The Texas Experience with Birth Defects Surveillance among Military Births

Birth Defects Epidemiology & Surveillance
Texas Department of State Health Services
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Texas Birth Defects
Active Surveillance

• BD staff read/abstract hospital medical records. Where possible, remote access to eMR is used.
• Each year, over 220 hospitals are visited in over 262,000 square miles.
• In 2010, over 92,000 records were reviewed resulting in over 22,000 cases with over 81,000 diagnoses.
Why work in Military Facilities?

• To have the most complete state birth defects prevalence
• Not all mothers/infants are deliver/treated in civilian hospitals
• Including military facility data permits BDES to better respond to community concerns around military facilities
Texas Military Facilities in which BDES Staff Work

- Facility 1 is in West Texas
- Facility 2 is in Central Texas
- Facility 3 is in South Central Texas
Challenges – Facility 1 (West)

• Getting a computer password takes a long time (currently waiting 12 months after submitting required paperwork)

• Hospital has been unable to print an ICD-9 discharge line list (100% chart review)
Challenges – Facility 2 (Central)

• Facility security/training requirements prevented access for almost a year (included contacting family/friends, fingerprints, mini physical, shot records review, completion of federal training on HIPPA and security, formal orientation in several facility departments)

• Had to review every delivery until recently as facility was unable to provide ICD-9 discharge list
Challenges – Facility 2 (Central)

• Only on computer available and electronic medical record system is down frequently
• Facility staff turnover is much higher
Challenges – Facility 3 (South Central)

• Medical records are stored by sponsor’s social security number (may not be the mother)
• In the near future, the Labor & Delivery and nurseries are moving to another local military facility (need to set up new relationships) but the outpatient clinics are remaining
Challenges – Facility 3 (South Central)

• Base access clearance process changes every visit and is time consuming

• Not allowed on units to review logs (do get a limited printout for Labor and Delivery)
## Texas Military Facility Workload

<table>
<thead>
<tr>
<th>Facility</th>
<th># of cases</th>
<th># of charts reviewed</th>
<th># of work days</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facility 1 (West Texas)</td>
<td>32</td>
<td>422</td>
<td>24</td>
</tr>
<tr>
<td>Delivery Year 2009</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Facility 2 (Central Texas)</td>
<td>122</td>
<td>3202</td>
<td>24</td>
</tr>
<tr>
<td>Delivery Year 2008</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Facility 3 (South Central Texas)</td>
<td>150</td>
<td>430</td>
<td>25</td>
</tr>
<tr>
<td>Delivery Year 2008</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

**Note:** Provisional data
Cases and Live Births by Texas Military Facility, 2006-2007

<table>
<thead>
<tr>
<th>Military Facility</th>
<th>Cases</th>
<th>Births</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facility 1 (West Texas)</td>
<td>32</td>
<td>1869</td>
</tr>
<tr>
<td>Facility 2 (Central Texas)</td>
<td>215</td>
<td>5202</td>
</tr>
<tr>
<td>Facility 3 (South Central Texas)</td>
<td>155</td>
<td>4063</td>
</tr>
<tr>
<td>Total Texas Military Facility</td>
<td>402</td>
<td>11134</td>
</tr>
<tr>
<td>Texas Overall</td>
<td>35,342</td>
<td>806,830</td>
</tr>
</tbody>
</table>
Prevalence of Selected BDs Among All Texas Residents Compared to Residents Who Delivered in a Texas Military Facility, 2006-2007

- Hydrocephaly w/o SB
- Ventricular Septal Defect
- Atrial Septal Defect
- Trisomy 21 (Down Syndrome)
Impact of Including Military Facility Deliveries

- Military deployment can create dips and spikes in delivery data
- Military families could be more mobile than the civilian population moving in and out of state which also creates dips and spikes in the data
Other Points

• BDES can not distinguish the military cases seen in civilian facilities from the general birth defects data.
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For More Information:

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