Department of Defense
Seasonal & Novel H1N1 Influenza Activities

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DoD Influenza Program

• Policy
• Immunization Rates
• Vaccine Effectiveness
• Novel Influenza A (H1N1)
Mandatory Immunization

- First influenza vaccine was developed by and for DoD in 1940 - mandatory ever since
- Mandatory seasonal influenza immunization for all active duty personnel
  - Policy reinforces need to vaccinate entire DOD population, not only uniformed personnel
  - Active duty rates 100-76% depending on Service
  - Overall DoD immunization rate: 97%
  - Active Duty flu campaign Sept – December. New accessions are immunized until vaccine expires (June)
- DoD immunization tracking system being revised to a universal platform that includes dependents and retirees.

Mandatory Immunization of Health Care Workers

- Limited to those providing direct patient care
  - Designation of who is included is at the Services discretion
- Policy released last year
- This year Services must report compliance rates
Vaccination Rates

- AF AD 95.8% ANG 92.0% AFR 84.0%
- All recruits are vaccinated – all services

AD = Active Duty  ANG = Air National Guard  AFR = Air Force Reserve

USAFSAM
DoD Vaccine Effectiveness, 2008-09

Population: Lab-confirmed cases of influenza tested through DoD Global Influenza Surveillance Program

- Cases limited to Active Duty Air Force with good vaccination data available
- A/H1 - 159 lab-confirmed cases (11 Jan-4 Apr 09)
  - Percent of cases vaccinated = 83% (132/159)
  - Percent of population vaccinated = 92.5%
  - VE against seasonal A/H1 = 60.9%
- A/H3 - 32 lab-confirmed cases (limited to 8 Feb-4 Apr 09)
  - Percent of cases vaccinated = 81% (26/32)
  - Percent of population vaccinated = 93.8%
  - VE against seasonal A/H3 = 71.4%

Source: Guerrero A, MacIntosh V, Sjoberg P, USAFSAM (15 June 2009)
Population-based Surveillance
NHRC, DoD Vaccine Effectiveness - Recruits

<table>
<thead>
<tr>
<th>Season</th>
<th>Vaccine Effectiveness*</th>
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<tbody>
<tr>
<td>2003-04</td>
<td>94%</td>
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<tr>
<td>2004-05</td>
<td>86%</td>
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<tr>
<td>2005-06</td>
<td>92%</td>
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<tr>
<td>2006-07</td>
<td>87%</td>
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<tr>
<td>2007-08</td>
<td>81%</td>
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<td>2008-09</td>
<td>79%</td>
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*Estimated vaccine effectiveness against laboratory-confirmed influenza infection among US military basic trainees

LAIV vs TIV among US military service members

- Outcome: ILI via ICD-9 codes
- 2005-06
  - Non-Recruits       | Recruits
  - TIV                | LAIV       | TIV | LAIV
  - 565,165            | 136,588    | 49,990 | 20,335
- 2006-07
  - Non-Recruits       | Recruits
  - TIV                | LAIV       | TIV | LAIV
  - 372,117            | 384,974    | 30,420 | 17,547

• **For Recruits**, LAIV significantly reduced ILI rates compared to TIV:
  
  – Reduced by 26-51% in 2005-06
  – Reduced by 18-47% in 2006-07

• **For Non-recruits**, TIV significantly reduced ILI rates (compared to LAIV):
  
  – Reduced by 13-15% in 2005-06
  – Reduced by 19-26% in 2006-07

  **Note:** Highly-immunized population, may not be generalizable to US population
  Much higher ILI rates in recruits (5-9x for TIV, 2-16x for LAIV)


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**DoD influenza surveillance systems identified the first four cases in the US**

- 3 dependent children identified via DoD influenza surveillance program

- 1 child identified via infectious disease surveillance program at CA/Mexico border conducted by the Naval Health Research Center in coordination with the CDC
Probable/Confirmed Cases of Novel Influenza A/H1N1
US Armed Forces Beneficiaries

Legend
△ Ships
 canlı Recruits

Version: 1 April 2009

Probable/Confirmed Cases of Novel Influenza A/H1N1
US Armed Forces Beneficiaries

Legend
△ Ships
 canlı Recruits

Version: 15 April 2009
DoD Pandemic Influenza Mitigation Measures

- Antiviral Stockpile
- Antibiotic Stockpile
- PPE Stockpile
- Procuring Vaccine for Operational Requirements
- PHEO
- Plans/ guidance
- www.dod.mil/pandemicflu

H1N1

- DoD is engaged at federal and local levels in pandemic influenza mitigation planning
- DoD has been planning and preparing for pandemic influenza for well over a decade
  - We are ready to function in a pandemic influenza environment to meet our mission requirements
    - Provide National Defense
    - Support the national pandemic response efforts
    - Protect our service members, their families and retirees
ACKNOWLEDGEMENTS

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Thank you

The fact is, compared to pigs, we humans are unforgivably slow to learn from pragmatic experience.

Karl Schwen