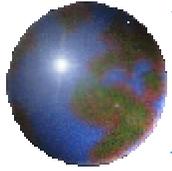


# *DoD Global Influenza Surveillance Program*

## 2002-2003 Season Information

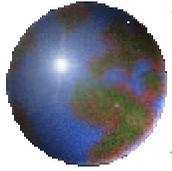
AFIERA/RSRH

Information current as of 16 Sep 02



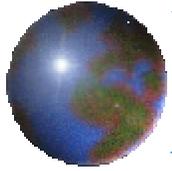
## *Topics*

- ✚ Program overview
- ✚ HA annual message
- ✚ Sentinel sites & collaborating DoD labs
- ✚ Program process
- ✚ ILI case definition

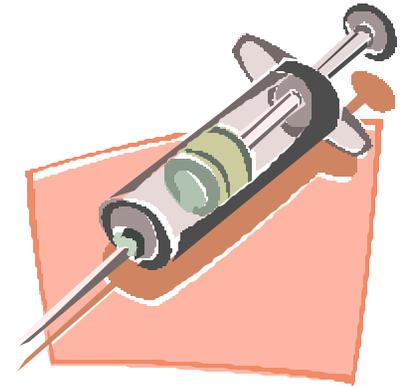


## *Topics (continued)*

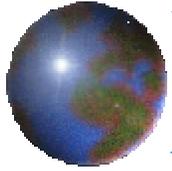
- ✚ Baseline ILI surveillance
- ✚ Reporting
- ✚ Local resources
- ✚ Provider participation
- ✚ Contact info



## *Program Overview*



- ✦ **Tri-service program**
  - ▣ USAF sites predominate
  - ▣ Collaboration with overseas DoD research labs
- ✦ **Active surveillance** performed Oct through Apr
- ✦ **Target:** 6 specimens/week/site
- ✦ **Collection kits provided by AFIERA/SDE** – allow approx 2 weeks for shipping
- ✦ Specimens are treated as **clinical specimens** – results reported to site's lab and PH office



## *Health Affairs Annual Message*

✿ Detailed information on:

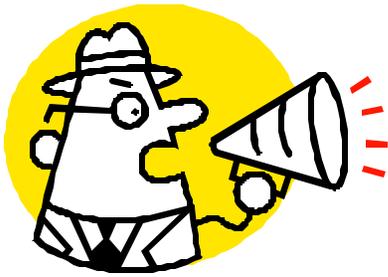
▣ Vaccine components

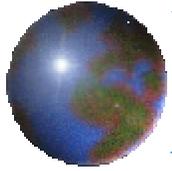
▣ Vaccine supply

▣ Vaccine prioritization

▣ Influenza surveillance program

✿ Will be circulated in late Sep 02





## *Sentinel Sites*

### ◆ **Army (2)**

- ◆ Madigan AMC, WA

### ◆ **Navy (3)**

- ◆ NAB Little Creek, VA
- ◆ NH Yokosuka, Japan

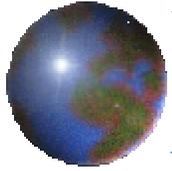
### ◆ **Air Force (17)**

- ◆ Andersen AFB, Guam
- ◆ Elmendorf AFB, AK
- ◆ Incirlik AB, Turkey
- ◆ Kunsan AB, R.O.K.
- ◆ McGuire AFB, NJ
- ◆ Osan AB, R.O.K.
- ◆ Ramstein AB, Germany
- ◆ Travis AFB, CA

- ◆ Tripler AMC, HI

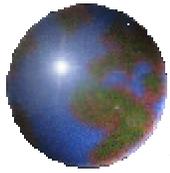
- ◆ NH Pearl Harbor, HI

- ◆ Air Force Academy, CO
- ◆ Andrews AFB, MD
- ◆ Hickam AFB, HI
- ◆ Kadena AB, Japan
- ◆ Maxwell AFB, AL
- ◆ Misawa AB, Japan
- ◆ RAF Lakenheath, U.K.
- ◆ Sheppard AFB, TX
- ◆ Yokota AB, Japan



## *Collaborating DoD Research Labs*

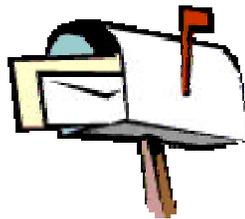
- Armed Forces Research Institute for Medical Sciences (AFRIMS)
  - Nepal
  - Thailand
- Naval Medical Research Institute Detachment (NAMRID)
  - Argentina
  - Bolivia
  - Ecuador
  - Peru
- Walter Reed Army Institute of Research (WRAIR)
  - Uganda



# DoD Global Influenza Surveillance Program



Six throat swabs per site are taken from individuals who meet the case definition each week during influenza season (samples are accepted year round).



Specimens are sent to the Epidemiology Surveillance Division (AFIERA/SDE) at Brooks AFB from 22 worldwide sentinel sites (non-sentinel sites use the same process).



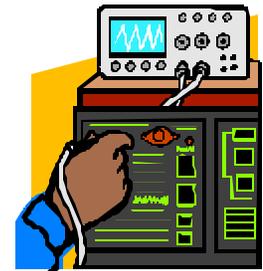
Specimens are tested for presence of respiratory viruses.



Specimens are typed if an influenza virus is detected.

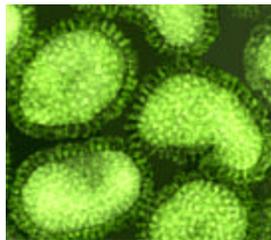


Selected influenza isolates are subtyped and undergo molecular characterization.



Influenza hemagglutinin (HA) gene is sequenced by the Molecular Epidemiology Lab at Brooks AFB.

AAGAGGACTCT  
GGAGAAGTCTC

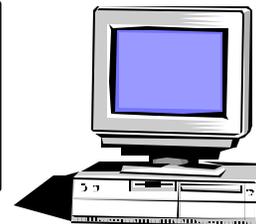


HA gene sequence of specimen is compared with HA sequence of vaccine strains to identify vaccine breakthroughs.

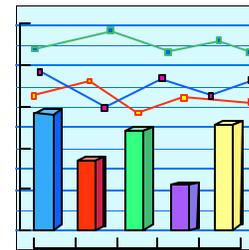
**2002-2003 vaccine strains**  
A/Moscow/10/99-like (H3N2)  
A/New Caledonia/20/9-like (H1N1)  
B/Hong Kong/330/2001-like

Selected isolates are sent to the Centers for Disease Control and Prevention (CDC) Virology Lab for hemagglutination inhibition testing.

Antigenicity of specimens is compared to antigenicity of vaccine strains.



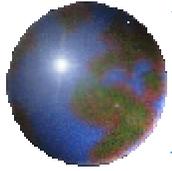
Lab and molecular data are combined with demographic information and vaccination history in influenza surveillance database.



Information is reported back to submitting sites' lab and public health office; used to support & develop local/AF/DoD surveillance data.



Information is used by the Vaccines and Biological Products Committee (VRBPAC) in the development of the annual influenza vaccine.



## *ILI Case Definition*

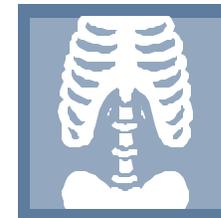
1. Fever (100.5° Fahrenheit)

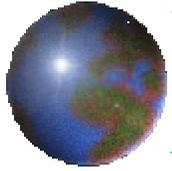
AND

either cough or sore throat (<72 hours duration)

**OR**

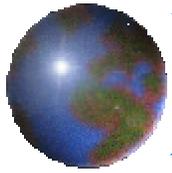
2. Clinical radiographic evidence of acute non-bacterial pneumonia





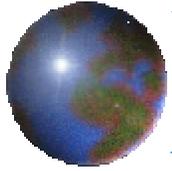
## *Baseline ILI Data*

- ✚ All sentinel sites should have a surveillance system in place for influenza-like illness (ILI)
- ✚ Use ICD-9 codes from ADS and extract with Business Objects Group (or other means)
- ✚ Develop baseline & threshold (mean  $\pm$  2 SD) using 3 to 5 years of data
- ✚ Contact the Epi Services Branch if need help



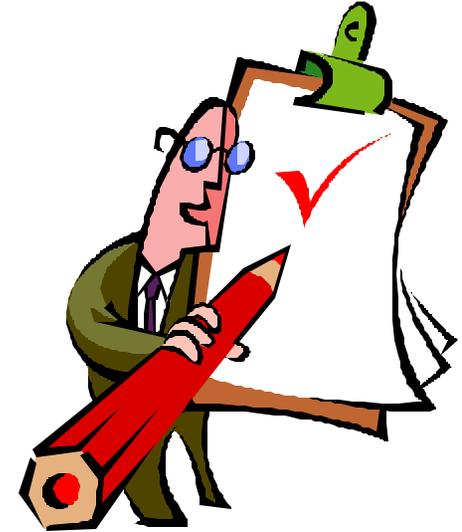
## *Reporting Requirements (RMES\*)*

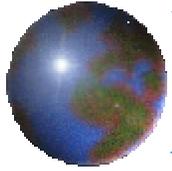
- ✚ Influenza is a **Routine** Reportable Event
  - ▣ Downgraded from urgent status
- ✚ Enter confirmed cases into service-specific Reportable Medical Events System (RMES)
- ✚ AF-Specific (AFRESS):
  - ▣ Indicate lab confirmation method
  - ▣ Complete travel history
  - ▣ Mark immunization status and date



## *Local Resources*

- ✿ Tracking Form
  - ▣ Sample form included
  - ▣ Use/modify to meet your needs
- ✿ Briefing for providers
  - ▣ Should be done annually
  - ▣ Purpose/benefit of the program
  - ▣ Sample briefing will be sent to you



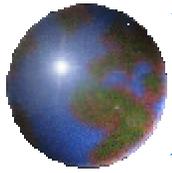


## *From a Provider's Perspective\**

- ✚ Tell me why it's important (value)
- ✚ Make me part of the process (ownership)
- ✚ Keep me informed (feedback)
- ✚ Make it easy (reduce barriers)
- ✚ Incentives are nice (acknowledgement)



\* From a provider who's worked at a DOD influenza surveillance site.



## *Contact Information*

### ✚ Internet

▣ <https://gumbo.brooks.af.mil/pestilence/Influenza>

### ✚ E-mail

▣ [Influenza@brooks.af.mil](mailto:Influenza@brooks.af.mil)

### ✚ Telephone

▣ Lab: DSN 240-8383/1679

▣ Epi Services: DSN 240-3471/1821/4108

# DoD Global Influenza Surveillance

.....*IN ACTION*

