**2018-2019 Indian Health Service (IHS), National Immunization Program**

**Influenza Vaccination Action Plan**

**Background:**

Influenza is a serious disease that causes significant morbidity and mortality, especially in the American Indian /Alaska Native (AI/AN) population. Influenza and resulting sequelae such as pneumonia are among the top 10 leading causes of death for AI/ANs, and influenza-related mortality is significantly higher among AI/AN populations compared with non-Hispanic Whites [1]. Influenza vaccination remains the best strategy for reducing influenza-related illness, and the Advisory Committee on Immunization Practices (ACIP) recommends everyone 6 months and older receive an influenza vaccination each year [2].

Healthy People 2020 goals for influenza vaccine are to achieve 70% seasonal influenza vaccine coverage among children ages 6 months – 17 years and among adults 18 years and older; the target among healthcare personnel (HCP) is 90% [3]. According to the IHS Influenza Awareness System (IIAS) data, IHS influenza vaccine coverage data for patients has remained relatively unchanged over the last 8 influenza seasons and remains considerably below the Healthy People 2020 goal of 70% [Figure 1]. In addition, influenza vaccine coverage among HCP remained relatively stagnant and fell short of the Healthy People 2020 goal of 90% until implementation of policy requiring influenza vaccination among IHS HCP in the 2015-2016 season [Figure 2]. This IHS Influenza Vaccination Action Plan was developed to provide a framework for IHS to increase influenza vaccination coverage among both patients and HCP with the eventual goals of reducing influenza-related morbidity and mortality among these groups while also achieving Healthy People benchmarks.

**Figure 1: Influenza Vaccine Coverage among Active Clinical Users**

*Active Clinical Users: Patients with at least 2 visits in the last 3 years, one of which must be to a primary care clinic.*
Table 1: Influenza Vaccine Coverage among Active Clinical Users by IHS Area, 2017-2018

*Active Clinical Users:* Patients with at least 2 visits in the last 3 years, one of which must be to a primary care clinic

Figure 2: Influenza Vaccine Coverage among Active Clinical Users

*Healthcare personnel defined as all employees, contractors, volunteers and students working in IHS healthcare facilities*
Table 2: Influenza vaccine coverage among healthcare personnel working at an IHS facility by IHS Area, 2017-2018

<table>
<thead>
<tr>
<th>Area</th>
<th>Population*</th>
<th># Vaccinated</th>
<th>% Vaccinated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Albuquerque</td>
<td>820</td>
<td>793</td>
<td>96.7%</td>
</tr>
<tr>
<td>Bemidji</td>
<td>607</td>
<td>560</td>
<td>92.3%</td>
</tr>
<tr>
<td>Billings</td>
<td>1177</td>
<td>1072</td>
<td>91.1%</td>
</tr>
<tr>
<td>Great Plains</td>
<td>2017</td>
<td>1961</td>
<td>97.2%</td>
</tr>
<tr>
<td>Nashville</td>
<td>47</td>
<td>46</td>
<td>97.9%</td>
</tr>
<tr>
<td>Navajo</td>
<td>4426</td>
<td>4327</td>
<td>97.8%</td>
</tr>
<tr>
<td>Oklahoma</td>
<td>1806</td>
<td>1745</td>
<td>96.6%</td>
</tr>
<tr>
<td>Phoenix</td>
<td>2949</td>
<td>2779</td>
<td>94.2%</td>
</tr>
<tr>
<td>Portland</td>
<td>279</td>
<td>272</td>
<td>97.5%</td>
</tr>
<tr>
<td>Tucson</td>
<td>568</td>
<td>530</td>
<td>93.3%</td>
</tr>
<tr>
<td>National</td>
<td>14696</td>
<td>14085</td>
<td>95.8%</td>
</tr>
</tbody>
</table>

*HCP population as reported by sites

GOALS:

1. **Reduce influenza-related morbidity and mortality among AI/AN patient populations served by IHS, Tribal, and Urban healthcare facilities by:**
   
a. Increasing influenza vaccine coverage among the IHS Active Clinical User population to make positive progress towards the Healthy People 2020 goal of 70% coverage in all age groups.

2. **Reduce influenza-related morbidity and mortality among HCP and nosocomial influenza transmission in health facilities serving AI/ANs by:**
   
a. Maintain high influenza vaccine coverage among HCP to sustain achievement of the Healthy People 2020 goal of 90% coverage among HCP.
IHS NATIONAL INFLUENZA VACCINATION ACTION PLAN for 2018-2019

To make progress towards achieving these goals, proposed national activities for the 2018-2019 influenza season include:

1. **Training and Dissemination of Best Practices**
   a. **Provide technical assistance to IHS Areas to develop and/or maintain Area Influenza Plans** - Provide data and other resources to assist each IHS Area in developing or updating an Area influenza plan (see Appendix A). Key components will include:
      i. Identification of barriers to influenza vaccination
      ii. Strategies to increase influenza vaccine uptake
      iii. Determining resources needed to achieve goals
   b. **IHS Influenza Kick-off Event** – Annually, in September, IHS will hold a “Flu Kick-off” national webinar for all of IHS. Main topics will include: review of current vaccine and treatment recommendations, vaccine supply and procurement updates, and best practices for increasing influenza vaccination.
   c. **Monthly Flu Update Calls** – The IHS Immunization Program will hold monthly calls during the influenza season (October – May) to provide updates on influenza activity both nationally and within Indian Country, review cumulative influenza vaccine coverage data, and share best practices with sites.
   d. **Training opportunities** - The IHS Immunization Program will host training opportunities for IHS providers on the following topics:
      i. **Planning Flu Activities for Next Season** – July 2018
      ii. **PHN Influenza webinar** – October 2018

2. **Monitoring and Feedback**
   a. **Healthcare Personnel Vaccination Update** – data on influenza vaccine coverage are collected as of Dec. 31st and March 31st through the National Immunization Reporting System (NIRS) and will be shared as part of the flu update calls as available.
   b. **Government Performance and Results Act (GPRA) Influenza Measures** - The GPRA Influenza measures collect data on influenza vaccine coverage among children ages 6 months – 17 years and adults ages 18 years and older. The fiscal year (FY) 2019 GPRA Influenza vaccine coverage goals under the new Integrated Data Collection System Data Mart (IDCS-DM) is 20.6% for children ages 6 months-17 years and 18.8% for adults ages 18 years and older. Influenza vaccine coverage data collected in FY 2019 will be used to determine the FY 2020 GPRA IDC-DM coverage goals.
   c. **Weekly IHS Influenza Awareness System (IIAS) report** – The IHS Immunization Program will publish a weekly IIAS report available for IHS Area contacts from September to April. This report contains data from the IIAS on Influenza-like illness activity and influenza vaccine coverage across reporting RPMS sites.

3. **Community Outreach**
a. **Promotion of educational materials developed for AI/AN communities** — The IHS Immunization Program will work with partners and IHS Public Affairs to distribute educational materials (e.g., PSAs, fact sheets, etc.) developed by CDC and others for AI/AN communities. Outreach to Tribal radio stations featuring native speakers (https://www.nativepublicmedia.org/) across the country will also be promoted. PSAs can be found here: [http://www.cdc.gov/flu/freeresources/media-psa.htm](http://www.cdc.gov/flu/freeresources/media-psa.htm).

b. **Update IHS influenza website to include current influenza resources** — The IHS Immunization Program will ensure the most current AI/AN influenza reports and influenza-related vaccination materials and guidance are available on the IHS seasonal influenza website (https://www.ihs.gov/flu/).

4. **Policy**
   a. **IHS mandatory Influenza vaccination policy for healthcare personnel (HCP)** — Monitor compliance with the mandatory influenza vaccination policy for all employees, contractors, volunteers and students working in IHS healthcare facilities, which became effective in the 2015-2016 influenza season. All IHS facilities are required to track and report influenza vaccine coverage among HCP two times per influenza season; mid-season as of Dec. 31st and end of season as of March 31st through the National Immunization Reporting System.

**References**


Appendix A: Developing an Area Influenza Plan

Each Area is recommended to develop an annual Area influenza plan, which should be reviewed and updated annually. The Area influenza plan should provide background on the current status of influenza vaccine coverage among facilities in the Area, identify barriers and issues related to increasing influenza vaccination, provide guidance to facilities on implementing strategies to increase influenza vaccine coverage, and identify measures for monitoring progress in increasing influenza vaccination uptake.

Background

- Current influenza vaccine coverage rates among patients and employees for the Area
- Difference between current coverage and HP 2020 goal
- Current barriers to increasing vaccination and potential solutions

Action Steps

- Area level support activities
  - Identify measureable outcomes to monitor progress in increasing influenza vaccine coverage
  - Identify data needed to inform efforts and monitor progress
  - Support facilities in developing and implementing strategies to increase influenza vaccination
  - Identify specific strategies to increase coverage (see Appendix C)
  - Develop Facility Driver diagram (see Appendix D)
  - Identify process and outcome measures to monitor success of implementing strategies
Appendix B: Best Practice Strategies

To Increase Access to Vaccine

- Implement standing orders to facilitate vaccination at every opportunity
- Increase opportunities for vaccination
  - Pharmacy based immunization
  - Walk in immunization clinics
  - After hours clinics
  - Community-based clinics
  - Mobile vaccine carts (employees)

To Increase Provider Awareness

- Influenza education sessions – providers, PHNS, CHRs
- Data feedback – share information re: immunization vaccine coverage on an on-going basis throughout flu season

To Increase Community Acceptance

- Provide education and materials to CHRs
- Reach out to local tribal radio stations to air radio PSAs re: flu
- Provide information in tribal newspapers re: influenza
Appendix C: Examples of Influenza Vaccination Driver Diagrams:

**Influenza Vaccination driver diagram**

Patient Perception
- Patient Education
- Outreach to population
- Healthcare Provider vaccination rate
- Vaccine Safety
- Vaccine coverage/efficacy
- Disease burden

Opportunities
- Setting
  - Taking vaccination to patient
  - Direct patient invitations

Vaccine availability
- Early stock availability
- Amount of unused vaccine at year end
- Enough available stock
- Intranasal?
  - % of intranasal used
- Delivery method
- Intranasal?

Take advantage of given opportunities
- Time available to give clinic
- Policies in place
- Utilize Huddles to identify
- Create list

Increase the Immunization rate

Immunization rate
## Appendix C: Examples of Influenza Vaccination Driver Diagrams (continued):

<table>
<thead>
<tr>
<th>Strategy (or Change Concept)</th>
<th>Primary Drivers</th>
<th>Secondary Drivers</th>
<th>Constraints</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start vaccinating sooner</td>
<td>Clinic Readiness</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Pre-scheduled walk-in flu vaccine clinics</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Pharmacists, Medical Assistants (MAs), and nurses trained and ready to vaccinate</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• All necessary supplies in place prior to arrival of vaccines (gloves, syringes, needles, alcohol wipes, band-aids, VIS, etc)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Community Readiness</td>
<td></td>
<td>Highly dependent on timely vaccine supply delivery to clinic</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Pre-placed articles/ads in local newspapers about when flu vaccines will be given, benefits of flu vaccines, etc</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Messaging throughout the community—posters, brochures, PSAs, video-messages, Social Media, radio, etc</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Community-based vaccine days/sites pre-planned</td>
<td></td>
</tr>
<tr>
<td>Strategy (or Change Concept)</td>
<td>Primary Drivers</td>
<td>Secondary Drivers</td>
<td>Constraints</td>
</tr>
<tr>
<td>------------------------------</td>
<td>----------------</td>
<td>-------------------</td>
<td>-------------</td>
</tr>
</tbody>
</table>
| Sustain period of maximum vaccination rate longer | Clinic Capability | • Ensure adequate staffing throughout the month of November  
• Extend/maintain flu vaccine walk-in clinics  
• Ensure adequate supplies to last for the duration of the extend flu vaccine campaign | • Dependent on a sustained demand from patients/community  
• May require additional efforts to vaccinate outside of the clinic |
|                              | Community Demand or Acceptance | • May need to develop new messaging strategies or repeat messages multiple times  
• Anticipate and provide information about the benefits of flu vaccine specific to any issues that develop (vaccine mismatch, adverse events, reported “severity” of the circulating flu strain, special populations. | • Mistrust of IHS/CDC  
• Negative media messages |
<table>
<thead>
<tr>
<th>Strategy (or Change Concept)</th>
<th>Primary Drivers</th>
<th>Secondary Drivers</th>
<th>Constraints</th>
</tr>
</thead>
</table>
| Increase weekly number of vaccines given per week by some percent (e.g., by 25%) | Clinical systems change to increase capacity | • Remove barriers to getting flu vaccine (standing orders, walk-in clinics, offering universally to all patients, etc)  
• Provide multiple types of vaccine (live attenuated, preservative free, high-dose, quadrivalent, etc)  
• Providers educated and committed to providing flu vaccine to all patients  
• Providers and staff get vaccinated  
• Create new vaccination venues— evening/weekend clinics, community-based clinics, etc. | • System must increase its daily capacity to give vaccines (staff must work harder than previous years)  
• Staff reluctance to promote vaccine or reluctance to receive their own flu vaccine  
• Insufficient staff to provide evening/weekend vaccination clinics |
| Community Demand or Acceptance | | • May need to develop new messaging strategies or repeat messages multiple times  
• Anticipate and provide information about the benefits of flu vaccine specific to any issues that develop (vaccine mismatch, adverse events, reported “severity” of the circulating flu strain, special populations. | • Mistrust of IHS/CDC  
• Negative media messages |
Appendix D: Influenza Resources

1. **Centers for Disease Control and Prevention Flu website** – includes surveillance data, fact sheets for providers and patients about influenza and influenza vaccine, and free printed, video and radio resources - [www.cdc.gov/flu](http://www.cdc.gov/flu)


3. **Indian Health Service Flu website** – links to IHS surveillance data and educational resources for American Indian and Alaska Native Communities – [www.ihs.gov/flu](http://www.ihs.gov/flu)

