DoD Must Operate in a Drug Free Environment

- National Security positions
  - Military members are on duty 24/7 and drug abuse or misuse compromises readiness
- Barracks – shared living environment
- Service culture relies on the “buddy system”
- Military operate in locations where illegal and other drugs are readily accessible
- Our demographics include high risk populations
  - 18-25 year old males (35% of total end strength and 66% of overall DoD positive specimens)
Current Panel of Tested Drugs

- Marijuana (THC)
- Cocaine (BZE)
- Amphetamine & Methamphetamine
- Designer Amphetamines / Ecstasy
- Heroin
- Oxycodone/Oxymorphone*
- Hydrocodone/hydromorphone*
- Codeine/Morphine*
- Benzodiazepines: (10% testing rate started November 15, 2012)
  - Nordiazepam, oxazepam, temazepam, lorazepam, and α-OH alprazolam
- Special request testing conducted at Armed Forces Medical Examiners System
  - Barbiturates, benzodiazepines, synthetic opiates, ketamine, salvia, LSD, mephedrone, psilocin, methylenedioxyxpyrovalerone (MDPV), etc.
- *100% testing started October 1, 2012
Emerging Prescription Drug Threat

- Drug positive rate versus survey data (1980-2008)

<table>
<thead>
<tr>
<th>Year</th>
<th>All military survey data</th>
<th>DoD ,% positive rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980</td>
<td>27.6</td>
<td>7.3</td>
</tr>
<tr>
<td>1982</td>
<td>19</td>
<td>3</td>
</tr>
<tr>
<td>1985</td>
<td>8.9</td>
<td>2.4</td>
</tr>
<tr>
<td>1988</td>
<td>4.8</td>
<td>1.8</td>
</tr>
<tr>
<td>1992</td>
<td>3.4</td>
<td>0.9</td>
</tr>
<tr>
<td>1995</td>
<td>3</td>
<td>0.8</td>
</tr>
<tr>
<td>1998</td>
<td>2.7</td>
<td>1.05</td>
</tr>
<tr>
<td>2002</td>
<td>3.4</td>
<td>1.38</td>
</tr>
<tr>
<td>2005</td>
<td>5</td>
<td>1.12</td>
</tr>
<tr>
<td>2008</td>
<td>12</td>
<td>1.2</td>
</tr>
</tbody>
</table>

- Psychiatric med prescriptions rose 42% from 2005-2009 in 18-31 yr old group
- 2009 prevalence testing; prescription drug abuse exceeded illegal drug abuse
- CJCS; multiple briefings from scientists and line leaders on growing drug abuse concern
- 12% reported abusing prescription drugs
- 1 % Illicit drug use in DoD
Prevalence Rate testing

- Monitors the incidence of other abused drugs.
  - Analyze previously reported NEGATIVE specimens from the 6 DoD laboratories on a small scale (~6K/Lab).
  - Positive prevalence specimens are confirmed and statistics are calculated to determine if the study drug requires consideration for routine testing in the DoD drug program.
    - Prevalence rates may be an underestimation. Specimens positive for other drugs are not included in the prevalence testing. Missed polydrug user.
    - Requires an available immunoassay kit for screening.
  - DoD may change test panel quickly to respond to threat (e.g., LSD, OH-LSD, ecstasy, oxycodone/oxymorphone and heroin specific screening).
# Prevalence Rate Testing

<table>
<thead>
<tr>
<th>Year</th>
<th>Drug</th>
<th>Prevalence Rate # positive/total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>Benzodiazepines</td>
<td>0.21% (Navy) 0.37% (Army)</td>
</tr>
<tr>
<td>2004</td>
<td>Oxycodone</td>
<td>0.42%</td>
</tr>
<tr>
<td>2007</td>
<td>Benzodiazepines</td>
<td>*0.55% (in theater)</td>
</tr>
<tr>
<td>2009</td>
<td>Benzodiazepines</td>
<td>0.27%</td>
</tr>
<tr>
<td></td>
<td>**Opiate class</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Morphine/Codeine</td>
<td>0.35%</td>
</tr>
<tr>
<td></td>
<td>Hydrocodone</td>
<td>0.21%</td>
</tr>
<tr>
<td></td>
<td>Oxycodone</td>
<td>0.15%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.19%</td>
</tr>
<tr>
<td>2013</td>
<td>LSD Barbiturates</td>
<td>Pending</td>
</tr>
</tbody>
</table>
Systems Approach to Drug Demand Reduction

• Drug Demand Reduction is first and foremost a Readiness Issue
  – Inappropriate use of prescription drug use has grown substantially

• Need to provide deterrence for common prescription drugs
  – Medical Support
    • Need to gain better controls on the use of prescription drugs
    • Education, treatment, and accessibility to rehabilitation services
    • Commander compliance
  – Random frequent unannounced collections
  – Increase Commanders’ willingness to adjudicate urinalysis positive members

– Information Sharing
  • Coordination and access of urinalysis drug testing results with the DoD Prescription Drug Portal, medical support, line leadership, unit readiness reporting, joint pain task force, and suicide and accident prevention programs
Improved Testing for Prescription Drug Abuse

• Testing for hydrocodone started on May 1, 2012
  – Slow ramp up of the testing rate from 25% to 100% by Sept 30, 2012
  – Ramped up other opiate category testing (i.e., codeine, morphine, oxycodone, and oxymorphone) to 100% by Sept 30, 2012

• Started Benzodiazepine testing on November 15, 2012
  – 10% level unless funding is increased

• Implemented a prescription drug portal
  – Correlate positive results with prescription history
  – Utilized at the immunoassay level if possible
Information Sharing: Using the Drug Portal to Verify Prescriptions in the TRICARE Database

• Compares a screen or confirmation result to the individual’s military prescription record
  – Dependent on the specificity of the screening test
• Implemented on May 1, 2012
  – After screening: oxycodone and amphetamine-only
  – After confirmation: Codeine, morphine, hydrocodeine, hydromorphone
• “Electronic MRP”
  – Decreases the need to perform a manual Medical Review Process
• Not applicable to members that get medication outside TRICARE/ DoD (Reserve components while in civilian job)
  – Retained the manual Medical Review Process
Synthetic Marijuana (Spice)

- “Spice” products present unique challenges
  - Large number of Spice drug variants
  - Absence of human studies prevents experts in the field from linking positive test results to the use of a specific scheduled Spice product
  - Lack of FDA-approved rapid screening procedures restricts the ability to perform random large population testing
  - Senate bill "FDA Safety and Innovation Act", that scheduled synthetic drugs (Spice, and bath salts); effectively removing them from the drug culture and present severe legal penalties for use, distribution, sale, and manufacture
Synthetic Marijuana (Spice)

- Army Prevalence Study:
  - 20,000 specimens analyzed prior to the scheduling action
  - 2.4% positive rate
- DoD Prevalence Study:
  - Pending in FY13 (post-legislation)
- Actions to Address
  - DoD established a Spice feasibility study with the National Institute of Drug Abuse to identify and address gaps in existing scientific studies and available technologies
  - DoD has partnered with AFMES to conduct a Post-Legislation prevalence study and evaluate new analytical technologies.
  - Military Departments should continue to pursue all courses of action to prosecute Service member for violations of Service regulation prohibiting the possession of Spice and related products
  - AFMES initiated Spice and Bath Salts testing for investigative case for the services in late 2011
Questions?