

## 2017-2024 Cleveland EMS Intervention Comparison.

| Intervention               | 2017    | 2018    | 2019    | 2020    | 2021    | 2022    | 2023    | 2024    | % change 22-24 |
|----------------------------|---------|---------|---------|---------|---------|---------|---------|---------|----------------|
| 12 lead                    | 25,045  | 26,719  | 26,797  | 21,860  | 21,716  | 22,612  | 22,709  | 25,537  | 11%            |
| Adult Intubation           | 561     | 500     | 563     | 321     | 290     | 294     | 279     | 265     | -5%            |
| Supraglottic (King/lgel)   | 157     | 170     | 177     | 388     | 376     | 356     | 356     | 321     | -11%           |
| Advanced airways           | 718     | 670     | 740     | 709     | 666     | 650     | 635     | 586     | -8%            |
| Albuterol/Duoneb           | 9,486   | 9,128   | 8,829   | 3,037   | 2,072   | 5,105   | 3,890   | 4,236   | 8%             |
| Arterial Tourniquet        | 33      | 43      | 75      | 117     | 91      | 88      | 108     | 98      | -10%           |
| Chest Decompression        | 32      | 52      | 84      | 104     | 95      | 99      | 43      | 49      | 12%            |
| Chest Seal                 | 118     | 173     | 168     | 240     | 162     | 194     | 104     | 106     | 2%             |
| CPR started                | 698     | 640     | 694     | 721     | 656     | 784     | 593     | 498     | -19%           |
| Hemostatic dressing        | 32      | 35      | 30      | 36      | 33      | 27      | 31      | 32      | 3%             |
| Intraosseous               | 456     | 467     | 533     | 606     | 541     | 574     | 470     | 458     | -3%            |
| IV                         | 27,291  | 26,436  | 26,917  | 21,370  | 21,249  | 22,299  | 21,113  | 23,041  | 8%             |
| Narcan                     | 6,308   | 3,265   | 3,941   | 3,275   | 1,681   | 3,155   | 1,532   | 1,062   | -44%           |
| <b>Hospital Transports</b> | 77,266  | 79,395  | 80,602  | 73,117  | 75,670  | 73,656  | 73,676  | 77,081  | 4%             |
| <b>Total calls</b>         | 105,714 | 107,213 | 109,633 | 104,973 | 109,305 | 106,106 | 105,570 | 107,652 | 2%             |

### Glossary (click on hyperlinks to see videos)

Advanced Life Support (ALS): An intervention which must be performed by a paramedic.

Basic Life Support (BLS): An intervention which may be performed by an EMT-Basic.

12 Lead: Electrocardiogram (EKG) that looks at the heart from 12 angles. Paramedics are trained to interpret 12 Lead EKGs and look for signs that the patients may be having a Myocardial Infarction (heart attack). ALS skill.

Intubation: Placing an Endotracheal Tube via direct visualization. The paramedic places a tube down the trachea to assist the respiratory effort of a critically ill or injured patient. ALS skill.

Supraglottic Airway: The paramedic places a tube that seals the airway above the level of the vocal cords to assist the respiratory effort of a critically ill or injured patient. ALS skill.

Advanced Airways: Intubation and King LT combined. Both ALS skills.

Albuterol: A nebulized breathing treatment typically given to asthmatics and COPD patients. ALS skill.

Arterial Tourniquet: A military-grade device that is designed to stop severe bleeding from the limbs. BLS skill.

Chest Decompression: Placing a needle into the chest to relieve the trapped air that may accumulate after a traumatic incident. ALS skill.

Chest Seal: Placing a dressing with a one-way valve over a penetrating torso wound. BLS skill.

CPR started: Chest compressions initiated on a patient without a pulse or breathing. BLS skill.

Hemostatic Dressing: Military-grade gauze impregnated with an agent that promotes clotting. Used to stop severe external bleeding. BLS skill.

Intraosseous: Establishing vascular access into the bone channel of a critical patient using a special drill. ALS skill.

IV: Establishing vascular access into a vein for fluid resuscitation or medication administration. ALS skill

Naloxone: An opioid reversal agent. IN (up the nose) BLS skill. All other routes, ALS skill.

Newer procedures that have recently been introduced: These interventions were either not requested before, or were recently added to the CEMS protocol.

| <b>Procedure</b>     | <b>2021</b> | <b>2022</b> | <b>2023</b> | <b>2024</b> | <b>% change 23 - 24</b> |
|----------------------|-------------|-------------|-------------|-------------|-------------------------|
| Albuterol/Duoneb     | 2,072       | 5,105       | 3,890       | 4,236       | 8%                      |
| Narcan               | 1,681       | 3,155       | 1,532       | 1,062       | -44%                    |
| Solumedrol           | 663         | 938         | 1140        | 1342        | 15%                     |
| Zofran               | 424         | 585         | 547         | 651         | 16%                     |
| Epinephrine 1:10,000 | 612         | 1895        | 523         | 453         | -15%                    |
| D10 Infusion         | 428         | 412         | 378         | 377         | 0%                      |
| Fentanyl Citrate     | 384         | 454         | 376         | 477         | 21%                     |
| Lorazepam            | 300         | 380         | 318         | 291         | -9%                     |
| Benadryl             | 200         | 188         | 233         | 255         | 9%                      |
| Epinephrine 1:1,000  | 276         | 260         | 214         | 233         | 8%                      |
| Magnesium Sulfate    | 67          | 121         | 206         | 223         | 8%                      |
| Phenergan            | 103         | 111         | 101         | 86          | -17%                    |
| Amiodarone           | 100         | 119         | 99          | 59          | -68%                    |
| Glucagon             | 131         | 125         | 94          | 100         | 6%                      |
| Sodium Bicarb        | 80          | 85          | 78          | 53          | -47%                    |
| Atropine             | 98          | 114         | 77          | 80          | 4%                      |
| Morphine             | 73          | 66          | 52          | 58          | 10%                     |
| Diazepam             | 20          | 20          | 19          | 22          | 14%                     |
| Calcium Chloride     | 22          | 18          | 15          | 6           | -150%                   |
| Lidocaine            | 24          | 18          | 12          | 16          | 25%                     |
| Ketamine             |             |             |             | 21          | 100%                    |