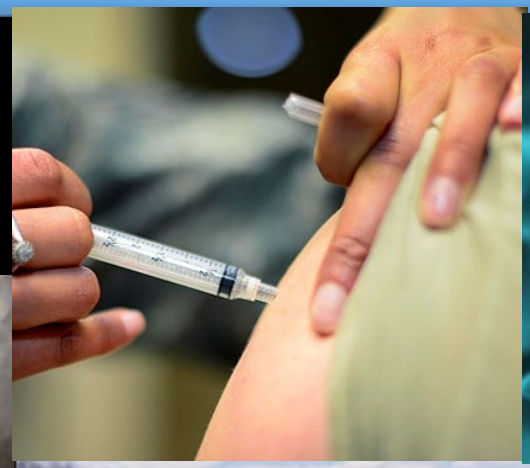
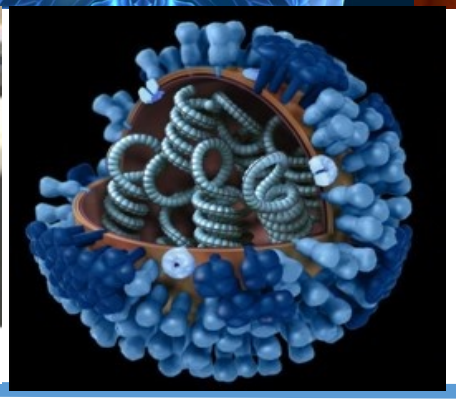
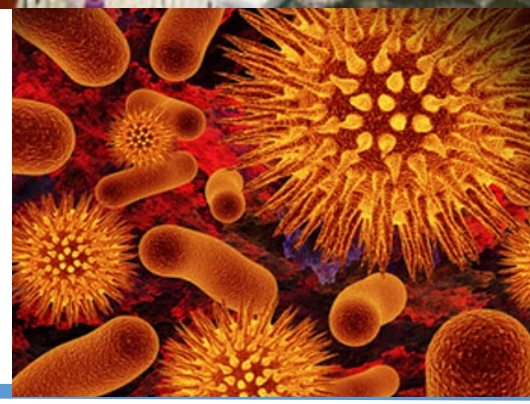
DoD Global Respiratory Pathogen Surveillance Program







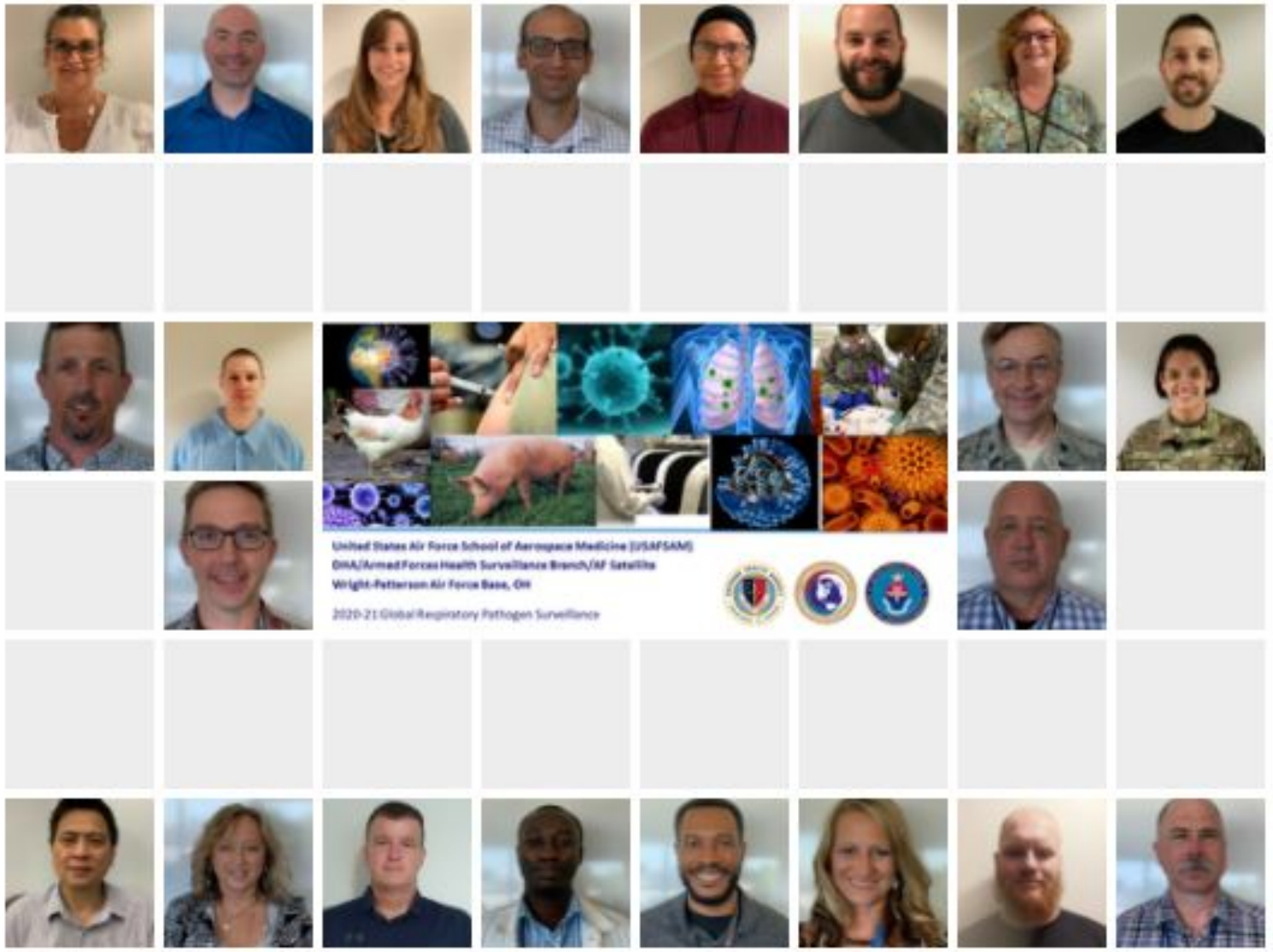
United States Air Force School of Aerospace Medicine (USAFSAM)

DHA/Armed Forces Health Surveillance Branch/AF Satellite

Wright-Patterson Air Force Base, OH

2020-21 Global Respiratory Pathogen Surveillance

Meet the Staff



Deborah Koontz

Matthew Sanders

Andrew Martin

Laboratory Professionals

Sarah Purves

Aleta Yount

Carol Garrett

Dr. William Buggele

Military and Government Service Members

LtCol Robbins

MSgt Caso

Dr. Tony Fries

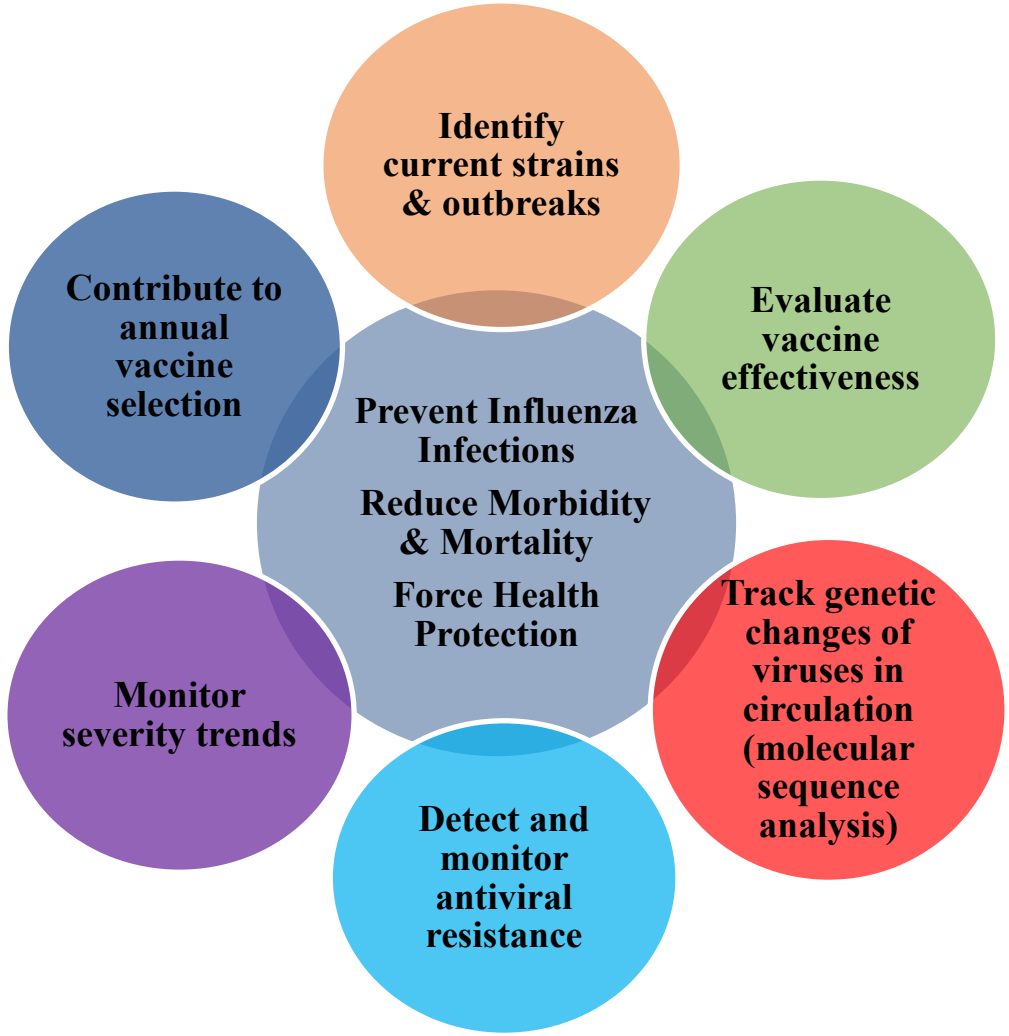
Mr. Matthew Couch

Mr. Jim Hanson

Mr. Don Minnick

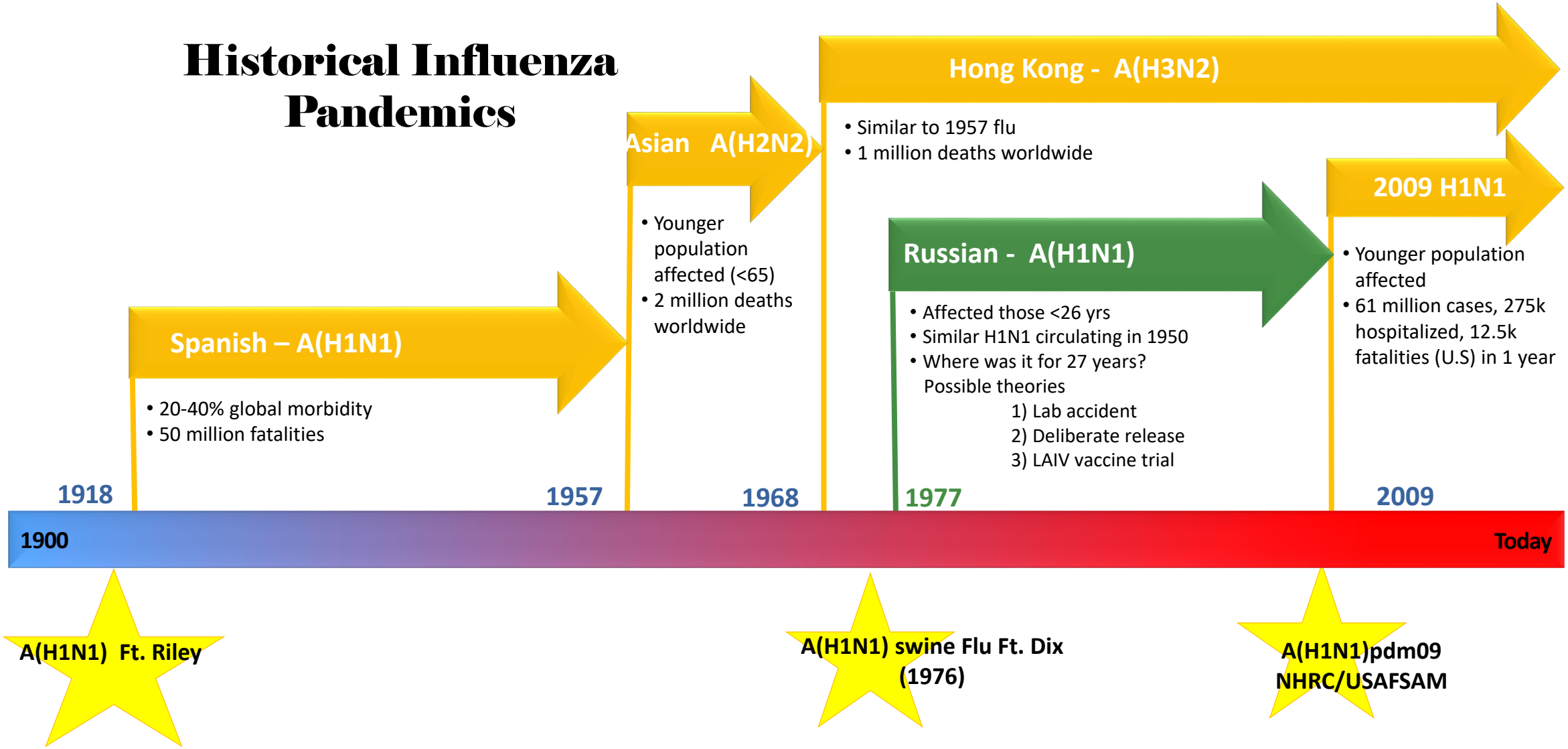
Mission & Priorities

- **Identify** circulating viruses / detect new strains
- **Evaluate** influenza vaccine effectiveness
- **Compile** weekly comprehensive surveillance report
- **Share** data and specimens with the CDC & WHO for annual vaccine selection



Historic Influenza Pandemics and Persistence

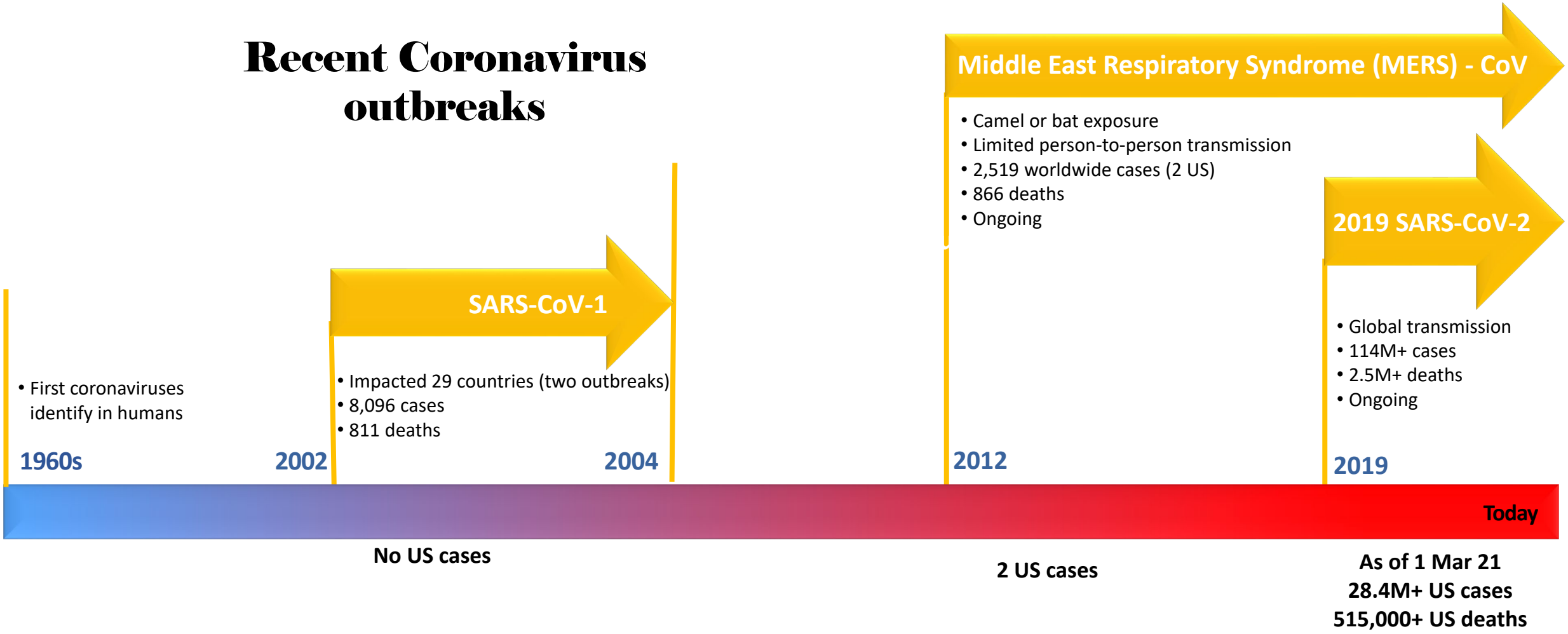
Historical Influenza Pandemics

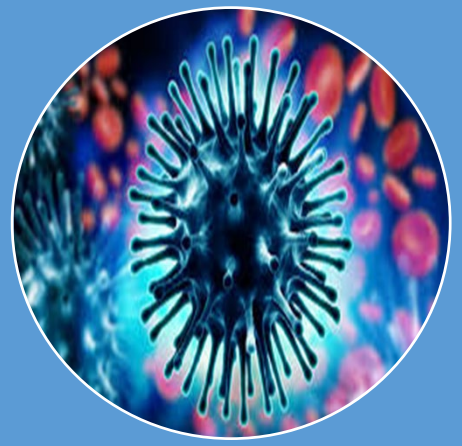


Military Significance

Historic Severe Acute Respiratory Syndrome (SARS) Outbreaks and Pandemic

Recent Coronavirus outbreaks





General Respiratory Surveillance/Research

- "Project Gargle"

- DoD overseas medical research labs (Brazil, Egypt, Indonesia, Kenya, Peru, Thailand)

1976-1997

Presidential Decision Directive (NSTC-7)

Global Emerging Infections Surveillance & Response System Operations (GEIS)

1996 & 1997

Addressing Emerging Infectious Disease Threats: A Strategic Plan for the DoD

Assistant Secretary of Defense, DoD (Health Affairs) Policy Memorandum

1998 & 1999

Defense Health Agency (DHA) merger

- DHA combined multiple health surveillance activities across the DoD into the Health Surveillance Branch (HSB)

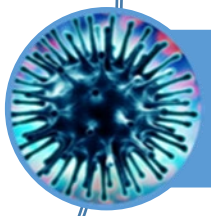
2015

Military Impact

“The flu is very unpredictable when it begins and in how it takes off” – Harvey V. Fineberg

Acute Respiratory Diseases accounts for 25% to 30% of infectious disease-related hospitalizations

Increased risk of spreading a respiratory pathogens through global travel



Training environments are well suited for the spread of emerging respiratory pathogens

Increased risk of novel respiratory diseases in deployed settings

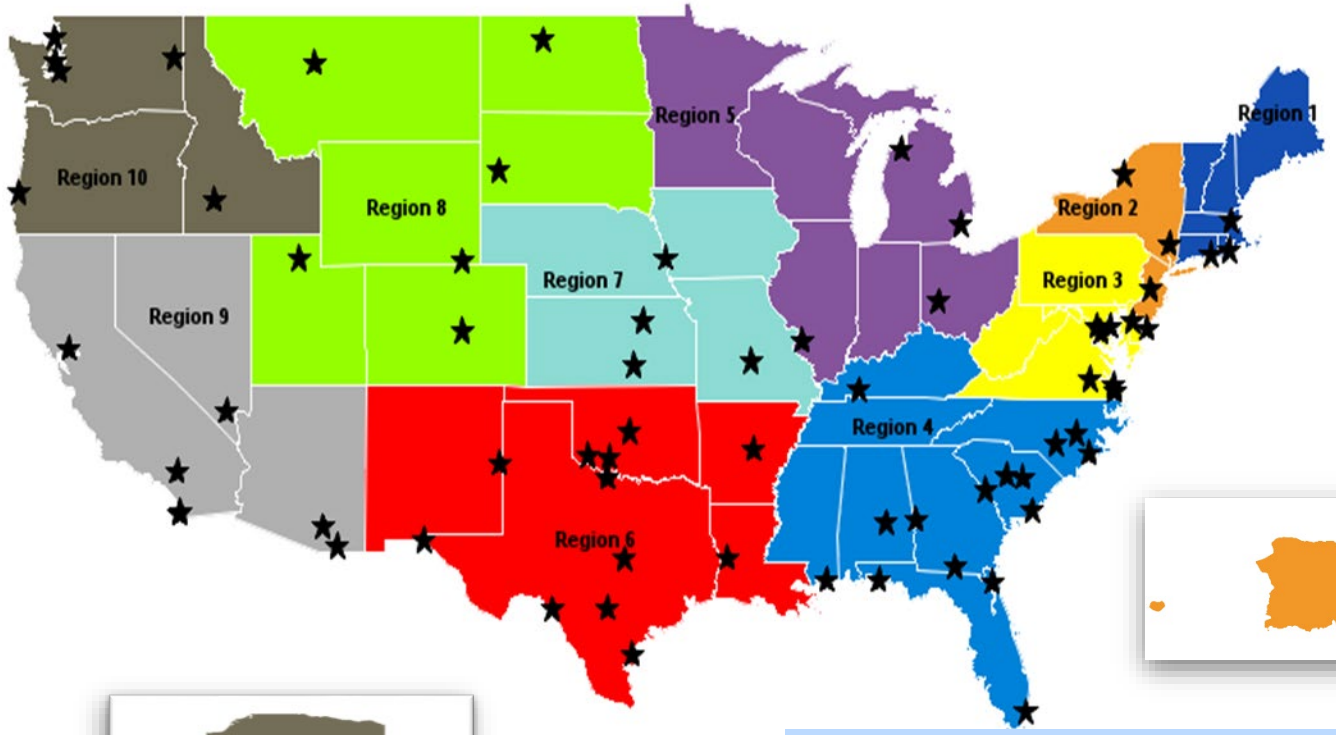
Sentinel Sites

CONUS Sites: 73

- Air Force: 31
- Army: 20
- Navy: 9
- Coast Guard: 6
- DHA: 7

OCONUS Sites: 29

- Air Force: 13
- Army: 10
- Navy: 6

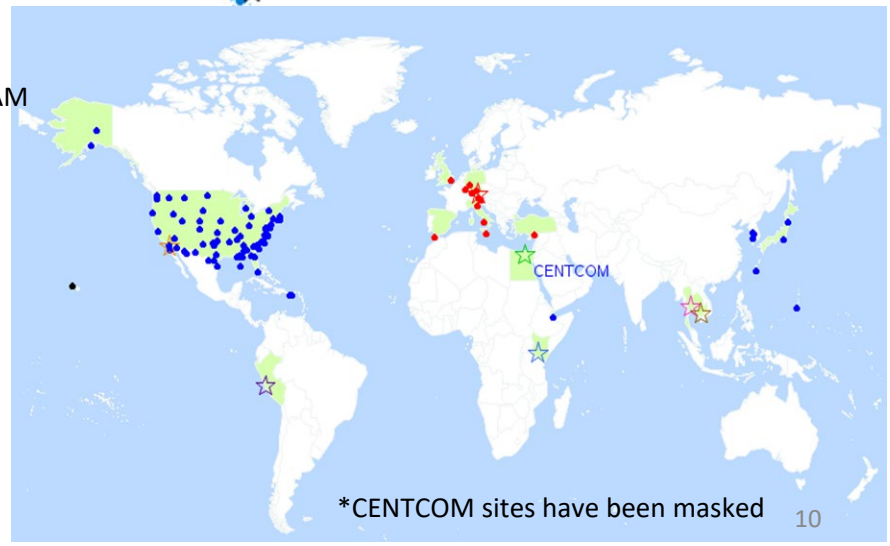


Sentinel Sites

- Submit to USAFSAM
- Submit to LRMC
- Submit to TAMC

Partner Labs

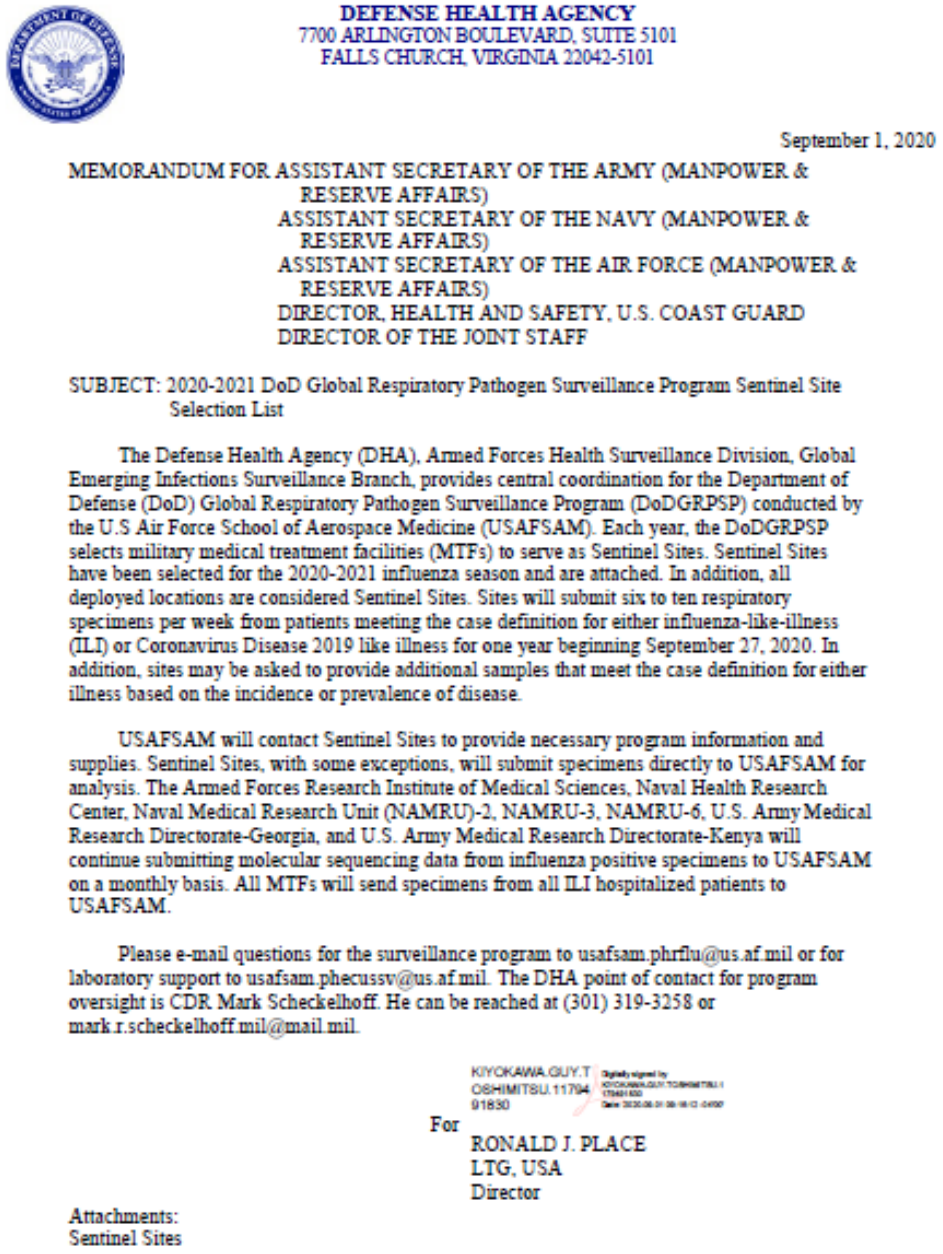
- LRMC
- NHRC
- NAMRU-6
- NAMRU-2
- AFRIMS
- USAMRU-K
- NAMRU-3



*CENTCOM sites have been masked

DHA Memo Summary

- Sentinel sites will submit a minimum of six (6) specimens/week
- DHA-AF satellite team will provide program training, supplies and cover shipping costs
- All deployed sites are considered Sentinel Sites
- Armed Forces Research Institute of Medical Sciences, Naval Health Research Center, Naval Medical Research Units, Army Medical Research Directorates – Georgia/Kenya will submit sequence data monthly
- Medical treatment facilities will send specimens from ALL hospitalized patients due to influenza-like Illness to USAFSAM



DEFENSE HEALTH AGENCY
7700 ARLINGTON BOULEVARD, SUITE 5101
FALLS CHURCH, VIRGINIA 22042-5101

September 1, 2020

MEMORANDUM FOR ASSISTANT SECRETARY OF THE ARMY (MANPOWER & RESERVE AFFAIRS)
ASSISTANT SECRETARY OF THE NAVY (MANPOWER & RESERVE AFFAIRS)
ASSISTANT SECRETARY OF THE AIR FORCE (MANPOWER & RESERVE AFFAIRS)
DIRECTOR, HEALTH AND SAFETY, U.S. COAST GUARD
DIRECTOR OF THE JOINT STAFF

SUBJECT: 2020-2021 DoD Global Respiratory Pathogen Surveillance Program Sentinel Site Selection List

The Defense Health Agency (DHA), Armed Forces Health Surveillance Division, Global Emerging Infections Surveillance Branch, provides central coordination for the Department of Defense (DoD) Global Respiratory Pathogen Surveillance Program (DoDGRPSP) conducted by the U.S Air Force School of Aerospace Medicine (USAFSAM). Each year, the DoDGRPSP selects military medical treatment facilities (MTFs) to serve as Sentinel Sites. Sentinel Sites have been selected for the 2020-2021 influenza season and are attached. In addition, all deployed locations are considered Sentinel Sites. Sites will submit six to ten respiratory specimens per week from patients meeting the case definition for either influenza-like-illness (ILI) or Coronavirus Disease 2019 like illness for one year beginning September 27, 2020. In addition, sites may be asked to provide additional samples that meet the case definition for either illness based on the incidence or prevalence of disease.

USAFSAM will contact Sentinel Sites to provide necessary program information and supplies. Sentinel Sites, with some exceptions, will submit specimens directly to USAFSAM for analysis. The Armed Forces Research Institute of Medical Sciences, Naval Health Research Center, Naval Medical Research Unit (NAMRU)-2, NAMRU-3, NAMRU-6, U.S. Army Medical Research Directorate-Georgia, and U.S. Army Medical Research Directorate-Kenya will continue submitting molecular sequencing data from influenza positive specimens to USAFSAM on a monthly basis. All MTFs will send specimens from all ILI hospitalized patients to USAFSAM.

Please e-mail questions for the surveillance program to usafsam.phrflu@us.af.mil or for laboratory support to usafsam.phecussv@us.af.mil. The DHA point of contact for program oversight is CDR Mark Scheckelhoff. He can be reached at (301) 319-3258 or mark.r.scheckelhoff.mil@mail.mil.

KIYOKAWA.GUY.T.OSHIMITSU.1179491830

For
RONALD J. PLACE
LTG, USA
Director

Attachments:
Sentinel Sites

SENTINEL SITES
CONUS Installations

Installation	State	Service	Installation	State	Service
Altus AFB	OK	USAF	JBSA Lackland	TX	USAF
Camp Lejeune	NC	Navy	Keesler AFB	MS	DHA
Cannon AFB	NM	USAF	Laughlin AFB	TX	USAF
CGAS Traverse City	MI	USCG	Little Rock AFB	AR	USAF
CGS Detroit	MI	USCG	Malmstrom AFB	MT	USAF
CGS Miami	FL	USCG	Maxwell AFB	AL	USAF
CGS North Bend	OR	USCG	McConnell AFB	KS	USAF
Davis-Monthan AFB	AZ	USAF	Minot AFB	ND	USAF
Dover AFB	DE	USAF	Moody AFB	GA	USAF
Eglin AFB	FL	USAF	Mt. Home AFB	ID	USAF
Ellsworth AFB	SD	USAF	NAS Whidbey Island (Oak Harbor)	WA	Navy
Fairchild AFB	WA	USAF	NBHC Coronado	CA	Navy
FE Warren AFB	WY	USAF	NCRM Ft. Belvoir CH	VA	DHA
Ft. Benning	GA	Army	NCRM Walter Reed NMMC	MD	DHA
Ft. Bliss	TX	Army	Nellis AFB	NV	USAF
Ft. Bragg	NC	DHA	NH Bremerton	WA	Navy
Ft. Campbell	KY	Army	NH Jacksonville	FL	DHA
Ft. Carson	CO	Army	NHC Corpus Christi	TX	Navy
Ft. Drum	NY	Army	NHC New England	RI	Navy
Ft. Gordon	GA	Army	NMC San Diego	CA	Navy
Ft. Hood	TX	Army	NMC Portsmouth	VA	Navy
Ft. Huachuca	AZ	Army	Offutt AFB	NE	USAF
Ft. Irwin	CA	Army	Peterson AFB	CO	USAF
Ft. Jackson	SC	Army	Rodriguez AHC	PR	Army
Ft. Lee	VA	Army	SAMMC (BAMC)*	TX	Army
Ft. Leonard Wood	MO	Army	Scott AFB	IL	USAF
Ft. Polk	LA	Army	Seymour Johnson AFB	NC	DHA
Ft. Riley	KS	Army	Shaw AFB	SC	USAF
Ft. Sill	OK	Army	Sheppard AFB	TX	USAF
Hanscom AFB	MA	USAF	Tinker AFB	OK	USAF
Hill AFB	UT	USAF	TRACEN Cape May	NJ	USCG
JB Andrews	MD	USAF	Travis AFB	CA	USAF
JB Charleston	SC	DHA	US Naval Academy	MD	Navy
JB Langley-Eustis	VA	Army	USAF Academy	CO	USAF
JB Lewis-McChord	WA	Army	USCG Academy	CT	USCG
JB McGuire-Dix-Lakehurst	NJ	USAF	USMA West Point	NY	Army
			Wright-Patterson AFB	OH	USAF

* Locations will provide six to ten subtyped influenza positive specimens weekly to USAFSAM

OCONUS Installations

Installation	Location	Service	Installation	Location	Service
Aviano AB	Italy	USAF	NAVSTA Rota	Spain	Navy
Brian Allgood ACH	ROK	Army	NH Okinawa	Japan	Navy
Camp Lemonnier	Djibouti	Navy	NSA Naples	Italy	Navy
Eielson AFB	AK	USAF	Osan AB	ROK	USAF
Ft. Wainwright	AK	Army	RAF Lakenheath	England	USAF
Grafenwoehr AHC	Germany	Army	Ramstein AB	Germany	USAF
Incirlik AB	Turkey	USAF	Spangdahlem AB	Germany	USAF
JB Elmendorf-Richardson	AK	USAF	Stuttgart AHC	Germany	Army
JB Pearl Harbor-Hickam	HI	Navy	Tripler AMC	HI	Army
JR Marianas-Andersen AFB	Guam	USAF	USAG Daegu	ROK	Army
Kadena AB	Japan	USAF	Vicenza AHC	Italy	Army
Kunsan AB	ROK	USAF	Vilseck AHC	Germany	Army
Landstuhl RMC*	Germany	Army	Wiesbaden AHC	Germany	Army
Misawa AB	Japan	USAF	Yokota AB	Japan	USAF
NAS Sigonella	Italy	Navy			

* Locations will provide six to ten subtyped influenza positive specimens weekly to USAFSAM

Service Influenza Policy

DoD
Defense Health Agency: 2020-2021 DoD Respiratory Pathogen Surveillance Program Sentinel Sites (13 July 2020)

Air Force

- Instruction 48-105: Surveillance, Prevention, and Control of Diseases and Conditions of Public Health or Military Significance (26 June 2020)

Army

- OP-ORD 18-93: 2018-2019 Influenza Prevention Program: Surveillance and Vaccination (Sep 2018)

Navy and Marine Corps

- BUMED POLICY, NAV19248, 29 Aug 2019 (Policy for Influenza Vaccine Use for the 2019-2020 Influenza Season)

BUMEDINST 6230.15B Immunization for the Prevention of Infectious Disease

Coast Guard

- 2019-2020 Annual Influenza (Flu) Immunization Program
- COMDTINST M6000.0/M6260.32/DHA Interim Procedures Memo 19-005

Influenza A

Evolves rapidly

Due to its ability to mutate rapidly, flu A is responsible for most flu epidemics and all flu pandemics

Subtypes

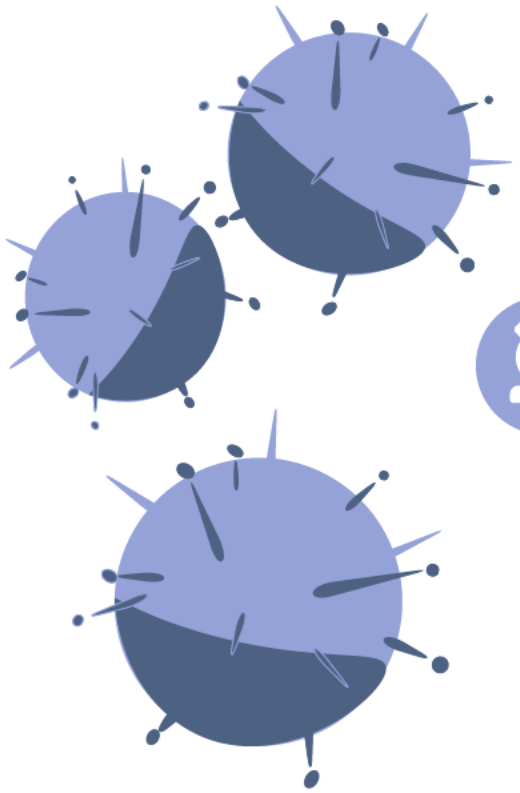
Divided into subtypes based on surface proteins: Hemagglutinin (HA) and Neuraminidase (NA)

Species

Can infect a variety of species, including humans, birds, cats, pigs, horses, seals, and whales

Reassortment

Interspecies transmission can lead to antigenic shift, a major reassortment of surface proteins. These shifts can give rise to novel strains.



Influenza B

Evolves gradually

Can cause epidemics, but has never caused a flu pandemic

Lineages

Classified into strains based on their lineage:
Yamagata and Victoria

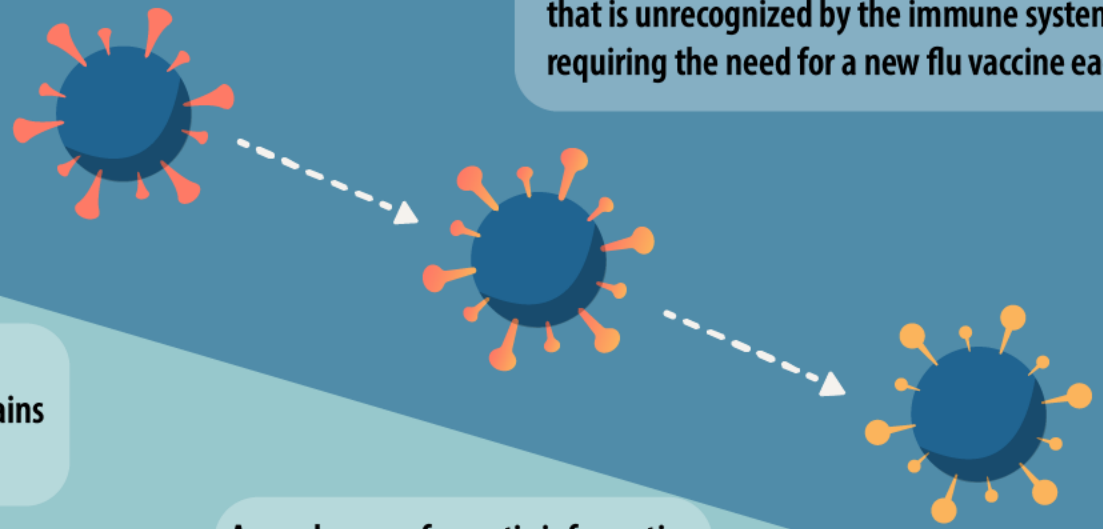
Species

Circulates mostly among humans (and sometimes seals)

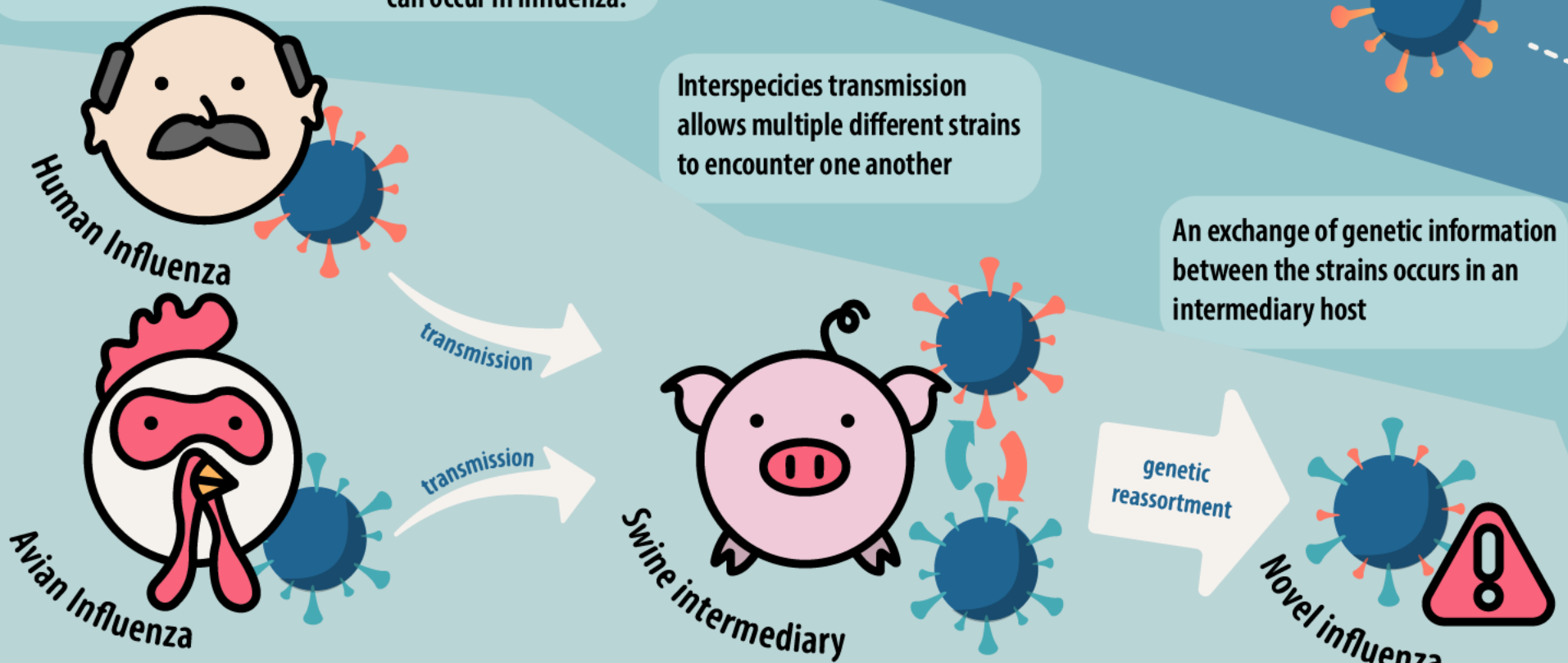
ANTIGENIC DRIFT & SHIFT

Antigenic drift is the accumulation of small mutations over time that lead to changes in surface proteins HA (hemagglutinin) and NA (neuraminidase)

While gradual, the changes can result in a strain that is unrecognized by the immune system, thus requiring the need for a new flu vaccine each year



Antigenic shift is an abrupt and major reorganization of surface proteins. Below is just one example of how a shift can occur in influenza.



Interspecicies transmission allows multiple different strains to encounter one another

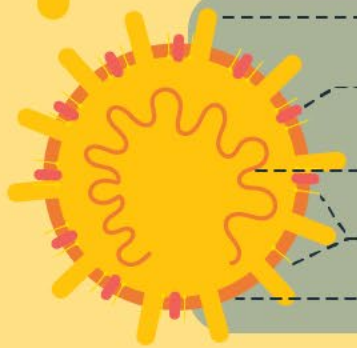
An exchange of genetic information between the strains occurs in an intermediary host

The resulting phenotype of HA and NA proteins can be a novel influenza that is highly infectious

CORONAVIRUS

QUICK FACTS

- Named for the crown-like spikes on their surface
- 4 major categories: α, β, γ, and δ
- Mutate at high rates
- Zoonotic, mostly infect their specific animal host
- Historically, caused 10-30% of "colds" worldwide



- *Spike glycoprotein (S)*
- *Hemagglutinin-esterase dimer (HE)*
- *RNA and Nucleocapsid (N)*
- *Membrane protein (M)*
- *Envelope (E)*

7 human coronavirus identified:

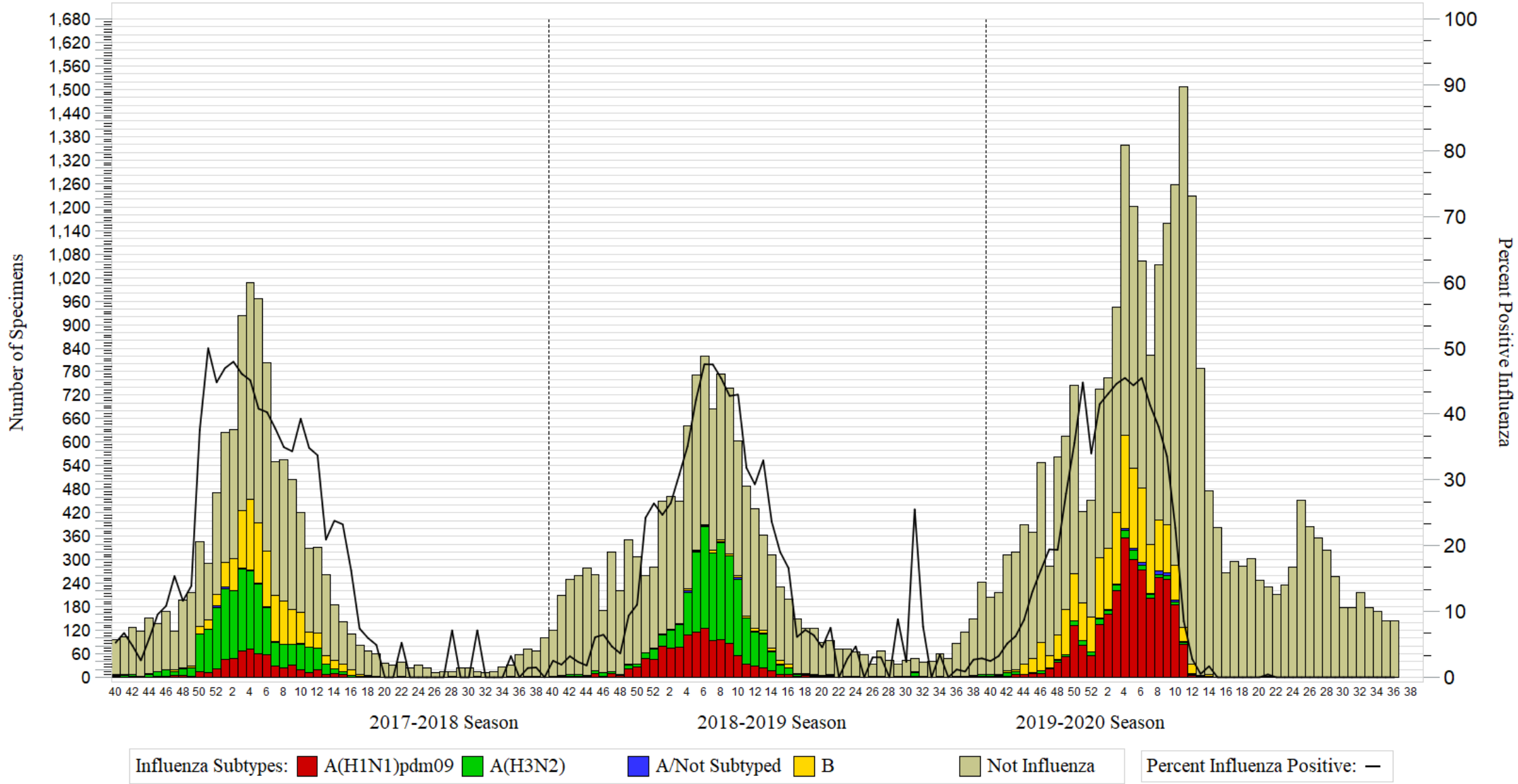
HCoV-229E HCoV-OC43
HCoV-NL63 HCoV-HKU1
SARS-CoV MERS-CoV *SARS-CoV-2*

Common "cold" symptoms, mild to moderate symptoms

Epidemic and pandemic viruses, mild to severe symptoms

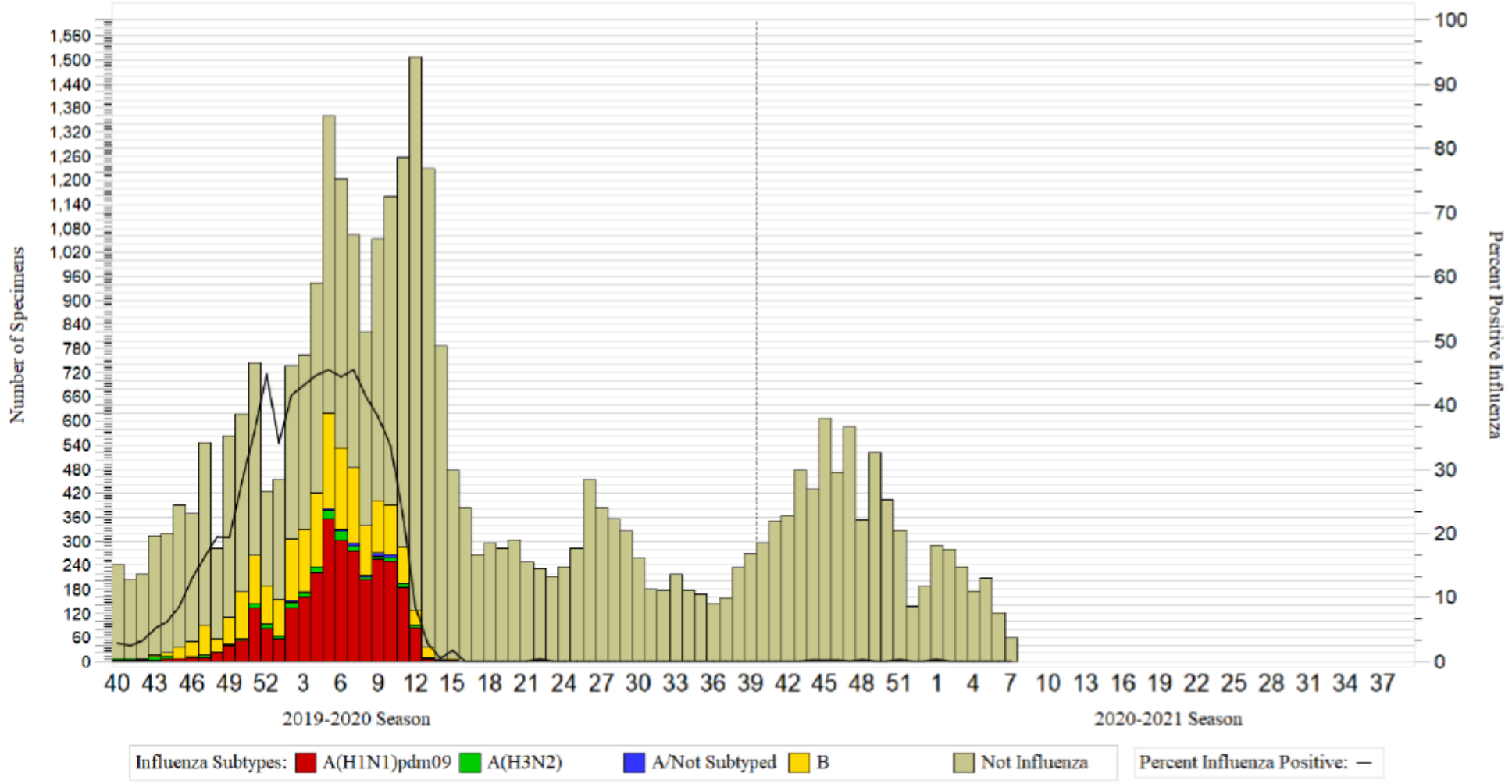
114+ million cases of *COVID-19* worldwide as of March 1, 2021

Influenza 2017-2018, 2018-2019 and 2019-2020 Subtypes



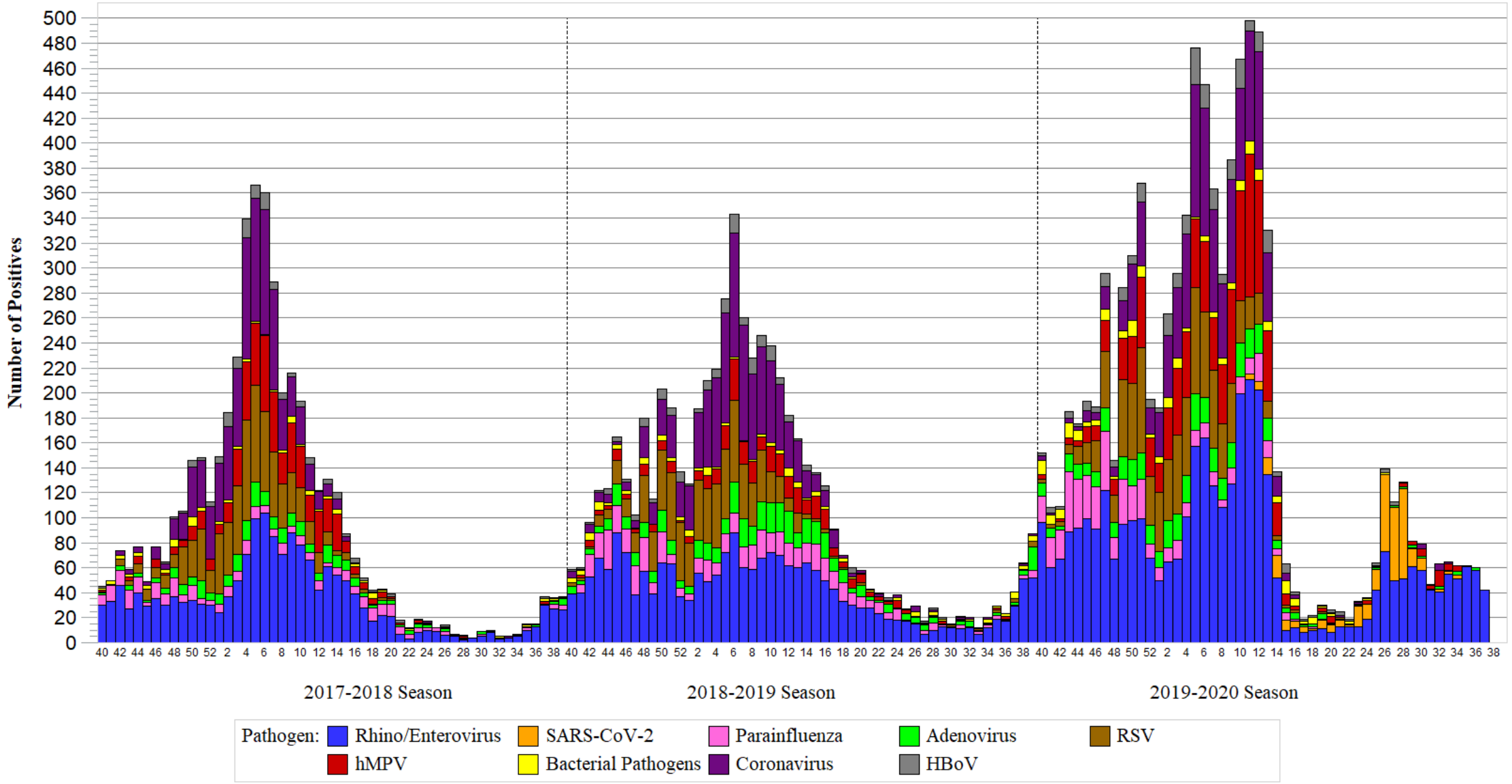
Influenza Surveillance 2019-2020 and 2020-2021 Subtypes

Graph 7. Percent positive for influenza by week: 2019-2020 surveillance year through week 7 of the 2020-2021 surveillance year



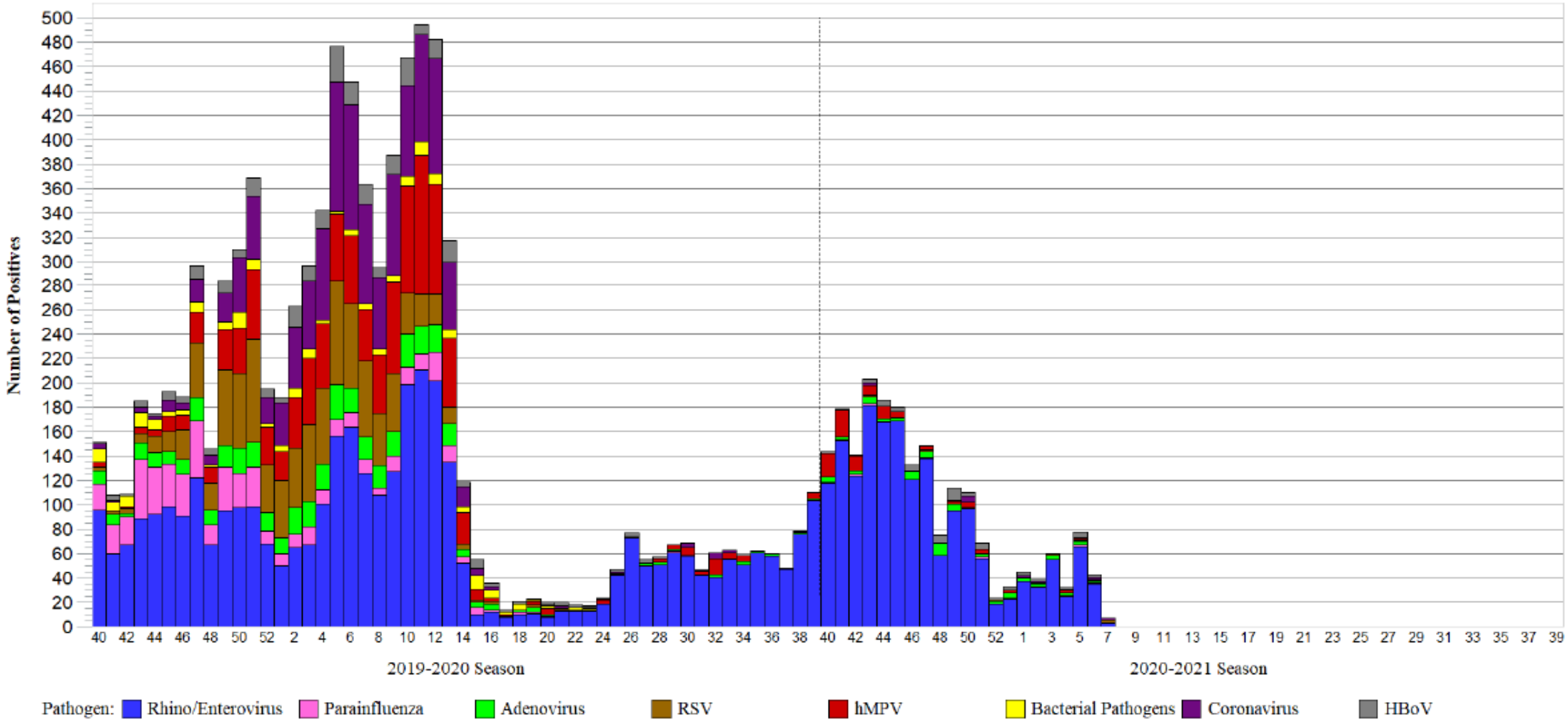
Note: Dual influenza coinfections are excluded from this graph.

Other Respiratory Pathogens 2017--2020



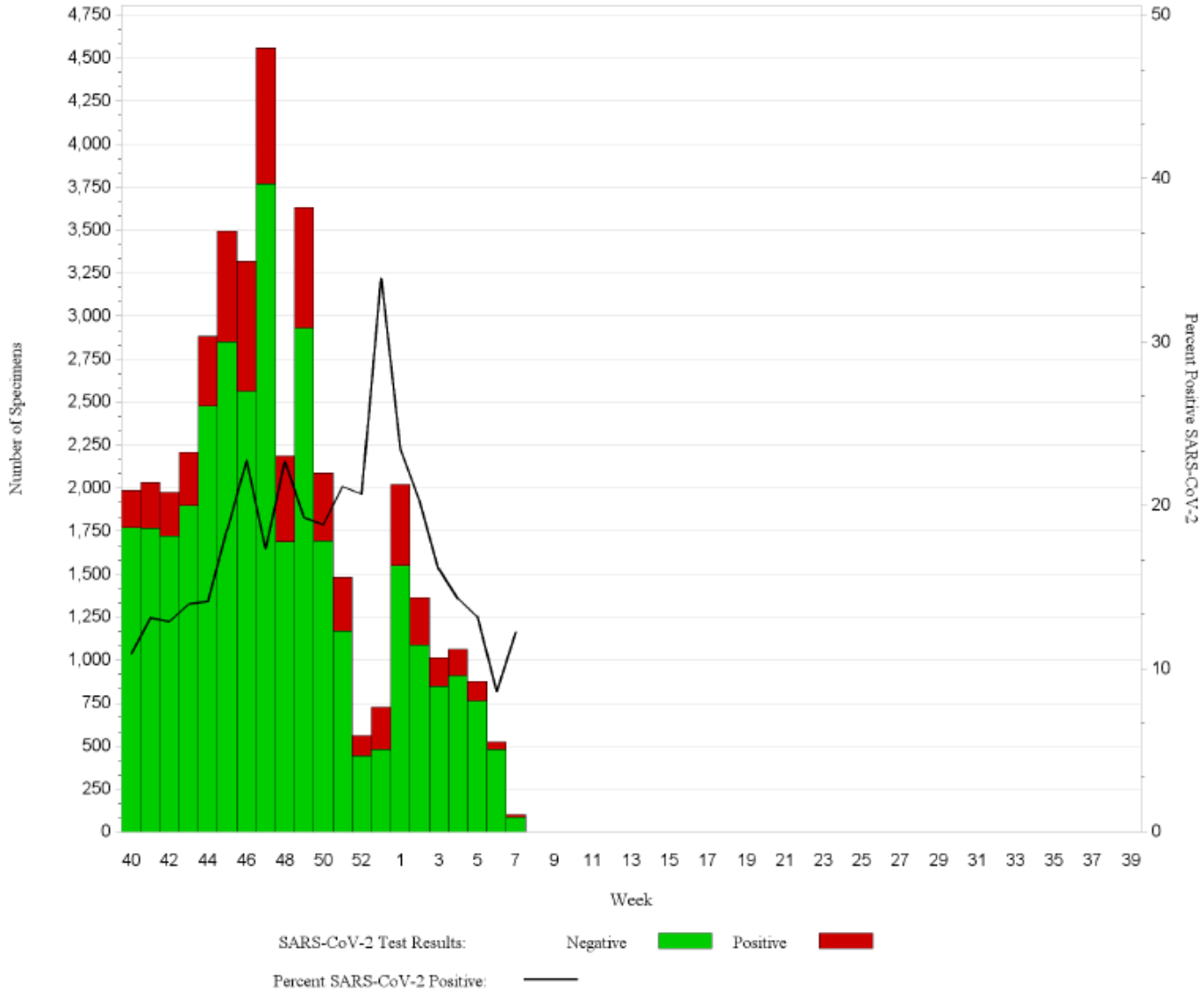
Other Respiratory Pathogens 2019--2021

Graph 9. Other positive respiratory pathogens by week: 2019-2020 surveillance year through week 7 of the 2020-2021 surveillance year



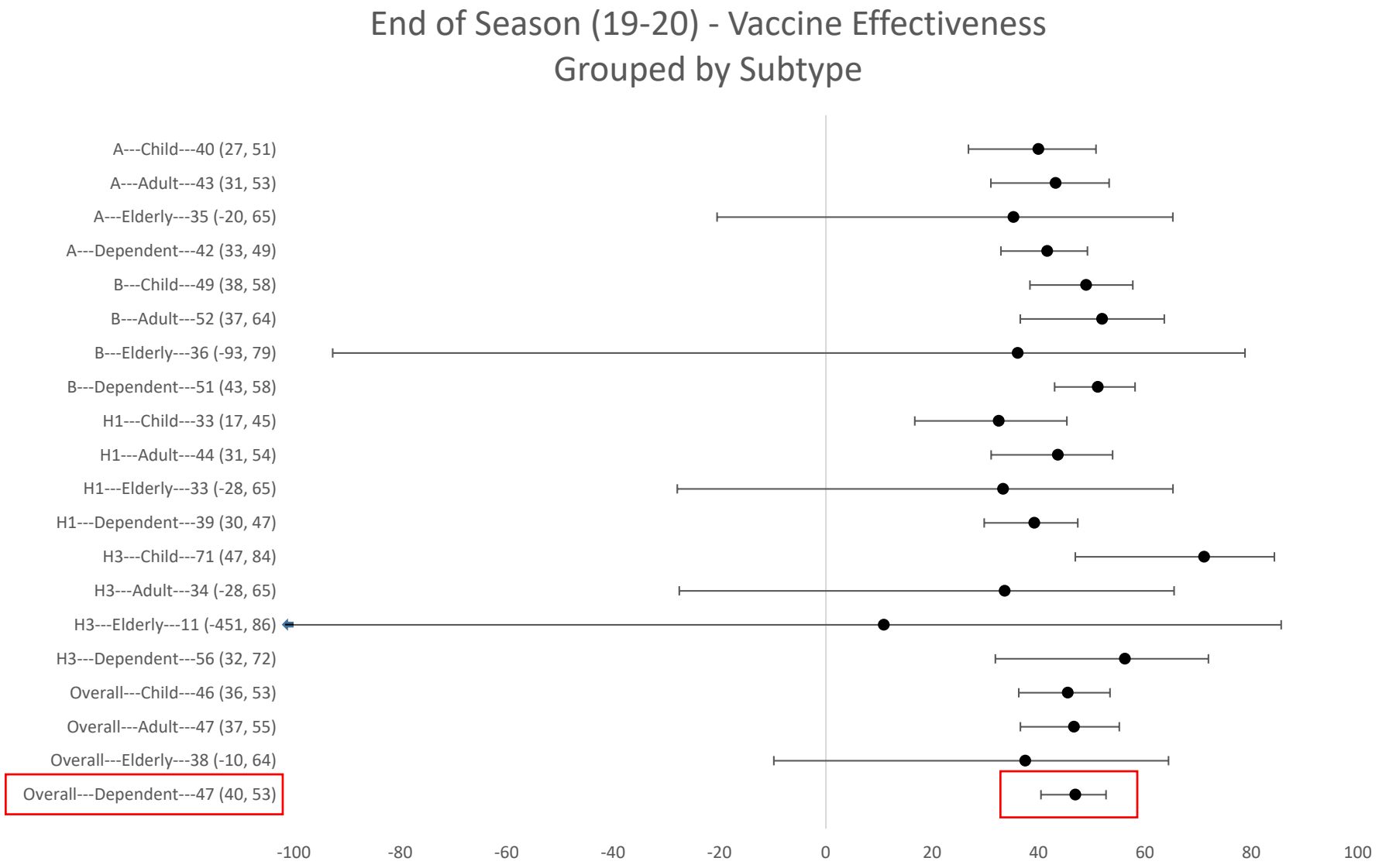
SARS-CoV-2 Surveillance 2020--2021

Graph 2. Percent positive for SARS-Cov-2 surveillance specimens through week 7 of the 2020-2021 surveillance year

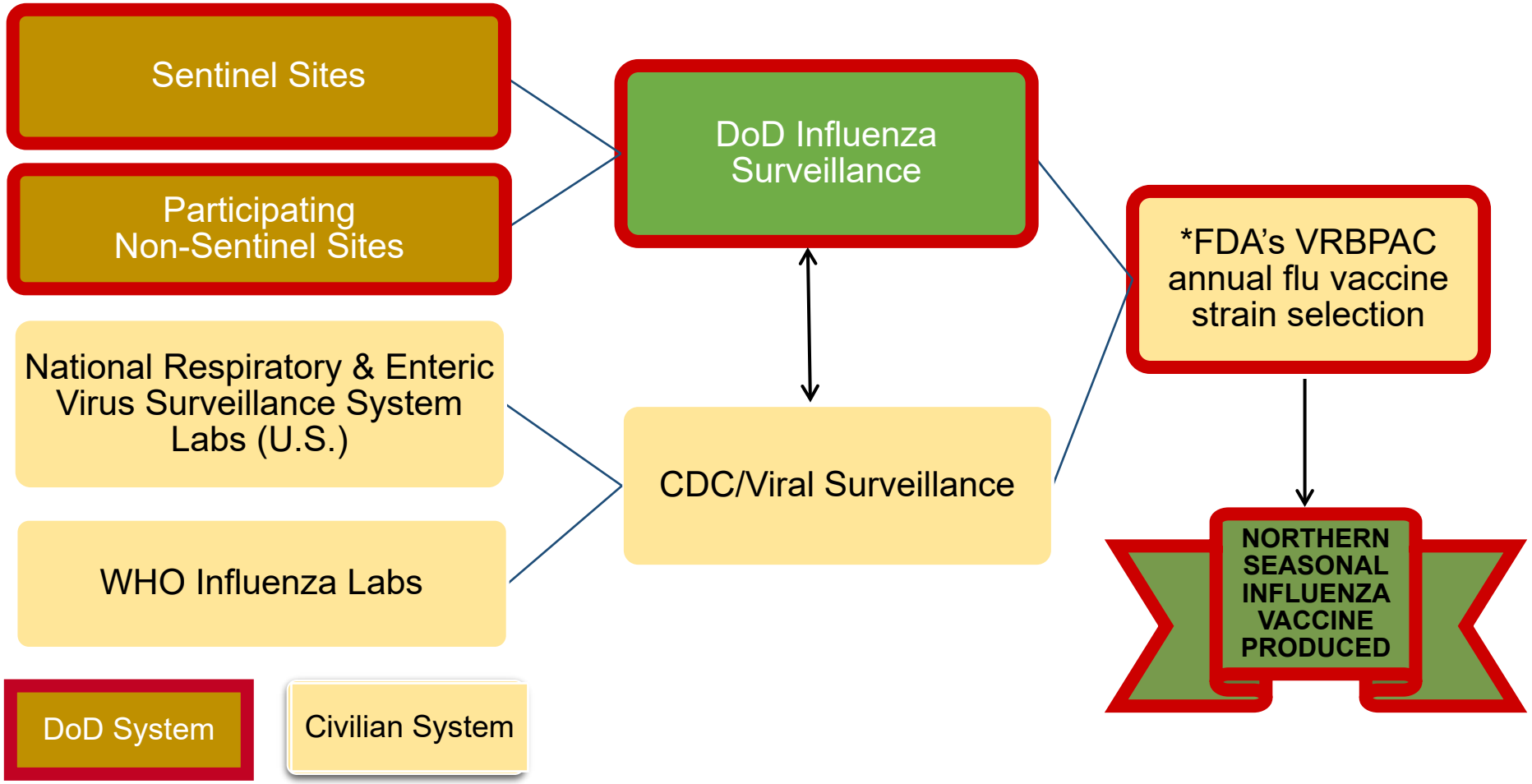


Vaccine Effectiveness (VE)

- Population: DoD healthcare beneficiaries (excluding Active Duty members)
- Analyses by influenza type, subtype, and beneficiary group (children, adults)
- Cases: confirmed by multiplex respiratory panel, RT-PCR or viral culture
- Controls: test-negative for influenza
- Odds ratio (OR) and 95% confidence intervals (CI) were calculated using multivariable logistic regression adjusted for age, collection date, gender, and region
- VE= (1-OR) x 100%

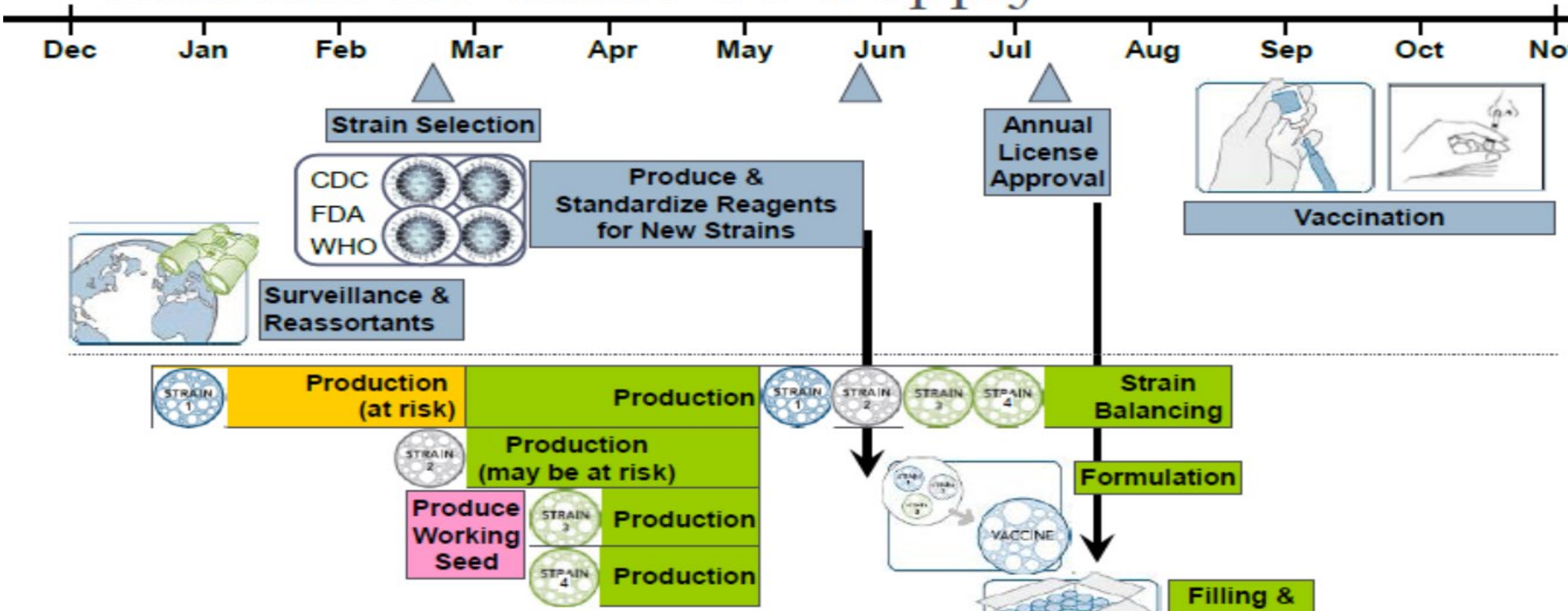


Surveillance Process and Vaccine Development



*Food and Drug Administration (FDA), Vaccines and Related Biological Products Advisory Committee (VRBPAC)

Annual Influenza Vaccine Manufacturing Timeline for entire US Supply



- **~6 Months to produce ~140 Million doses**
  - 2 weeks of production = >10 Million doses
- **~4 Months to vaccinate ~140 Million people**
  - 2 weeks represents >16 Million vaccinations

Influenza Vaccine

Recommended 2020-2021 Northern Hemisphere influenza vaccine:

Egg-based Vaccines

Trivalent (three strains):

- A/Guangdong-Maonan/SWL 1536/2019 (H1N1)pdm09-like virus
- A/Hong Kong/2671/2019 (H3N2)-like virus
- B/Washington/02/2019-like virus (B/Victoria lineage)

Quadrivalent (four strains):

- B/Phuket/3073/2013-like virus (B/Yamagata lineage)

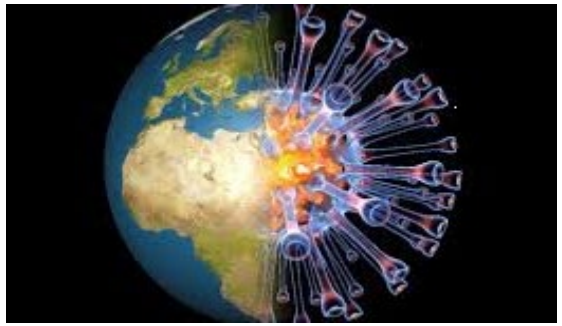
Cell- or recombinant-based Vaccines

Trivalent (three strains):

- A/Hawaii/70/2019 (H1N1)pdm09-like virus
- A/Hong Kong/45/2019 (H3N2)-like virus
- B/Washington/02/2019-like virus (B/Victoria lineage)

Quadrivalent (four strains):

- B/Phuket/3073/2013-like virus (B/Yamagata lineage)



Provide Respiratory Illness Surveillance

Collect Specimens & Questionnaires from patients presenting with:

Acute Respiratory Illness based on

Patient presentation *(to include CoV symptoms)*
Patient history
Clinical suspicion
Laboratory testing

Influenza-like Illness (ILI) or CoVID-19-like Illness (CLI)

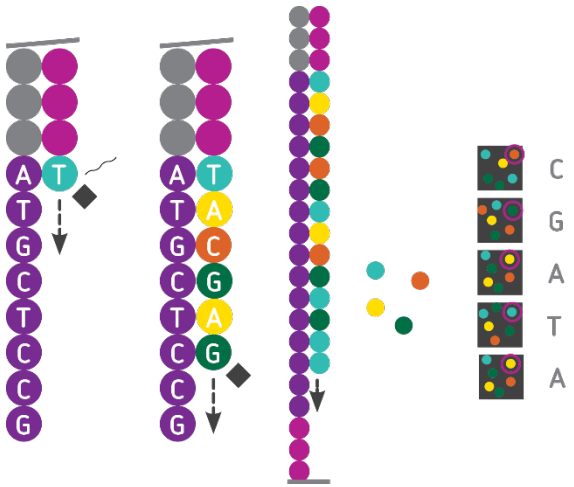
Fever ≥ 100.4°F (≥ 38°C) and Cough and/or *any symptom designated on 2020-2021 questionnaire*

Testing Capabilities

Types of tests to order

Order in CHCS as

1. **Respiratory Pathogen Panel**
   - Traditional test for the DoDGRS program
   - 20 pathogens
2. **SARS-CoV-2 PCR (Diagnostic – Tier 0)**
3. **(Pending) SARS-CoV-2_INFLUENZA**
   - Possibly future test for only Influenza A/B and SARS-CoV-2



Rapid Influenza Diagnostic Tests

- ID influenza A/B antigens
- Relatively quick (~15 minutes)
- Aids clinical decisions for treatment
- High **specificity** level during flu season
- Multiple commercial versions available

Result does NOT determine specimen submission

Split sample & submit to USAFSAM

DoDGRS Kits

DoDGRS team will send kits to sites on a prioritized by site and participation.

Site sends specimens for analysis

DoDGRS returns kits to submitting site

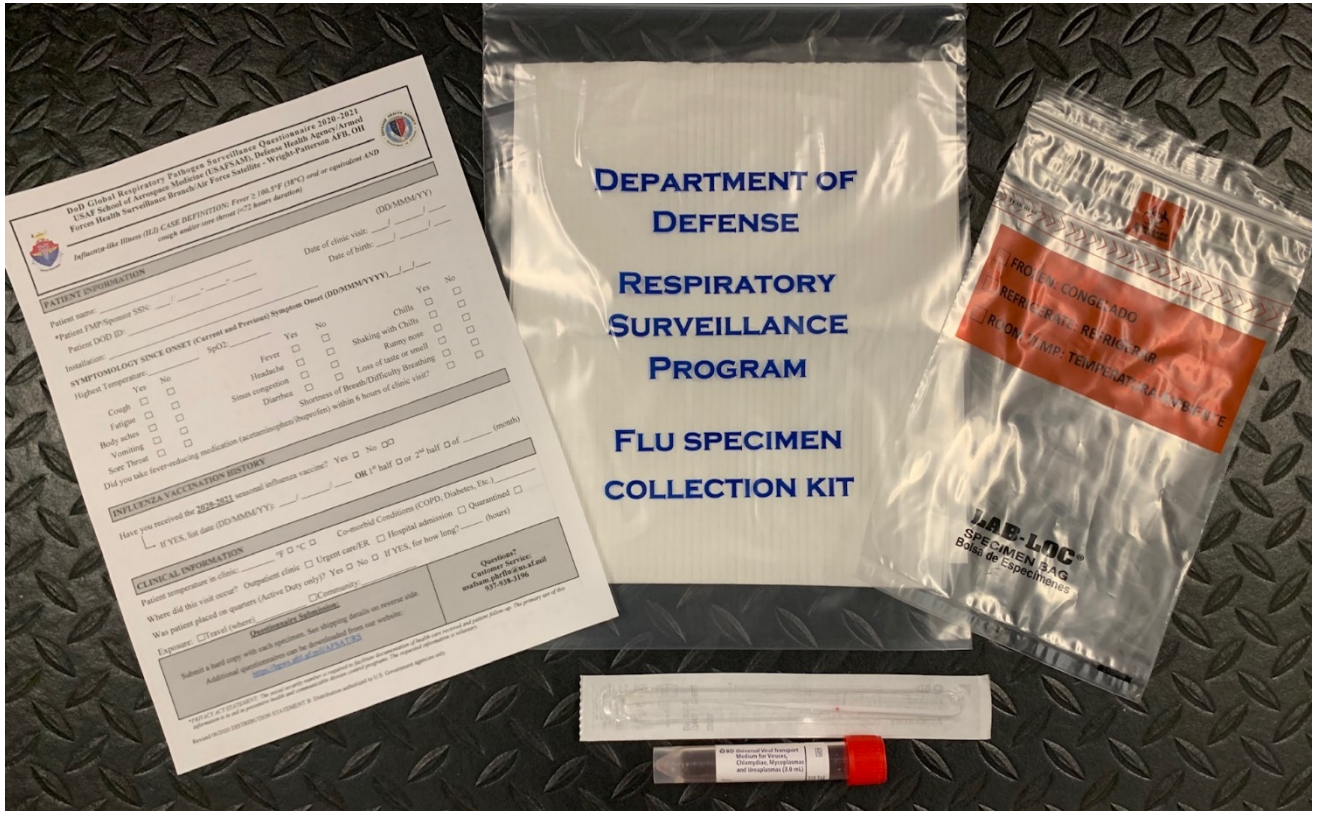
Ms. Caroline Smith

To request collection kits or other documents:

- usafsam.phrflu@us.af.mil
- https://hpws.afrl.af.mil/AFSAT/RS

Nasopharyngeal Kits

These kits are in limited supply, and will be supplied on a site by site basis



Site sends specimens for analysis

DoDGRS returns like kits to submitting site

To request collection kits or other documents:

- usafsam.phrflu@us.af.mil
- https://hpws.afrl.af.mil/AFSAT/RS

Shipping

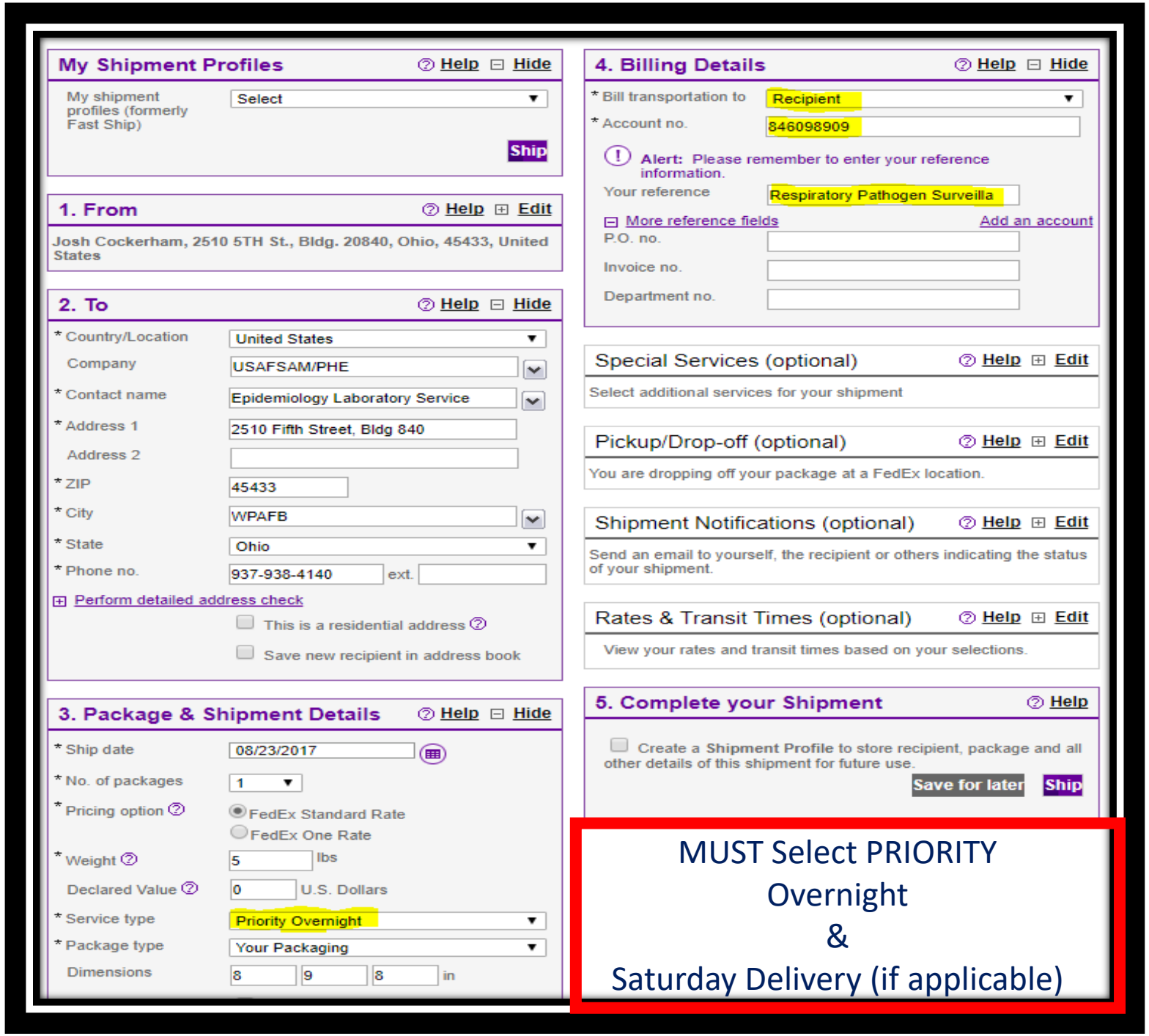
Preferred:

- Freeze specimen at -70°C or colder and ship with dry ice:
  - VTM/UTM tube must have two identifiers, such as DOB and DoD ID
- Use ample amounts of dry ice blocks or pellets
- Specimens are received Monday - Saturday

Acceptable:

- Refrigerate specimen at 2-8°C and ship with frozen gel packs:
  - *Must be received within **48 hours of COLLECTION from patient***

Rejected: Out of temperature/> 48 hours from time of collection/incorrect media/leaking/< 2 identifiers/incorrect or no orders


My Shipment Profiles
Help
Hide
My shipment profiles (formerly Fast Ship)
Select
Ship
1. From
Help
Edit
Josh Cockerham, 2510 5TH St., Bldg. 20840, Ohio, 45433, United States
2. To
Help
Hide
* Country/Location
United States
Company
USAFSAM/PHE
* Contact name
Epidemiology Laboratory Service
* Address 1
2510 Fifth Street, Bldg 840
Address 2
* ZIP
45433
* City
WPAFB
* State
Ohio
* Phone no.
937-938-4140
ext.
Perform detailed address check
This is a residential address
Save new recipient in address book
3. Package & Shipment Details
Help
Hide
* Ship date
08/23/2017
* No. of packages
1
* Pricing option
FedEx Standard Rate
FedEx One Rate
* Weight
5
lbs
Declared Value
0
U.S. Dollars
* Service type
Priority Overnight
* Package type
Your Packaging
Dimensions
8
9
8
in
4. Billing Details
Help
Hide
* Bill transportation to
Recipient
* Account no.
846098909
Alert: Please remember to enter your reference information.
Your reference
Respiratory Pathogen Surveilla
More reference fields
Add an account
P.O. no.
Invoice no.
Department no.
Special Services (optional)
Help
Edit
Select additional services for your shipment
Pickup/Drop-off (optional)
Help
Edit
You are dropping off your package at a FedEx location.
Shipment Notifications (optional)
Help
Edit
Send an email to yourself, the recipient or others indicating the status of your shipment.
Rates & Transit Times (optional)
Help
Edit
View your rates and transit times based on your selections.
5. Complete your Shipment
Help
Create a Shipment Profile to store recipient, package and all other details of this shipment for future use.
Save for later
Ship
MUST Select PRIORITY Overnight
&
Saturday Delivery (if applicable)

DoD Global Respiratory Pathogen Surveillance Questionnaire 2020-2021
USAF School of Aerospace Medicine (USAFSAM), Defense Health Agency/Armed Forces Health Surveillance Division/Air Force Satellite - Wright-Patterson AFB, OH

CASE DEFINITION (Both Influenza Like Illness (ILI) and CoVID-19 Like Illness (CLI): Fever ≥ 100.4°F (≥ 38°C) oral or equivalent AND cough and/or any symptoms designated below

PATIENT INFORMATION

WS

Patient name: _____ (DD/MMM/YY)

*Patient FMP/Sponsor SSN: ___ / _____-____-_____ Date of clinic visit: ____ / _____ / ____

Patient DOD ID: _____ Date of birth: ____ / _____ / ____

Installation: _____

SYMPTOMOLOGY SINCE ONSET (Current and Previous) Symptom Onset (DD/MMM/YYYY) ____ / _____ / ____

Highest Temperature: _____ SpO2: _____

	Yes	No		Yes	No		Yes	No
Cough	☐	☐	Fever	☐	☐	Chills	☐	☐
Fatigue	☐	☐	Headache	☐	☐	Shaking with Chills	☐	☐
Body aches	☐	☐	Sinus congestion	☐	☐	Runny nose	☐	☐
Vomiting	☐	☐	Diarrhea	☐	☐	Loss of taste or smell	☐	☐
Sore Throat	☐	☐				Shortness of Breath/Difficulty Breathing	☐	☐

Did you take fever-reducing medication (acetaminophen/ibuprofen) within 6 hours of clinic visit? ☐ ☐

VACCINATION HISTORY(Influenza and Covid-19)

Received the **2020-21** seasonal influenza vaccine ? Yes ☐ No ☐ : Covid-19 Vaccination? Yes ☐ No ☐

If YES, list date (DD/MMM/YY): ____ / _____ / ____ **OR** 1st half ☐ or 2nd half ☐ of _____ (month)

Covid–19 Vaccination Date (DD/MMM/YY) ____ / _____ / ____ Manufacturer_____ Dose: 1 ☐ 2 ☐

CLINICAL INFORMATION

Patient temperature in clinic: _____ °F ☐ °C ☐ Co-morbid Conditions (COPD, Diabetes, Etc) _____

Where did this visit occur? Outpatient clinic ☐ Urgent care/ER ☐ Hospital admission ☐ Quarantined ☐

Was patient placed on quarters (Active Duty only)? Yes ☐ No ☐ If YES, for how long? _____ (hours)

Exposure: ☐ Travel (where) _____ ☐ Community: _____

Questionnaire Submission:	**Questions?**
Submit a hard copy with each specimen. See shipping details on reverse side. Additional questionnaires can be downloaded from our website: https://hpws.afrl.af.mil/AFSAT/RS	**Customer Service:** usafsam.phrflu@us.af.mil 937-938-3196

*PRIVACY ACT STATEMENT: The social security number is requested to facilitate documentation of health care received and patient follow-up. The primary use of this information is to aid in preventive health and communicable disease control programs. The requested information is voluntary.

Revised 06/2020 DISTRIBUTION STATEMENT B. Distribution authorized to U.S. Government agencies only.

DoD Global Respiratory Pathogen Questionnaire 2020-2021
USAFSAM, Defense Health Agency/Armed Forces Health Surveillance Branch/Air Force Satellite
Wright-Patterson AFB, OH

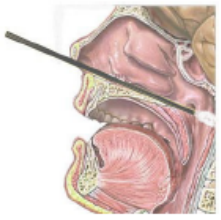
Order the following clinical tests in CHCS - Respiratory Pathogen Panel and SARS-CoV-2 PCR. When selecting the testing category for the SARS-CoV-2 test, select "**DIAGNOSIS**" -- Diagnosis-clinically indicated for patient.

Nasal Wash Procedural Guidelines *(Preferred Method of Collection)*

Instructions:

1. Tuck bib into patient's shirt collar.
2. Uncap pre-filled saline syringe and specimen collection container. Break the seal on the syringe by gently expressing a small amount of saline into the tip of the hub.
3. Have patients tilt their head back so they are able to look directly at the ceiling while they hold the specimen collection container up to their chin area.
4. Encourage patients to not swallow saline by saying "Ka Ka Ka" or making a constant "choking sound" while saline is expressed into their nostrils.
5. Gently express 2-4 mL of sterile saline into right nostril of patient (saline will drain back into the back of the nasopharynx).
6. After a few seconds, have patients lean their head far enough forward so the saline will drain into the specimen collection container. **Repeat procedure for the second nostril.**
7. Offer patients a facial tissue or have them use the bib to wipe away excess saline from their face.
8. Transfer the contents to the transport medium* vial included in the kit. Squeezing the rim of the cup will aid in pouring the contents into the transport medium.
9. Place specimen in the biohazard bag included in the kit and forward to the laboratory for packaging and shipment to USAFSAM. Place the completed questionnaire in the pocket on the outside of the specimen bag.

Nasopharyngeal (NP) Swab Collection Guidelines



NP swabs can be used to collect an appropriate specimen for respiratory testing. Specimens must be immediately placed in 1-3 mL of transport medium.* Use a flexible fine-shafted swab with a polyester, Dacron, nylon, or rayon tip. Do NOT use cotton or calcium alginate tips or wooden shaft swabs.

Instructions:

1. With the patient's head at a 70° angle, gently insert the swab into a nostril (straight back, not upwards) until resistance is met by contact with the posterior nasopharynx. The distance from the patients' nose to their ear gives an estimate of the distance the swab should be inserted.
2. Rotate the swab several times (5-6 times) across the mucosal surface to loosen and collect cellular material.
3. Although a contact time of 10 - 30 seconds is suggested, allow swab to remain in place for several seconds. Remove the swab.
4. Withdraw the swab and insert into the tube of transport medium*. Snap off the swab shaft leaving the swab inside the vial. Replace the cap securely.
5. Place specimen in the biohazard bag included in the kit and forward to laboratory for packaging and shipment to USAFSAM. Place the completed questionnaire in the pocket on the outside of the specimen bag.

* USAFSAM Epidemiology Lab Approved Transport Medium (Supplied)

Video demonstration of a nasal wash specimen collection is available on our resources link at:
https://hpws.afrl.af.mil/AFSAT/RS (CAC required site) or https://www.milsuite.mil/video/watch/video/19316

Storage & Shipment

Best: Freeze the specimen at -70°C and ship with dry ice (5lbs CONUS and 15 lbs OCONUS)

Acceptable: If specimens can arrive at the USAFSAM laboratory within 48 hours from collection time, then store & maintain the 2-8°C temperature with frozen gel packs.

Viral transport supplies may be ordered by emailing our Customer Service department at usafsam.phrflu@us.af.mil or by calling 937-938-3196 (DSN: 798-3196) by calling 937-938-3196(DSN: 798-3196)

Shipping

Ship **Priority Overnight (Mark Saturday Delivery)**
FedEx number **8460-9890-9** to:

USAFSAM/PHE
Epidemiology Laboratory Services
2510 Fifth Street, Bldg. 20840
WPAFB, OH 45433

Additional laboratory and logistics info, please refer to the resource link at:
https://hpws.afrl.af.mil/AFSAT/RS
(CAC required site)

Revised 06/2020 DISTRIBUTION STATEMENT B. Distribution authorized to U.S. Government agencies only.

NW demonstration video: https://www.milsuite.mil/video/watch/video/19316

PATIENT INFORMATION

WS

Patient name: (DD/MMM/YY)

*Patient FMP/Sponsor SSN: ____ / _____ - _____ - _____

Patient DOD ID: _____

Date of clinic visit: _____ / _____ / _____

Date of birth: _____ / _____ / _____

Installation: _____

SYMPTOMOLOGY SINCE ONSET (Current and Previous) Symptom Onset (DD/MMM/YYYY) ____ /_____ /_____

Highest Temperature: _____ SpO2: _____

	Yes	No		Yes	No		Yes	No
Cough	☐	☐	Fever	☐	☐	Chills	☐	☐
Fatigue	☐	☐	Headache	☐	☐	Shaking with Chills	☐	☐
Body aches	☐	☐	Sinus congestion	☐	☐	Runny nose	☐	☐
Vomiting	☐	☐	Diarrhea	☐	☐	Loss of taste or smell	☐	☐
Sore Throat	☐	☐				Shortness of Breath/Difficulty Breathing	☐	☐

Did you take fever-reducing medication (acetaminophen/ibuprofen) within 6 hours of clinic visit? ☐ ☐

VACCINATION HISTORY(Influenza and Covid-19)

Received the **2020-21** seasonal influenza vaccine ? Yes ☐ No ☐ : Covid-19 Vaccination? Yes ☐ No ☐

If YES, list date (DD/MMM/YY): ____ / _____ / ____ **OR** 1st half ☐ or 2nd half ☐ of _____ (month)

Covid–19 Vaccination Date (DD/MMM/YY) ____ / _____ / ____ Manufacturer_____ Dose: 1 ☐ 2 ☐

CLINICAL INFORMATION

Patient temperature in clinic: _____ °F ☐ °C ☐ Co-morbid Conditions (COPD, Diabetes, Etc) _____

Where did this visit occur? Outpatient clinic ☐ Urgent care/ER ☐ Hospital admission ☐ Quarantined ☐

Was patient placed on quarters (Active Duty only)? Yes ☐ No ☐ If YES, for how long? _____ (hours)

Exposure: ☐ Travel (where) _____ ☐ Community: _____

Patient name: _____ (DD/MMM/YY)

*Patient FMP/Sponsor SSN: ____ / _____ - _____ - _____ Date of clinic visit: ____ / _____ / ____

Patient DOD ID: _____ Date of birth: ____ / _____ / ____

Installation:

SYMPTOMOLOGY SINCE ONSET (Current and Previous) Symptom Onset (DD/MMM/YYYY) 14 / Feb / 21

Highest Temperature: _____ SpO2: _____

	Yes	No		Yes	No		Yes	No
Cough	☐	☐	Fever	☐	☐	Chills	☐	☐
Fatigue	☐	☐	Headache	☐	☐	Shaking with Chills	☐	☐
Body aches	☐	☐	Sinus congestion	☐	☐	Runny nose	☐	☐
Vomiting	☐	☐	Diarrhea	☐	☐	Loss of taste or smell	☐	☐
Sore Throat	☐	☐				Shortness of Breath/Difficulty Breathing	☐	☐

Did you take fever-reducing medication (acetaminophen/ibuprofen) within 6 hours of clinic visit? ☐ ☐

(If patient is asymptomatic, you may leave blank or abbreviate "Asympt")

VACCINATION HISTORY(Influenza and Covid-19)

Received the **2020-21** seasonal influenza vaccine ? Yes ☐ No ☐ : Covid-19 Vaccination? Yes ☐ No ☐

If YES, list date (DD/MMM/YY): ____ / _____ / ____ **OR** 1st half ☐ or 2nd half ☐ of _____ (month)

Covid–19 Vaccination Date (DD/MMM/YY) ____ / _____ / ____ Manufacturer_____ Dose: 1 ☐ 2 ☐

(It is ok for the patient to state "No")

CLINICAL INFORMATION

Patient temperature in clinic: _____ °F ☐ °C ☐ Co-morbid Conditions (COPD, Diabetes, Etc) _____

Where did this visit occur? Outpatient clinic ☐ Urgent care/ER ☐ Hospital admission ☐ Quarantined ☐

Was patient placed on quarters (Active Duty only)? Yes ☐ No ☐ If YES, for how long? _____ (hours)

Exposure: ☐ Travel (where) _____ ☐ Community: _____

Patient name: _____ (DD/MMM/YY)

*Patient FMP/Sponsor SSN: ____ / _____ - _____ - _____ Date of clinic visit: ____ / _____ / ____

Patient DOD ID: _____ Date of birth: ____ / _____ / ____

Installation: _____

SYMPTOMOLOGY SINCE ONSET (Current and Previous) Symptom Onset (DD/MMM/YYYY) ____ /_____ /____

Highest Temperature: _____ SpO2: _____

	Yes	No		Yes	No		Yes	No
Cough	X		Fever	X		Chills	X	
Fatigue	X		Headache	X		Shaking with Chills	X	
Body aches	X		Sinus congestion	X		Runny nose	X	
Vomiting		X	Diarrhea		X	Loss of taste or smell		X
Sore Throat	X					Shortness of Breath/Difficulty Breathing		X
Did you take fever-reducing medication (acetaminophen/ibuprofen) within 6 hours of clinic visit?								

If the patient is able to respond that they are not experiencing a symptom, mark "No"

VACCINATION HISTORY(Influenza and Covid-19)

Received the **2020-21** seasonal influenza vaccine ? Yes ☐ No ☐ : Covid-19 Vaccination? Yes ☐ No ☐

If YES, list date (DD/MMM/YY): ____ / _____ / ____ **OR** 1st half ☐ or 2nd half ☐ of _____ (month)

Covid–19 Vaccination Date (DD/MMM/YY) ____ / _____ / ____ Manufacturer_____ Dose: 1 ☐ 2 ☐

CLINICAL INFORMATION

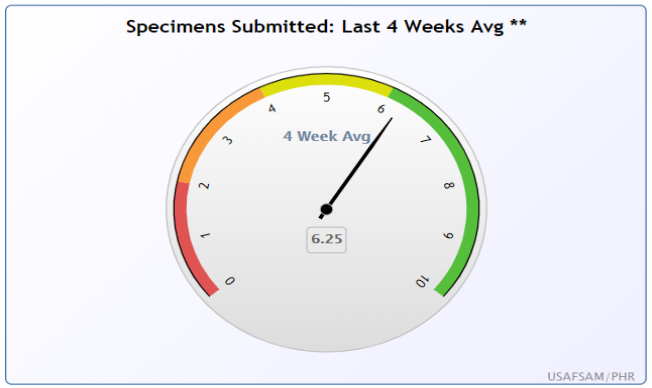
Patient temperature in clinic: _____ °F ☐ °C ☐ Co-morbid Conditions (COPD, Diabetes, Etc) _____

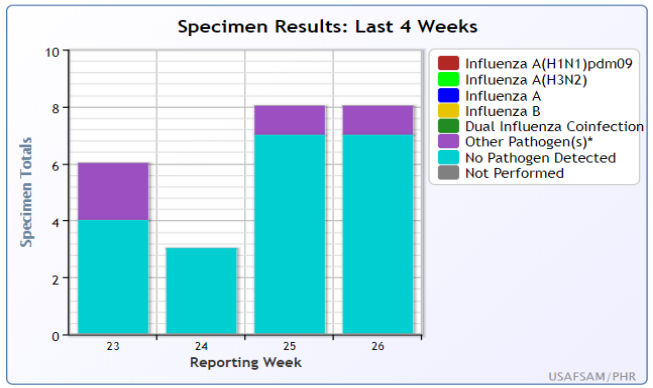
Where did this visit occur? Outpatient clinic ☐ Urgent care/ER ☐ Hospital admission ☐ Quarantined ☐

Was patient placed on quarters (Active Duty only)? Yes ☐ No ☐ If YES, for how long? _____ (hours)

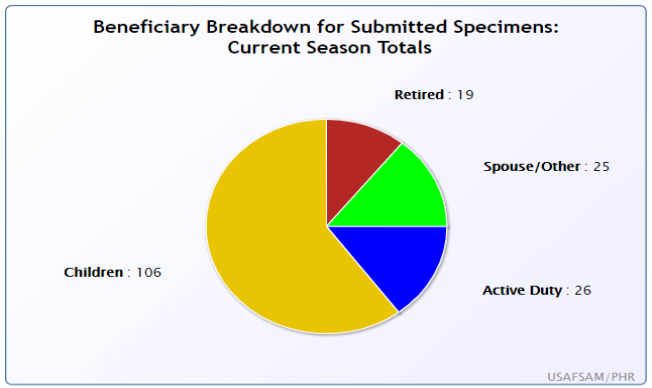
Exposure: ☐ Travel (where) _____ ☐ Community: _____

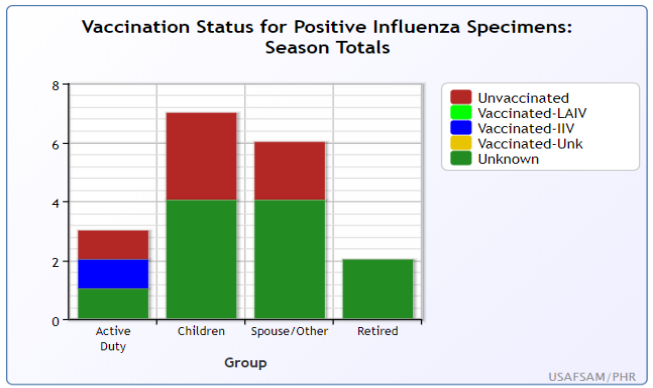
DoDGRS Dashboard *https://hpws.afrl.af.mil/AFSAT/RS*





** Request 6-10 specimens per week from patients who meet our ILI case definition.

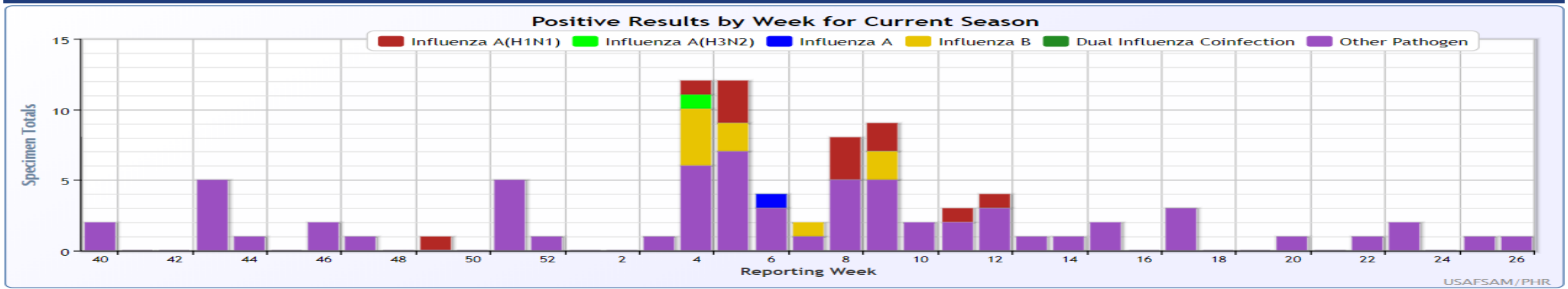




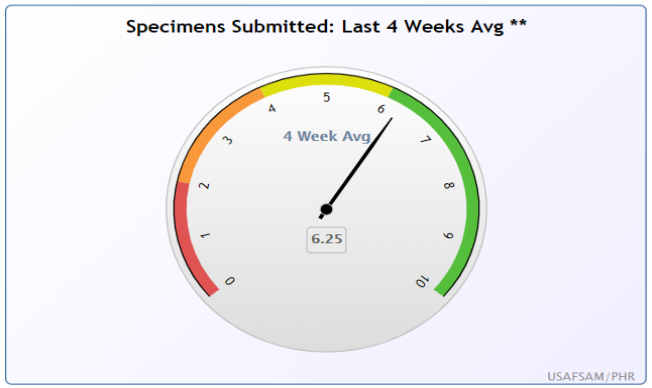
2019 - 2020 QUICK STATS
(through 27 Jun 2020)

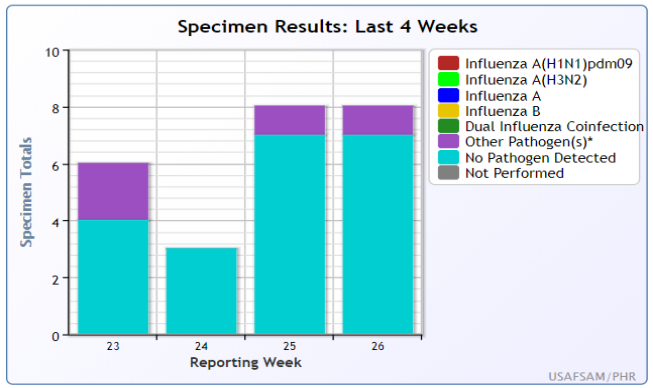
Specimens Submitted:	**1373**
Positive Flu Results:	23
Positive Other Pathogens:	65
No Pathogen:	92
Failed/Inconclusive:	0
Test Not Performed:	0
Rejected*:	1
Pending Results:	0
Pending Tests:	1192
Questionnaires Submitted:	59 (4 %)
Missing Questionnaires:	1313
Specimens received for Sequencing:	0
Positive Influenza Results Sequenced:	12 (0 %)
View Quick Stats for Season:	2019-2020

WEEKLY DATA



DoDGRS Dashboard *https://hpws.afrl.af.mil/AFSAT/RS*





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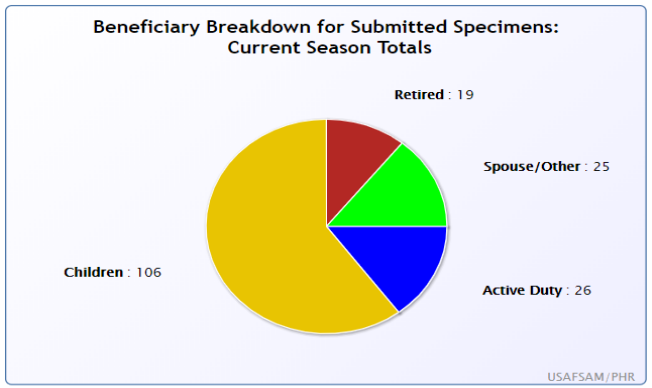
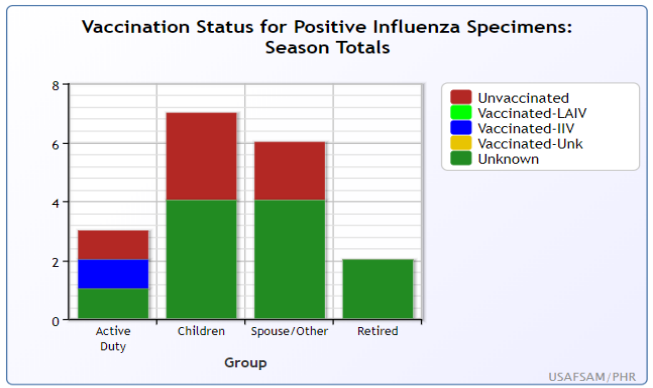
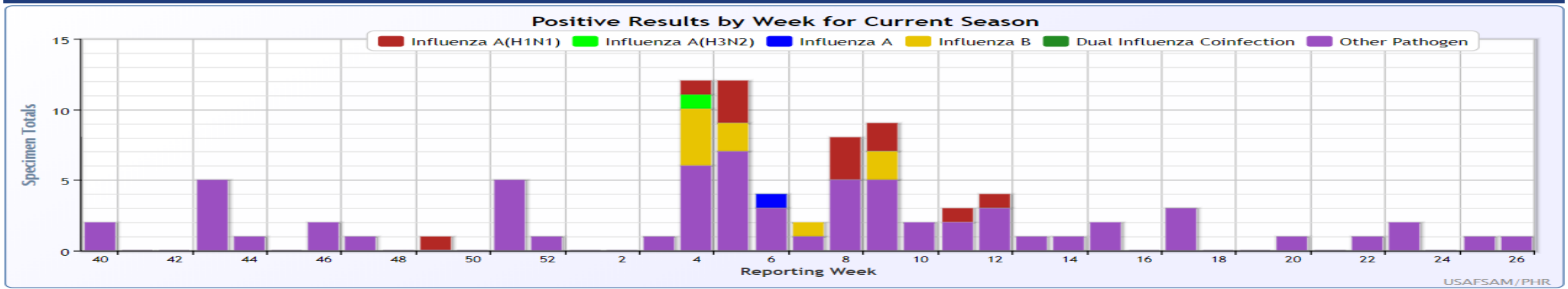




2019 - 2020 QUICK STATS
(through 27 Jun 2020)

Specimens Submitted:	**1373**
Positive Flu Results:	23
Positive Other Pathogens:	65
No Pathogen:	92
Failed/Inconclusive:	0
Test Not Performed:	0
Rejected*:	1
Pending Results:	0
Pending Tests:	1192
Questionnaires Submitted:	59 (4 %)
Missing Questionnaires:	1313
Specimens received for Sequencing:	0
Positive Influenza Results Sequenced:	12 (0 %)
View Quick Stats for Season:	2019-2020

WEEKLY DATA



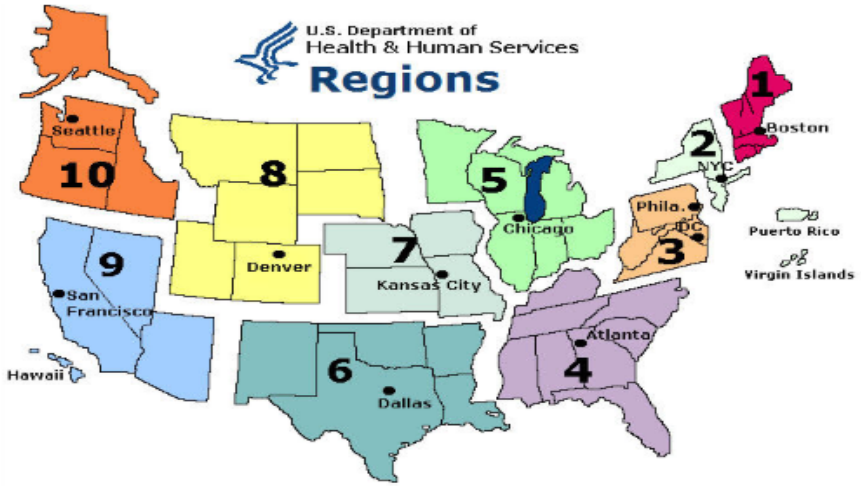
Respiratory Pathogens Dashboard

Surveillance Dashboard

CDC Region 6 - South Central

View Other CDC Regions

- 0 - OCONUS
- 1 - New England
- 2 - North Atlantic
- 3 - Mid Atlantic
- 4 - South Atlantic
- 5 - East North Central
- 6 - South Central
- 7 - Mid Central
- 8 - Mountain
- 9 - South Pacific
- 10 - North Pacific

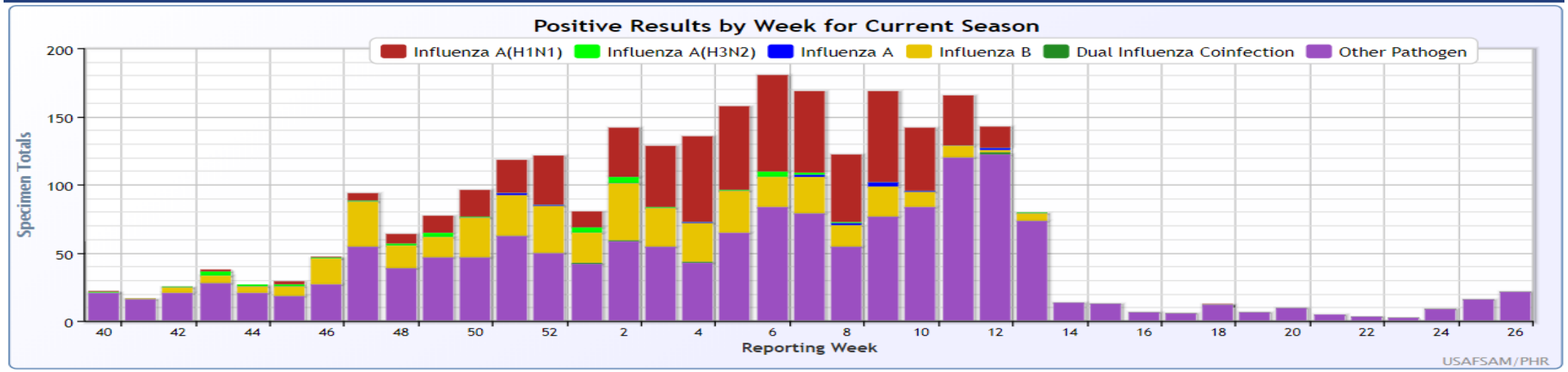


Back to Dashboard Location Listing

2019 - 2020 QUICK STATS
(through 27 Jun 2020)

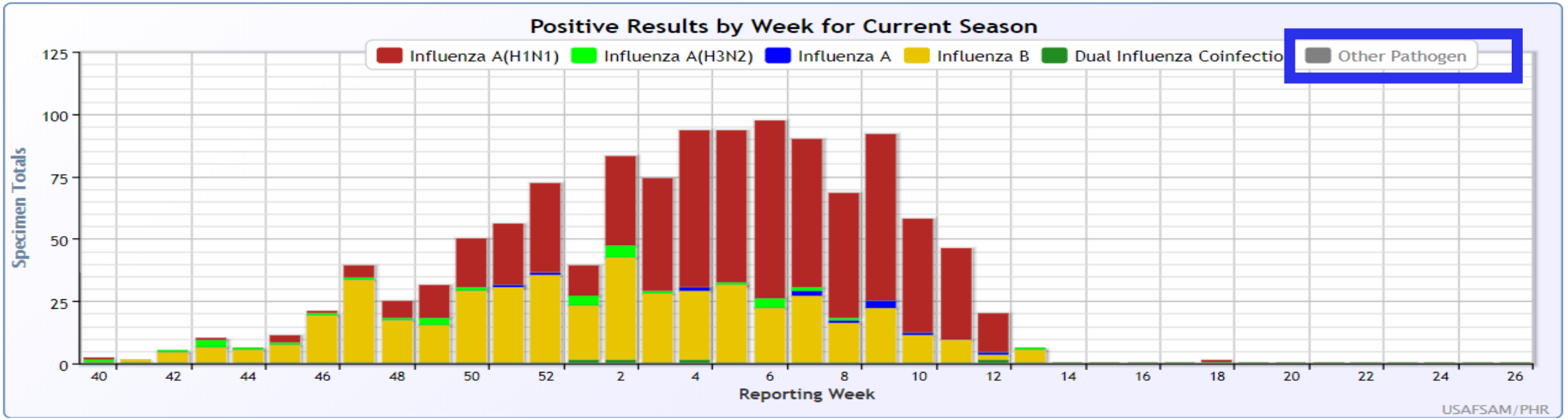
Specimens Submitted:	10199
Positive Flu Results:	1185
Positive Other Pathogens:	1503
No Pathogen:	3024
Failed/Inconclusive:	51
Test Not Performed:	82
Rejected*:	19
Pending Results:	0
Pending Tests:	4331
Questionnaires Submitted:	3911 (38 %)
Missing Questionnaires:	6269
View Quick Stats for Season:	2019-2020

WEEKLY DATA

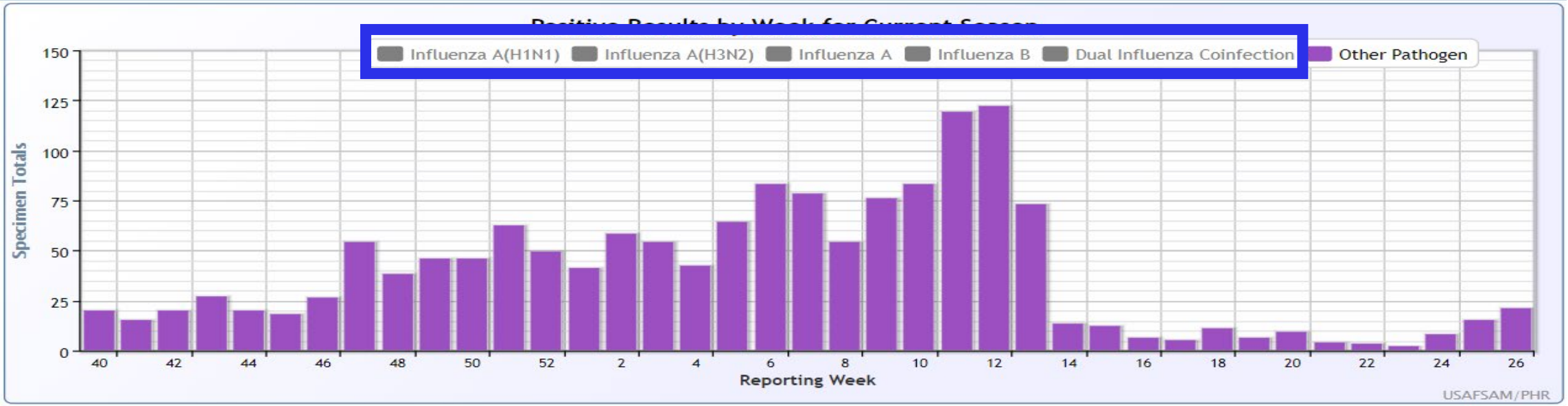


Respiratory Pathogens Dashboard

WEEKLY DATA



WEEKLY DATA



USAF School of Aerospace Medicine & Defense Health Agency

DoD Global Respiratory Pathogen Surveillance Program

2019-2020

Cumulative Results

Locations	115
Collected	28,189
Tested	27,847

Influenza	**5,529**
A(H1N1)pdm09	2,584
A(H1N1)pdm09 & Other Pathogens	301
A(H3N2)	180
A(H3N2) & Other Pathogens	33
A/Not Subtyped	53
A/Not Subtyped & Other Pathogens	11
B	2,065
B & Other Pathogens	271
Dual Influenza	27
Dual Influenza & Other Pathogens	4
SARS-CoV-2	**348**
SARS-CoV-2	340
SARS-CoV-2 & Other Pathogens	8
SARS-CoV-2 & hMPV (n=3)	
SARS-CoV-2 & Rhino/Entero (n=5)	
Other Pathogens	**7,477**
Adenovirus	276
Chlamydophila pneumoniae	60
Coronavirus (seasonal)	953
Human Bocavirus	94
Human Metapneumovirus	805
Mycoplasma pneumoniae	127
Parainfluenza	454
RSV	782
Rhinovirus/Enterovirus	3,113
Viral or Bacterial Coinfections	813
No Pathogen Detected	**14,019**
Negative^	**474**

Results are preliminary and may change as more results are finalized.
^Negative—Specimens only tested for SARS-CoV-2. Multiplex testing was not performed.

Respiratory Highlights
30 August - 12 September 2020 (Surveillance Weeks 36 & 37)

- During 30 August - 12 September 2020, a total of 333 specimens were collected and received for SARS-CoV-2 or other respiratory pathogen testing from 25 locations. Results were finalized for 323 specimens from all locations. During this two week period, influenza and SARS-CoV-2 were not detected. Additionally, there were 101 other respiratory pathogens identified, which were all positive for rhinovirus/enterovirus (including two coinfections). The predominant respiratory pathogen circulating in the past two weeks is rhinovirus/enterovirus. The influenza percent positive for the season is approximately 20% and SARS-CoV-2 percent positive since week 10 is approximately 8%.

Surveillance Weeks	Adenovirus & Rhinovirus/ Enterovirus	Rhinovirus/ Enterovirus	Total
Week 36	2	56	58
Week 37	0	43	43
Total	2	99	101

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Weekly Surveillance Report: Distributed via email and on the DoDGRS Dashboard

usafsam.phrflu@us.af.mil or https://hpws.afrl.af.mil/AFSAT/RS

Frequently Asked Questions

- **If we have the ability to send confirmed positive COVID or Flu positive samples, is that desired?**
  - We prefer you send random samples that meet ILI or CLI case definitions. Do not use rapid testing/on-site testing results as a means to select specimens to send. We suggest you split a specimen received in your lab prior to testing and send to us regardless of result (and always include the completed questionnaire). *The CDC requests positive SARS-CoV-2 specimens not be sent via FedEx.*

Frequently Asked Questions

- **If the patient had a fever at home but does not when they come to the clinic to be seen, do you still want that specimen?**
  - Yes, we want that specimen. Whether the patient reports a fever at home or has a documented fever at the MTF, that meets our requirement for the ILI or CLI fever portion of the case definition.
- **Is the new questionnaire available on the DoDGRS website?**
  - Yes, the 2020-2021 questionnaire is available under the Resources Tab on our website: https://hpws.afrl.af.mil/epi-consult/influenza/resources.cfm
- **When does the new influenza season start?**
  - The new influenza season for 2020-2021 starts on 27 September 2020.

Frequently Asked Questions

- **What test should I order in CHCS?**
  - For the time being, please order the Respiratory Pathogen Panel (RPP) and the SARS-CoV-2 PCR test and submit Nasal Wash or Nasopharyngeal Swabs in Remel M4RT Viral Transport Medium (VTM) or BD Universal Transport Medium (UTM). If a specimen arrives with a different collection method or in a different media than those permitted on the RPP, then the tests will need to be cancelled and re-ordered.
  - We are able to accommodate a larger range of specimen and media types for only SARS-CoV-2 testing, so please check the lab guide for additional information if you do not wish to have the RPP performed. Additionally, we are currently working to bring on multiplexed testing for Influenza and SARS-CoV-2, and potentially other pathogens, however any changes in testing algorithms will be contingent upon resource supply chains, testing costs and available funds, customer needs, and timeliness of FDA clearance and/or EUA approvals.
  - In the event of any testing operation changes, all sites will be notified via letter and given instructions on how to proceed. Please be patient as we anticipate changes to come soon and potentially throughout the season as demands change.

Frequently Asked Questions

- **Does a temperature recording at or above 100.4°F from home count as meeting the ILI / CLI Case Definition?**
  - Yes, any recorded temperature ≥ 100.4°F should be considered for ILI Case Definition, regardless of where the temperature was taken. There is room on the questionnaire to document the highest temperature recorded, whether at home or in the clinic, etc.
- **Are we to send SARS-CoV-2 and/or Influenza positive specimens, or random specimens?**
  - For the purposes of this program, please send 6-10 specimens from patients that meet the ILI/CLI Case Definition of a temperature ≥ 100.4°F, cough and/or any other symptom designated by the CDC, ***regardless of any rapid test result or other result that may have been obtained***. In certain instances, USAFSAM may contact a site to send positive SARS-CoV-2 or Influenza specimens for further genetic characterizations, but please send only a mix of unknown positive and negative specimens unless otherwise discussed.

More Information

USAFSAM Epidemiology Laboratory Service (PHE)

- Email: usafsam.phecussv@us.af.mil
- Commercial: (937) 938-4140 or DSN: 798-4140
- Website: https://kx.health.mil/kj/kx5/EPILab/Pages/lab_guide.aspx

DoD Respiratory Pathogen Surveillance Program

- Email: usafsam.phrflu@us.af.mil
- Commercial: (937) 938-3196 or DSN: 798-3196
- Website: https://hpws.afrl.af.mil/AFSAT/RS