2024 National Survey on EMS Medication Shortages

<table>
<thead>
<tr>
<th>66 Essential Emergency Medications (EEM)</th>
<th>9 Minutes Count Medications (MCM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cardiac arrest</td>
<td>Epinephrine</td>
</tr>
<tr>
<td>Peri-arrest/Shock</td>
<td>Lidocaine</td>
</tr>
<tr>
<td>Sedative/Anti-seizure</td>
<td>Calcium</td>
</tr>
<tr>
<td>Antidotes</td>
<td>0.9% Saline</td>
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<tr>
<td>Pain management</td>
<td>Lactated Ringer’s Solution</td>
</tr>
<tr>
<td>Other – antibiotics, anti-parasitic, anti-hypertensive,</td>
<td>Albuterol</td>
</tr>
<tr>
<td>asthma, anti-fungal, antivenom, vaccines</td>
<td>Midazolam</td>
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<tr>
<td></td>
<td>10% Dextrose Solution</td>
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<tr>
<td></td>
<td>Fentanyl</td>
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</tbody>
</table>

Medication shortages pose an immediate threat to EMS patients when minutes count and medications on the ambulance are unavailable, expired or second tier.

Overall Medication Shortages

91% reported a shortage of at least one of 66 essential medication in the last 6 months
Minutes Count Medications
Shortages of Minutes Count Medications in Previous 6 Months

- Epinephrine: 64%
- Midazolam: 27%
- Fentanyl: 26%
- Albuterol: 21%
- 0.9% Saline: 19%
- Dextrose (10%): 16%
- Calcium: 19%
- Lidocaine: 7%
- Lactated Ringer's Solution: 5%

Adverse Events
Shortage Resulted in Adverse Event

- Yes: 51%
- No: 49%

Nature of Adverse Events
- Medication could not be administered: 51%
- Wrong dose administered: 7%
- Wrong medication administered: 4%

Shortage Impact

- Moderate/Critical: 85%
- Minimal: 15%

85% rated the shortages as having moderate or critical impact at their agencies.