Influenza Vaccination

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Background

• American Indian/Alaska Native (AI/AN) people are at higher risk for influenza-related complications compared to U.S. Whites:
  – Pneumonia and influenza-related mortality 1.5 to 4 times higher
  – Mortality from 2009 H1N1 influenza 4 times higher

• 2010-2011 ACIP Influenza Vaccine recommendations
  – AI/AN people as a high risk group

Lessons Learned from H1N1
The Harvard Opinion Research Program Poll

• 24% of AI/AN people concerned that they might get H1N1*
• Majority adopted multiple prevention behaviors*
• 87% said H1N1 vaccine safe or very safe
• 33% didn’t get vaccine because of safety concerns
  – Mistrust of pharmaceutical companies (26%)
  – Flu is treatable (18%)
• Traditional media (TV, newspapers, radio) more important than websites
  – <30% reported websites as a source of H1N1 information
  – 43% reported no internet connection

* Significantly higher compared to white Americans
2010 – 2011 Coverage Methods

• IHS estimates based on the IHS Electronic Health Record
  – Represent doses actually administered
  – Limited to AI/AN people served by IHS-funded facilities
  – Data through March 31\textsuperscript{st}, 2010

• U.S. population estimates based on March National Flu Survey
  – Telephone survey
  – Vaccine status based on self-report
2010-2011 Influenza Vaccine Coverage
All Ages, by IHS Region

Source: IHS Division of Epidemiology and Disease Prevention. Data as of March 31st, 2011
2010-2011 Influenza Vaccine Coverage
IHS vs. U.S. as of March 2011

Sources: IHS Data – Indian Health Service, Division of Epidemiology
U.S. Data – CDC March National Flu Survey
Conclusions

- For 2010-2011, influenza vaccine coverage among AI/AN patients served by I/T/U facilities was lower than U.S. estimates
  - Differences in methodology (administered vs. self-report) may account for some of this
  - Low coverage among 65+ years a concern

- Considerable regional variation in flu coverage
  - Geographic/population differences
Results – Coverage among HCP

• Data were collected from all 12 IHS Regions
  • 188 facilities
  • 29,092 HCP (~77% of total HCP)
• Overall HCP coverage for all facilities types: 72.3%
  – Regional Range: 60.9% - 82.5%
• Coverage varied by facility type
  – IHS facilities: 77.3%
  – Tribal facilities: 69.0%
  – Urban Indian facilities: 52.6%
HCP Seasonal Influenza Vaccine coverage 2008 - 2011

IHS H1N1 vaccine coverage – 61.7%
U.S. H1N1 Vaccine Coverage – 37.1%
Reasons for HCP Refusal

• Concern could get flu from vaccine (24%)
• Do not consider themselves at risk/not a serious disease (23%)
• Concerns about vaccine safety (23%)
• Concerns about Efficacy (9%)
• Not Convenient (4%)
Influenza Education/Outreach: Examples from Alaska

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Alaska H1N1 retrospect

- H1N1 complications high in Alaska Native people
  - hospitalization rate was 4 times higher than white Anchorage residents,
  - relatively healthy young adults and children affected

http://www.epi.hss.state.ak.us/bulletins/docs/b2009_30.pdf
Influenza complications in medically compromised people

Fig. 1—56-year-old man with history of lung transplant who developed H1N1 infection. Chest radiograph obtained 10 days after normal initial radiograph shows extensive ground-glass opacities and multifocal consolidation in transplanted left lung.

Kim EA et al. Radiographics 2002;22:S137-149
Flu can strike down even previously healthy kids

Tate Hart, 6, came down with swine flu, which turned into pneumonia. He then developed Guillain-Barre syndrome. His parents, Anne Gore and Dave Hart, use their experience to urge people to vaccinate their children against the flu.

Read more: http://www.adn.com/2011/02/05/168665/5/boy-stricken-with-serious-illnesses.html#ixzz1MAD4DT6T
Challenges: Myths about H1N1 vaccine that circulated by e-mail among AI/AN

Here are snippets from e-mails that circulated to Alaska:

- “Last week, many of the aboriginal people in the remote west … were inoculated with the tamiflu vaccine”
  - *The Truth: TamiFlu is not a vaccine – it’s the anti-viral medication given to people sick with H1N1*

- “these reserves are being targeted first to be injected with untested, unsafe and potentially lethal flu vaccines”
  - *The Truth: H1N1 flu vaccine was made and tested in the same manner as seasonal flu vaccine and the safety was the same. The vaccine was offered to all racial groups”*

- “The swine vaccine contains a computer chip”
  - *The Truth: No computer chip*

- “The H1N1 vaccines contains dangerous additives like squalene”
  - *The Truth: None of the U.S. H1N1 vaccines contained additives like squalene*
H1N1 educational efforts by Alaskan tribal programs

- PSA on H1N1 distributed to radio and tribal corporations
- ILI reports distributed to regional facilities
- 3 minute video PSA “H1N1 – Just the Facts” developed to address myths; posted on Facebook and Youtube
- Anchorage Daily News article highlighting 1918 epidemic impact on Alaska Native communities

Like others, we were running like crazy!
Annual Provider Flu Education

• Flu-Facts distributed through *Vaccinate Alaska Coalition*

• Regular Flu updates to:
  • Clinical Directors,
  • Immunization Coordinators,
  • Community Health Aide programs
  • All-Clinic Staff meetings
  • E-mail updates with surveillance, guidelines

• Tools for providers:
  • Flu vaccine protocols
  • Flu-Mist Screening Forms
Flu Outreach: Alaska Style

• Mass Vaccination Clinics
  – Schools
  – Health Fairs
  – Alaska Federation of Natives (AFN) Convention

Sassa Kitka giving her mom a Flu vaccine at AFN
Flu Outreach Alaska Style: Kusko at the Bethel July 4th Parade
New CDC Guidelines on Influenza Antivirals, November 23, 2010

• **Summary of Influenza Antiviral Treatment Recommendations for the 2010-2011 Season – US**

  – Antiviral treatment is recommended as early as possible for any patient with confirmed or suspected influenza who:
    - has severe, complicated, or progressive illness, or
    - is hospitalized, or
    - is at higher risk for influenza complications as follows:
      - Children younger than 2 years old;*…
      - Adults 65 years of age and older; …
      - Persons with the following conditions: chronic pulmonary…
      - Persons with immunosuppression,
      - **American Indians and Alaskan Natives**;

Best Practices
Best Practices

• Increase access to vaccine
  – Walk in flu clinics/streamlined registration
  – Extended clinic hours, weekends/evenings
  – Clinics in the community
    • Schools, chapter houses, casinos, grocery stores
  – Hire additional staff/overtime authorization
  – Pharmacist immunizers
  – Flu Immunization protocols and standing orders

• Vaccine promotion
  – Local radio, newspapers, tribal newsletters
    • Ethnic media roundtables
  – Community education (PHNs, CHRs)
Best Practices cont.

• Review the data
  – Influenza report in the RPMS Immunization Package
  – IHS Influenza Awareness System (IIAS) weekly reports
    • Influenza-like illness trends
    • Flu vaccine doses administered and coverage

• Utilize Reminder Recall
HCP Vaccination: Best Practice

• Strong HCP recommendations
  – Require vaccination or declination form
  – Administration supportive
  – Recommendations widely published to staff
• Educate HCP about flu and flu vaccine
• Make vaccine accessible
  – Employee vaccine clinics
  – Vaccine carts taken to each service area
• **HCP Influenza Vaccine Requirement**
  – Tuba City
Educational Materials

• Posters and Fact Sheets with AI/AN people
• Flu Presentation for community members
• Tool Kits
  – Tribal Head Start/Early Childhood Education programs
Public Service Announcements

Available at: www.ihs.gov/flu

• Wes Studi
• California Rural Indian Health Board
• IHS Director
Good Resources for Patients

Vaccinate Your Baby: www.vaccinateyourbaby.org/

Parents of Kids with Infectious Diseases: www.pkids.org/

Autism Science Foundation: www.autismsciencefoundation.org

CDC Parents: www.cdc.gov/vaccines/spec-grps/parents.htm

CHOP Vaccine Education Center: www.chop.edu/service/vaccine-education-center/home.html

YouTube Channels:
- PKIDSOrg
- ChildrensHospPhil
- ShotbyShotStories
Next Steps

• Our population is at high risk from flu - we must do better!
• Explore reasons why people don’t get vaccinated
  – Particularly among those 65+ years
• Target education and outreach efforts
• Review vaccine coverage data THROUGHOUT flu season
  – Use reminder recall, set weekly facility goal