The views expressed in this presentation are those of the author(s) and do not necessarily reflect the official policy of the Department of Defense, Department of the Army, U.S. Army Medical Department or the United States.
• This document provides a summary of injury medical encounter surveillance data for Active Duty Soldiers from Calendar Year (CY) 2017
• Injuries are defined using the U.S. Army Public Health Center (APHC) Taxonomy of Injuries¹
• This summary highlights Army Active Duty injury rates and distribution of injuries resulting from the applied Taxonomy of Injuries
• For additional details about data contained in these slides, please see the associated Technical Information Paper²


**Frequency***

- **Death**: 240
- **Hospitalizations**: 4,000
- **Ambulatory/Outpatient**: 771,000

**Ratio**

- Death: 1
- Hospitalizations: 17
- Ambulatory/Outpatient: 3,213

*Frequencies are rounded

Data source: Defense Medical Surveillance System (DMSS) and Armed Forces Medical Examiner System (AFMES); injuries defined using the APHC Taxonomy of Injuries

Diagnosis group “Other” includes adverse effects of drugs, blood disorders, and other neoplasms (not cancer)
Data source: Defense Medical Surveillance System (DMSS); injuries defined using the APHC Taxonomy of Injuries
MSK = damage to tissue(s) of the musculoskeletal system i.e., bone, cartilage, muscle, tendon, fascia, joint, ligament, bursa, synovium
Data source: Defense Medical Surveillance System (DMSS)
Data source: Defense Medical Surveillance System (DMSS); injuries defined using the APHC Taxonomy of Injuries
Overall Incident Injury Visit Rates
U.S. Army Active Duty vs. Trainee, 2016-2017

Active Duty injury adjusted to remove deployed injury and deployed person-time
Data source: Defense Medical Surveillance System (DMSS); injuries defined using the APHC Taxonomy of Injuries
<table>
<thead>
<tr>
<th>Body Region</th>
<th>Acute Traumatic (Trauma)</th>
<th>Cumulative Micro-traumatic (Overuse)</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower Extremity</td>
<td>65,447 (41.2%)</td>
<td>282,942 (48.1%)</td>
<td>351,000 (46.8%)</td>
</tr>
<tr>
<td>Spine &amp; Back</td>
<td>8,340 (5.2%)</td>
<td>168,346 (28.6%)</td>
<td>176,687 (23.6%)</td>
</tr>
<tr>
<td>Upper Extremity</td>
<td>50,511 (31.8%)</td>
<td>107,531 (18.3%)</td>
<td>158,614 (21.1%)</td>
</tr>
<tr>
<td>Head, Face &amp; Neck</td>
<td>24,983 (15.7%)</td>
<td>17,592 (3.0%)</td>
<td>42,575 (5.7%)</td>
</tr>
<tr>
<td>Torso</td>
<td>9,129 (5.7%)</td>
<td>871 (0.1%)</td>
<td>10,000 (1.3%)</td>
</tr>
<tr>
<td>Other</td>
<td>631 (0.4%)</td>
<td>10,458 (1.8%)</td>
<td>11,115 (1.5%)</td>
</tr>
<tr>
<td>Total</td>
<td>159,041 (100%)</td>
<td>587,740 (100%)</td>
<td>749,991 (100%)</td>
</tr>
</tbody>
</table>

Injuries defined using the APHC Injury Taxonomy; Acute traumatic (Trauma) and cumulative micro-traumatic (Overuse) injuries
Data source: Defense Medical Surveillance System (DMSS) ; injuries defined using the APHC Taxonomy of Injuries
## Incident Mechanical Injury Diagnoses by Body Region

U.S. Army Active Duty, 2017

### Diagnosis of MSK Tissue Damage by Body Region

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>Head, Face &amp; Neck</th>
<th>Spine &amp; Back</th>
<th>Torso</th>
<th>Upper Extremity</th>
<th>Lower Extremity</th>
<th>Other</th>
<th>Total n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Acute Trauma (ACT)</td>
<td>Cumulative Micro-trauma (CMT)</td>
<td>ACT</td>
<td>CMT</td>
<td>ACT</td>
<td>CMT</td>
<td>ACT</td>
</tr>
<tr>
<td>MSK Tissue Damage</td>
<td>26</td>
<td>0</td>
<td>53</td>
<td>152,395</td>
<td>56</td>
<td>1</td>
<td>3,370</td>
</tr>
<tr>
<td>Sprain/Joint Damage</td>
<td>13</td>
<td>0</td>
<td>2,253</td>
<td>1</td>
<td>787</td>
<td>0</td>
<td>7,118</td>
</tr>
<tr>
<td>Tissue Damage, Other</td>
<td>6,213</td>
<td>17,567</td>
<td>1,820</td>
<td>0</td>
<td>1,703</td>
<td>0</td>
<td>4,453</td>
</tr>
<tr>
<td>Strain/Tear</td>
<td>2,353</td>
<td>0</td>
<td>3,192</td>
<td>0</td>
<td>2,199</td>
<td>0</td>
<td>5,458</td>
</tr>
<tr>
<td>Contusion/Superficial</td>
<td>5,688</td>
<td>25</td>
<td>0</td>
<td>2,343</td>
<td>17</td>
<td>6,354</td>
<td>111</td>
</tr>
<tr>
<td>Nerve</td>
<td>59</td>
<td>0</td>
<td>14</td>
<td>15,926</td>
<td>3</td>
<td>430</td>
<td>3,845</td>
</tr>
<tr>
<td>Fracture</td>
<td>1,507</td>
<td>0</td>
<td>882</td>
<td>25</td>
<td>724</td>
<td>423</td>
<td>8,884</td>
</tr>
<tr>
<td>Open Wound</td>
<td>4,071</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>525</td>
<td>0</td>
<td>7,897</td>
</tr>
<tr>
<td>Internal Organ &amp; Blood Vessel</td>
<td>4,996</td>
<td>0</td>
<td>100</td>
<td>0</td>
<td>728</td>
<td>0</td>
<td>95</td>
</tr>
<tr>
<td>Dislocation</td>
<td>44</td>
<td>0</td>
<td>26</td>
<td>0</td>
<td>49</td>
<td>0</td>
<td>2,226</td>
</tr>
<tr>
<td>Crush</td>
<td>10</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>12</td>
<td>0</td>
<td>615</td>
</tr>
<tr>
<td>Amputation</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>196</td>
</tr>
<tr>
<td>Total</td>
<td>24,983</td>
<td>17,592</td>
<td>8,340</td>
<td>168,347</td>
<td>9,129</td>
<td>871</td>
<td>50,511</td>
</tr>
<tr>
<td>% Total</td>
<td>3.3%</td>
<td>2.3%</td>
<td>1.1%</td>
<td>22.4%</td>
<td>1.2%</td>
<td>0.1%</td>
<td>6.7%</td>
</tr>
</tbody>
</table>

Injuries defined using the APHC Injury Taxonomy; Acute traumatic (Trauma) and cumulative micro-traumatic (Overuse) injuries
Data source: Defense Medical Surveillance System (DMSS); injuries defined using the APHC Taxonomy of Injuries
Major Diagnosis Groups Resulting in Hospitalizations
U.S. Army Active Duty, 2017

Total number of hospitalizations = 28,111
Diagnosis group “Other” includes adverse effects of drugs, blood disorders, and other neoplasms (not cancer)
Data source: Defense Medical Surveillance System (DMSS); injuries defined using the APHC Taxonomy of Injuries
Total number of STANAG-coded injury hospitalizations = 872; may not be representative of the distribution of causes for all injuries
Data source: Defense Medical Surveillance System (DMSS); injuries defined using the APHC Taxonomy of Injuries
Total number of cause-coded unintentional injury hospitalizations = 388; may not be representative of the distribution of causes for all injuries

Data source: Defense Medical Surveillance System (DMSS); injuries defined using the APHC Taxonomy of Injuries

Total number of outpatient visits = 5,471,286
Diagnosis group “Other” includes adverse effects of drugs, blood disorders, and other neoplasms (not cancer)
Data source: Defense Medical Surveillance System (DMSS); injuries defined using the APHC Taxonomy of Injuries
Total number of cause-coded unintentional outpatient visits = 65,581; may not be representative of the distribution of causes for all injuries

Data source: Defense Medical Surveillance System (DMSS); injuries defined using the APHC Taxonomy of Injuries

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