | 17.3% | 7 / 34 | 20.6% |
| Other Lung procedure | 79 | 1.7 | 7 / 79 | 8.9% | 7 / 50 | 14.0% |
| Resection, Mediastinal Mass | 77 | 1.7 | 1 / 74 | 1.4% | 2 / 42 | 4.8% |
| Pericardial Window | 73 | 1.6 | 10 / 70 | 14.3% | 11 / 61 | 18.0% |
| Other Chest Wall Repair | 68 | 1.5 | 2 / 64 | 3.1% | 1 / 14 | 7.1% |
| Chest Wall Resection | 67 | 1.5 | 2 / 67 | 3.0% | 1 / 23 | 4.3% |
| Pleural Biopsy | 65 | 1.4 | 1 / 64 | 1.6% | 1 / 24 | 4.2% |
| Pleural Drainage Procedure - Open | 65 | 1.4 | 2 / 57 | 3.5% | 2 / 28 | 7.1% |
| Fundoplication, circumferentia | 64 | 1.4 | 0 / 64 | 0.0% | 0 / 3 | 0.0% |
| Dilation of Esophagus | 61 | 1.3 | 1 / 60 | 1.7% | 0 / 3 | 0.0% |
| Tracheal/Bronchial Stent | 57 | 1.3 | 2 / 57 | 3.5% | 2 / 24 | 8.3% |
| Esophagoscopy, flexible | 55 | 1.2 | 0 / 55 | 0.0% | 0 / 2 | 0.0% |
| Thymectomy | 49 | 1.1 | 0 / 49 | 0.0% | 0 / 24 | 0.0% |
| Other Pleural procedure | 45 | 1.0 | 1 / 36 | 2.8% | 0 / 5 | 0.0% |



Primary procedure (N = 4,535), by organ system

| Procedure | Incidence | | Discharge Mortality | | 30-Day Mortality | |
|--|-----------|----------|---------------------|--------|------------------|--------|
| | # | % of all | # / Eligible | % | # / Eligible | % |
| CHEST WALL | | | | | | |
| Chest Wall Biopsy | 8 | 0.2 | 0 / 8 | 0.0% | 0 / 4 | 0.0% |
| Rib Resection (single) | 32 | 0.7 | 1 / 32 | 3.1% | 0 / 14 | 0.0% |
| First/Cervical Rib Resection | 7 | 0.2 | 0 / 6 | 0.0% | 0 / 3 | 0.0% |
| Chest Wall Resection | 67 | 1.5 | 2 / 67 | 3.0% | 1 / 23 | 4.3% |
| Chest Wall Reconstruction | 10 | 0.2 | 0 / 9 | 0.0% | 0 / 1 | 0.0% |
| Thoracoplasty | 3 | 0.1 | 0 / 3 | 0.0% | 0 / 2 | 0.0% |
| Pectus Repair | 1 | 0.0 | 0 / 1 | 0.0% | 0 / | 0.0% |
| Sternectomy, complete | 1 | 0.0 | 1 / 1 | 100.0% | 0 / | 0.0% |
| Other Chest Wall Repair | 68 | 1.5 | 2 / 64 | 3.1% | 1 / 14 | 7.1% |
| MEDIASTINUM/NECK | | | | | | |
| Mediastinal LN Biopsy | 37 | 0.8 | 0 / 36 | 0.0% | 0 / 13 | 0.0% |
| Mediastinoscopy | 334 | 7.4 | 1 / 325 | 0.3% | 1 / 100 | 1.0% |
| Anterior Mediastinotomy | 20 | 0.4 | 0 / 20 | 0.0% | 0 / 3 | 0.0% |
| Mediastinal Lymph Node Dissection | 8 | 0.2 | 0 / 8 | 0.0% | 0 / 5 | 0.0% |
| Mediastinal Lymph Node Sampling | 9 | 0.2 | 0 / 8 | 0.0% | 0 / 5 | 0.0% |
| Biopsy, Mediastinal Mass | 16 | 0.4 | 0 / 15 | 0.0% | 0 / 9 | 0.0% |
| Resection, Mediastinal Mass | 77 | 1.7 | 1 / 74 | 1.4% | 2 / 42 | 4.8% |
| Thymectomy | 49 | 1.1 | 0 / 49 | 0.0% | 0 / 24 | 0.0% |
| Sympathectomy | 35 | 0.8 | 0 / 33 | 0.0% | 0 / 16 | 0.0% |
| Thoracic duct ligation | 7 | 0.2 | 0 / 7 | 0.0% | 1 / 1 | 100.0% |
| Other Mediastinal/Neck procedure | 29 | 0.6 | 1 / 25 | 4.0% | 1 / 11 | 9.1% |
| TRACHEOBRONCHIAL | | | | | | |
| Flexible Bronchoscopy | 206 | 4.5 | 5 / 204 | 2.5% | 5 / 28 | 17.9% |
| Rigid Bronchoscopy | 43 | 0.9 | 0 / 42 | 0.0% | 0 / 1 | 0.0% |
| Removal of Foreign Body (Tracheobronchial) | 2 | 0.0 | 0 / 2 | 0.0% | 1 / 2 | 50.0% |
| Laser Endobronchial Lesion | 29 | 0.6 | 3 / 29 | 10.3% | 5 / 28 | 17.9% |
| Tracheal/Bronchial Stent | 57 | 1.3 | 2 / 57 | 3.5% | 2 / 24 | 8.3% |
| Tracheostomy | 82 | 1.8 | 14 / 81 | 17.3% | 7 / 34 | 20.6% |
| Tracheal Repair | 5 | 0.1 | 0 / 5 | 0.0% | 0 / | 0.0% |
| Tracheal Stricture Resection | 20 | 0.4 | 0 / 20 | 0.0% | 0 / | 0.0% |
| Tracheal Tumor Resection | 3 | 0.1 | 0 / 3 | 0.0% | 0 / 1 | 0.0% |
| Carinal Resection | 1 | 0.0 | 0 / 1 | 0.0% | 0 / | 0.0% |
| Bronchotomy | 2 | 0.0 | 0 / 2 | 0.0% | 0 / | 0.0% |
| Bronchial Repair | 3 | 0.1 | 0 / 3 | 0.0% | 2 / 2 | 100.0% |
| Sleeve Bronchial Resection | 4 | 0.1 | 1 / 4 | 25.0% | 1 / 2 | 50.0% |
| TE Fistula Repair | 4 | 0.1 | 1 / 4 | 25.0% | 1 / 2 | 50.0% |
| Other Tracheobronchial procedure | 87 | 1.9 | 0 / 86 | 0.0% | 0 / 13 | 0.0% |



| Procedure | Incidence | | Discharge Mortality | | 30-Day Mortality | |
|---|-----------|----------|---------------------|-------|------------------|-------|
| | # | % of all | # / Eligible | % | # / Eligible | % |
| PULMONARY | | | | | | |
| Wedge Resection, single | 433 | 9.5 | 12 / 425 | 2.8% | 9 / 177 | 5.1% |
| Wedge Resection, multiple | 296 | 6.5 | 9 / 289 | 3.1% | 6 / 116 | 5.2% |
| Segmentectomy | 87 | 1.9 | 1 / 75 | 1.3% | 1 / 33 | 3.0% |
| Lobectomy | 658 | 14.5 | 8 / 633 | 1.3% | 4 / 322 | 1.2% |
| Bilobectomy | 33 | 0.7 | 0 / 23 | 0.0% | 0 / 12 | 0.0% |
| Pneumonectomy, standard | 44 | 1.0 | 2 / 43 | 4.7% | 1 / 22 | 4.5% |
| Completion pneumonectomy | 16 | 0.4 | 0 / 16 | 0.0% | 1 / 5 | 20.0% |
| Extrapleural pneumonectomy | 6 | 0.1 | 1 / 6 | 16.7% | 1 / 2 | 50.0% |
| Pneumonectomy, intrapericardial | 20 | 0.4 | 1 / 18 | 5.6% | 1 / 9 | 11.1% |
| Bullectomy / repair | 30 | 0.7 | 2 / 30 | 6.7% | 1 / 14 | 7.1% |
| Single Lung Transplant | 19 | 0.4 | 1 / 19 | 5.3% | 0 / 8 | 0.0% |
| Double Lung Transplant | 15 | 0.3 | 2 / 15 | 13.3% | 0 / 4 | 0.0% |
| Other Lung procedure | 79 | 1.7 | 7 / 79 | 8.9% | 7 / 50 | 14.0% |
| ESOPHAGOGASTRIC | | | | | | |
| Esophagoscopy, flexible | 55 | 1.2 | 0 / 55 | 0.0% | 0 / 2 | 0.0% |
| Removal of Foreign Body (Esophagogastric) | 4 | 0.1 | 0 / 4 | 0.0% | 0 / 1 | 0.0% |
| Dilation of Esophagus | 61 | 1.3 | 1 / 60 | 1.7% | 0 / 3 | 0.0% |
| Laser Esophageal Lesion | 5 | 0.1 | 0 / 5 | 0.0% | 0 / 4 | 0.0% |
| Stent Placement | 9 | 0.2 | 1 / 9 | 11.1% | 1 / 8 | 12.5% |
| Cervical esophagostomy | 4 | 0.1 | 0 / 4 | 0.0% | 0 / 2 | 0.0% |
| Anterior Thoracic Esophagostomy | 1 | 0.0 | 0 / 1 | 0.0% | 0 / 1 | 0.0% |
| Zenker's Diverticulum Repair | 13 | 0.3 | 0 / 12 | 0.0% | 0 / 2 | 0.0% |
| Myotomy, cricopharyngeal | 1 | 0.0 | 0 / 1 | 0.0% | 0 / | 0.0% |
| Myotomy, esophageal (long) | 11 | 0.2 | 0 / 11 | 0.0% | 0 / 3 | 0.0% |
| Myotomy, cardia (short) | 4 | 0.1 | 0 / 4 | 0.0% | 0 / 2 | 0.0% |
| Resection, intrathoracic diverticulum | 1 | 0.0 | 0 / 1 | 0.0% | 0 / | 0.0% |
| Resection, esophagus (esophagectomy) | 216 | 4.8 | 13 / 210 | 6.2% | 4 / 65 | 6.2% |
| Resection, esophageal wall lesion | 3 | 0.1 | 0 / 3 | 0.0% | 0 / 2 | 0.0% |
| Fundoplication, circumferentia | 64 | 1.4 | 0 / 64 | 0.0% | 0 / 3 | 0.0% |
| Fundoplication, partial | 20 | 0.4 | 0 / 20 | 0.0% | 0 / | 0.0% |
| Pyloromyotomy | 1 | 0.0 | 0 / 1 | 0.0% | 0 / | 0.0% |
| Gastrectomy | 6 | 0.1 | 0 / 6 | 0.0% | 0 / 1 | 0.0% |
| Gastrostomy | 5 | 0.1 | 0 / 5 | 0.0% | 1 / 5 | 20.0% |
| Jejunostomy | 16 | 0.4 | 0 / 16 | 0.0% | 0 / 3 | 0.0% |
| Conduit, gastric | 1 | 0.0 | 0 / 1 | 0.0% | 0 / | 0.0% |
| Anastomosis, neck | 1 | 0.0 | 0 / 1 | 0.0% | 0 / | 0.0% |
| Other Esophageal procedure | 18 | 0.4 | 0 / 18 | 0.0% | 0 / 5 | 0.0% |
| Other GI procedure | 20 | 0.4 | 0 / 19 | 0.0% | 0 / 9 | 0.0% |
| CARDIAC/PERICARDIUM/GREAT VESSELS | | | | | | |
| Pericardial Window | 73 | 1.6 | 10 / 70 | 14.3% | 11 / 61 | 18.0% |



| Procedure | Incidence | | Discharge Mortality | | 30-Day Mortality | |
|---|-----------|----------|---------------------|-------|------------------|--------|
| | # | % of all | # / Eligible | % | # / Eligible | % |
| Pericardiectomy | 6 | 0.1 | 0 / 6 | 0.0% | 0 / 4 | 0.0% |
| Repair Cardiac Laceration | 2 | 0.0 | 0 / 2 | 0.0% | 0 / 2 | 0.0% |
| Other Pericardial Procedure | 4 | 0.1 | 1 / 4 | 25.0% | 1 / 4 | 25.0% |
| Repair / Reconstruction, thoracic aorta | 6 | 0.1 | 0 / 6 | 0.0% | 0 / 1 | 0.0% |
| Repair / Reconstruction, abd aorta | 43 | 0.9 | 0 / 43 | 0.0% | 0 / 43 | 0.0% |
| Repair / Reconstruction, pulmonary artery | 1 | 0.0 | 0 / 1 | 0.0% | 0 / 1 | 0.0% |
| Other Cardiac procedure | 6 | 0.1 | 0 / 6 | 0.0% | 0 / 5 | 0.0% |
| DIAPHRAGM | | | | | | |
| Plication of Diaphragm | 2 | 0.0 | 0 / 2 | 0.0% | 0 / 1 | 0.0% |
| Diaphragmatic Hernia Repair, acute | 4 | 0.1 | 0 / 2 | 0.0% | 1 / 1 | 100.0% |
| Diaphragmatic Hernia Repair, chronic | 33 | 0.7 | 0 / 30 | 0.0% | 0 / 5 | 0.0% |
| Resection of Diaphragm | 5 | 0.1 | 0 / 5 | 0.0% | 0 / 4 | 0.0% |
| Reconstruction of Diaphragm | 1 | 0.0 | 0 / 1 | 0.0% | 0 / 1 | 0.0% |
| Other Diaphragm procedure | 2 | 0.0 | 0 / 2 | 0.0% | 0 / 2 | 0.0% |
| PLEURA | | | | | | |
| Pleural Drainage Procedure - Open | 65 | 1.4 | 2 / 57 | 3.5% | 2 / 28 | 7.1% |
| Pleural Drainage Procedure - Closed | 45 | 1.0 | 1 / 43 | 2.3% | 4 / 27 | 14.8% |
| Pleural Biopsy | 65 | 1.4 | 1 / 64 | 1.6% | 1 / 24 | 4.2% |
| Pleurodesis | 123 | 2.7 | 6 / 116 | 5.2% | 8 / 50 | 16.0% |
| Pleurectomy | 8 | 0.2 | 0 / 7 | 0.0% | 0 / 4 | 0.0% |
| Decortication | 105 | 2.3 | 6 / 97 | 6.2% | 5 / 49 | 10.2% |
| Clagett Procedure | 6 | 0.1 | 0 / 4 | 0.0% | 0 / | 0.0% |
| Other Pleural procedure | 45 | 1.0 | 1 / 36 | 2.8% | 0 / 5 | 0.0% |
| MISSING DATA | | | | | | |
| [Missing data] | 243 | 5.4 | 9 / 210 | 4.3% | 9 / 84 | 10.7% |

