



NHSN Healthcare Personnel Safety Component: Current Modules

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National Healthcare Safety Network (NHSN)

The National Healthcare Safety Network (NHSN) is a voluntary, secure, internet-based surveillance system that integrates and expands legacy patient and healthcare personnel safety surveillance systems managed by the Division of Healthcare Quality Promotion (DHQP) at CDC. NHSN also includes a new component for hospitals to monitor adverse reactions and incidents associated with receipt of blood and blood products. Enrollment is open to all types of healthcare facilities in the United States, including acute care hospitals, long term acute care hospitals, psychiatric hospitals, rehabilitation hospitals, outpatient dialysis centers, ambulatory surgery centers, and long term care facilities. For more information, click on the topics below.

Biovigilance Component
NHSN Biovigilance Component

Replay C

MDRO

HAI: Recovery Act

Biovigilance >>

GO >>

Topics

About NHSN

Overview, External Peer Review, Confidentiality, How data are used...

Enrollment Requirements

Eligibility, Required Training, Reporting & System Requirements, Security, Begin Enrollment...

Patient Safety Component

Procedure, Device (Dialysis Event), Medication-associated, MDRO, & HRIIV Modules...

Healthcare Personnel Safety Component

Influenza Vaccination, Antiviral Chemoprophylaxis

Data & Statistics

States with Facilities Using NHSN
(total=2100)



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National Healthcare Safety Network (NHSN)

NHSN

- About NHSN
- Communication Updates
- Enrollment Requirements
- Patient Safety Component
- Healthcare Personnel Safety Component**
- Blood/Body Fluids Exposure Module
- Influenza Vaccination and Exposure Management Module
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- Data Collection Forms
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NHSN

Healthcare Personnel Safety Component

Occupational hazards faced by healthcare personnel (HCP) in the United States have received increasing attention. Although recommendations, guidelines, and regulations to minimize HCP exposure to such hazards have been developed, additional information is needed to improve HCP safety.

CDC developed a surveillance system, NaSH or the National Surveillance System for Health Care Workers that focused on surveillance of exposures and infections among HCP. Operational from 1995 through 2007, NaSH has been replaced by the Healthcare Personnel Safety (HPS) Component of the National Healthcare Safety Network (NHSN). The component consists of four modules: Blood/Body Fluids Exposure with Exposure Management, Blood/Body Fluids Exposure only, Influenza Exposure Management, and Influenza Vaccination with (or without) Exposure Management. Additional modules are anticipated in the future.

Benefits of Participation in the Healthcare Personnel Safety Component

- Data collected in this surveillance system will assist healthcare facilities, HCP organizations, and public health agencies

To monitor and report trends in blood/body fluid exposures.



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Introduction to NHSN's Healthcare Personnel Safety Component

- Launched in September 2009
- Continuation and expansion of the previous National Surveillance System for Healthcare Workers (NaSH)
- Collect data from sample of US healthcare facilities
 - Estimate the severity and magnitude of adverse events among healthcare personnel
 - Estimate healthcare personnel participation in seasonal flu vaccine campaigns
- Work toward prevention strategies to improve adverse events in healthcare personnel



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NHSN

Patient
Safety Component

Healthcare
Personnel
Safety Component

Blood/Body Fluid
(BBF) Exposure
Modules

Influenza
Modules

BBF Exposure
with Exposure
Management Module

BBF Exposure Only
Module

Influenza Vaccination with
(or without) Exposure
Management Module

Influenza Exposure
Management Only Module

FACILITIES MAY
PARTICIPATE IN ONE OR
MORE MODULES



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Benefits of Participation

- Monitor and report trends in blood/body fluid exposures
- Assess the impact of preventive measures
- Monitor influenza vaccination rates among HCP
- Characterize influenza antiviral medication use
- Generate exposure reports for individual medical records and OSHA-300 or equivalent reports



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Staffing Requirements for Participating in the Healthcare Personnel Safety Component

- Oversight of occupational health surveillance program by trained Occupational Health Professional (OHP), Infection Preventionist (IP) or Hospital Epidemiologist
- Other personnel can be trained to
 - Screen for events (e.g., exposures, vaccinations)
 - Collect denominator data
 - Collect exposure management/vaccination data
 - Enter data
 - Analyze data



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Types of Data Entered in HPS

- Healthcare worker demographics
- Denominators
 - Measures of facility size (e.g., # beds, in-patient days, staffed beds)
 - Denominators for exposure rates, including facility size measures, numbers of HCP and FTEs



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► **Healthcare Personnel Safety Component: Overview**

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[NHSN > NHSN Training](#)

Webcast & Slides:

Healthcare Personnel Safety Component: Overview

Summary

This training reviews NHSN and its purposes, the 4 components in NHSN: Patient Safety, Healthcare Personnel Safety, Biovigilance, and Research and Development, and the two modules: Blood and Body Fluid Exposures and Influenza Vaccination. This training also defines key terms in HPS and how to complete the HPS Annual Facility Survey and the Monthly Reporting Plan.

On This Page

- [Corresponding Slidesets](#)
- [Corresponding materials](#)

Audience: This training is designed not only for those who will collect and analyze Healthcare Personnel Safety Component (or HPS) data, but also for those who will enroll a healthcare facility into NHSN. This includes NHSN facility administrators, the Healthcare Personnel Safety Primary contact, occupational health professionals, infection preventionists (IPs), epidemiologists, and data entry staff. The primary HPS contact is the person in your facility who has primary contact with CDC, especially regarding data entry questions. This is likely to be someone with occupational health responsibilities in your facility.

Corresponding Slidesets:

 [Overview of the personnel Safety Healthcare Component PDF \(785 KB / 50 slides\)](#)

Corresponding materials: Protocol and Instructions

- [Healthcare Personnel Safety Component Protocol Guidelines and procedures monitored in the Healthcare Personnel Safety Component](#) includes instructions for completing data collection forms. PDF (351 KB/ 53 pages)

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Blood and Body Fluids Exposure Module



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Overview of NHSN's Blood and Body Fluid Exposure Module

- Designed for prospective data collection on incidents and post-exposure follow-up
- Facilities can opt to collect data on exposures or exposures+management for a min. of 6 months per calendar year



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Overview of NHSN's Blood and Body Fluid Exposure Module

Module organized into:

- HCP Demographics
- Exposure Details and Baseline Lab
- Prophylaxis or Treatment
- Follow-Up Laboratory Results



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Features of the Blood and Body Fluid Exposure Module

- Integration of denominators to calculate local and regional rates of injury
- Compliance with OSHA300 log features for archiving and retrieval
- Ability to compare and benchmark rates across NHSN sites
- Produce on-demand queries, reports, or line-lists



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Forms Used in the Blood and Body Fluids Exposure Module

- Healthcare Worker Demographic Data
- Exposure to Blood/Body Fluids
- Healthcare Worker Prophylaxis/Treatment
- Laboratory Testing



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Entry form for a new exposure

- NHSN Home
- Reporting Plan
- HCW
- Vaccination
- Lab Test
- Exposure
 - Add
 - Find
- Prophyl/Treat
- Analysis
- Surveys
- Users
- Facility
- Group
- Log Out

Logged into DHQP MEMORIAL HOSPITAL (ID 10018) as TARA.
Facility DHQP MEMORIAL HOSPITAL (ID 10018) is following HCW component.

Add Exposure

[Print PDF Form](#)

Mandatory fields marked with *
Fields required when Blood/Body Fluid Exposure is in Plan marked with †
Fields required when Blood/Body Fluid Exposure with Exposure Management is in Plan marked with §

Healthcare Worker Information

Facility ID*: Exposure Event #: 425

HCW ID*: Secondary ID:

Social Security #: First Name:

Last Name: Date of Birth*:

Middle Name:

Gender*:

Work Location*:

Occupation*:

Exposure Type Information

Exposure Type*:

General Exposure Information

Did the exposure occur in this facility?*: Exposure is not Linked

Date of Exposure*:

Time of Exposure*: AM PM



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NHSN Blood/Body Fluid Exposure Entry

Exposure Type Information

Exposure Type*:

General Exposure Information

Did the exposure occur in this facility?*:

Date of Exposure*:

Time of Exposure (hh:mm)*: AM PM

Number of hours on duty: Is exposed person a temp/agency employee?:

Location where exposure occurred†\$:

Type of Exposure (check all that apply)*: Percutaneous

Did exposure involve a clean, unused needle or sharp object?†\$

- Mucous membrane
- Skin
- Bite

Type of fluid/tissue involved in exposure†\$:

Body site of exposure (check all that apply)†\$: Hand Arm Foot Leg
 Eye Mouth Nose
 Other Specify:



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Influenza Vaccination Module



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Influenza Vaccination Module

National-Level Purposes

- Continue and expand occupational exposure and infection surveillance
- Collect data from U.S. healthcare facilities to
 - estimate participation in flu vaccination campaigns
 - estimate the severity and magnitude of adverse reactions to flu vaccine among healthcare personnel (HCP)
 - monitor treatment and prophylaxis administered for influenza infections
- Assess adoption and effect of strategies to increase vaccination uptake



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Influenza Vaccination Module

Facility-Level Purposes

- Provide a record of flu vaccination and adverse reactions for HCP in the facility
- Meet requirement for record-keeping for adult vaccine administration
- Monitor trends in vaccination and declination rates
- Monitor treatment and prophylaxis administered for influenza infections
- Assess efficacy of facility influenza vaccination programs



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Forms Used in the Influenza Vaccination Module

- Pre- and Post-season Survey on Influenza Vaccination Programs for Healthcare Personnel
- Healthcare Worker Demographic Data
 - Importing HCWs
- Healthcare Worker Influenza Vaccination
- Healthcare Worker Prophylaxis/Treatment
- Other required forms
 - Facility Survey
 - Monthly Reporting Plan
- Printable and web-based forms



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Pre-season survey

*Date Entered: _____ *For Season: _____

(Month/Year)

(Specify years)

- *1. Which personnel groups do you plan to include in your annual influenza vaccination program?
- All personnel who work in the facility
 - All personnel who work in clinical areas, including those without direct patient care duties (e.g., clerks, housekeepers)
 - Only personnel with direct patient-care duties (e.g., physicians, nurses, respiratory therapists)
- *2. Which of the following types of employees do you plan to include in your annual influenza vaccination program? (check all that apply)
- Full-time employees Number _____
 - Part-time employees Number _____
 - Contract employees Number _____
 - Volunteers Number _____
 - Others, specify: _____ Number _____
- *3. At what cost will you provide influenza vaccine to your healthcare workers?
- No cost
 - Reduced cost
 - Full cost
- *4. Will influenza vaccination be available during all work shifts (including nights and weekends)?
- Yes
 - No
- *5. Which of the following methods do you plan to use this influenza season to deliver vaccine to your healthcare workers? (check all that apply)
- Mobile carts
 - Centralized mass vaccination fairs
 - Peer-vaccinators
 - Provide vaccination in congregate areas (e.g., conferences/meetings or cafeteria)
 - Provide vaccination at occupational health clinic
 - Other, specify: _____



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HCW Influenza Demographic Data

*HCW ID#:	Social Security #:		
Secondary ID#:			
HCW Name, Last:	First:	Middle:	
Street Address:			
City:	State:	Zip Code:	
Home Phone: ()			
Email Address:			
*Gender: <input type="checkbox"/> F <input type="checkbox"/> M	*Date of Birth: / /		
Born in U.S.? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown			
Ethnicity: <input type="checkbox"/> Hispanic or Latino <input type="checkbox"/> Not Hispanic or Not Latino	Race: <input type="checkbox"/> American Indian or Alaska Native <input type="checkbox"/> Asian <input type="checkbox"/> Black or African American <input type="checkbox"/> Native Hawaiian or Other Pacific Islander <input type="checkbox"/> White		
Employment Information			
Work Phone: ()			
*Start Date: / /			
*Work Status: <input type="checkbox"/> Active <input type="checkbox"/> Inactive <input type="checkbox"/> No longer affiliated			
*Type of employee: <input type="checkbox"/> Full-time <input type="checkbox"/> Part-time <input type="checkbox"/> Contract employee <input type="checkbox"/> Volunteer <input type="checkbox"/> Other (specify)			
*Work Location:	Department:	Supervisor:	
*Occupation:	Title:		
If occupation is a physician, indicate clinical specialty (check one):			



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Vaccination details-page 1

*Type of vaccination: **Influenza**

- *Influenza subtype: Seasonal (specify years) _____ Non-seasonal
- *Do you plan to use this information to satisfy federal record-keeping requirements for the administration of vaccine covered by the Vaccine Injury Compensation Program? Yes No
- *Vaccine administered:
- Onsite at this facility
 - Offsite at a location other than this facility
 - Declined due to medical contraindications (e.g., allergy to vaccine components)
 - Declined due to personal reasons
if declined for personal reasons: (check all that apply)
 - Fear of needles/injections
 - Fear of side effects
 - Perceived ineffectiveness of vaccine
 - Religious or philosophical objections
 - Concern for transmitting vaccine virus to contacts
 - Other (specify): _____

*Date of vaccination: ____ / ____ / ____
mm dd yyyy

- *Product: (check one)
- Afluria®
 - Fluanix®
 - Flulaval®
 - Flumist®
 - Fluvirin®
 - Fluzone®
 - Other (please specify) _____
- *Lot number: _____
- Manufacturer: _____

*Type of influenza vaccine:

- Live attenuated (LA) [e.g., nasal (Flumist®)]
- Inactivated vaccine (INA) [e.g., injectable (Fluvirin®, Fluzone®, Fluanix®, Flulaval®, Afluria®)]

*Route of administration:

- Intramuscular
- Subcutaneous
- Intranasal



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Vaccination details-page 2

*Adverse reaction to vaccine: Yes No Don't know

If Yes, check all that apply:

- Arthralgia
- Chills
- Cough
- Fever
- Headache
- Hives
- Malaise/fatigue
- Myalgia
- Nasal congestion
- Pain/soreness at injection site
- Rash, generalized
- Rash, localized
- Rhinorrhea
- Shortness of breath/difficulty breathing
- Sore throat
- Swelling
- Others (specify): _____

Which vaccine information statement, including edition date, was provided to the vaccinee?

- Live Attenuated Influenza Vaccine Information Statement
- Inactivated Influenza Vaccine Information Statement

Edition date: ____ / ____ / ____
mm dd yyyy

Person Administering Vaccine

Vaccinator ID : _____ (This is the HCW ID# for the vaccinator)
Name, Last: _____ First: _____ Middle: _____
Title: _____
Work address: _____
City: _____ State: _____ Zip code: _____



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Antiviral Prophylaxis/Treatment-p.1

Infectious agent: **Influenza** *For season: _____ (specify years)

*Indication (select one)	*#	Influenza subtype	*Antiviral medication (Enter code from below)	*Start date	Stop date	*Adverse reactions?
<input type="checkbox"/> Prophylaxis <input type="checkbox"/> Treatment		<input type="checkbox"/> Seasonal <input type="checkbox"/> Non-seasonal <input type="checkbox"/> Unknown		____ / ____ / ____ mm dd yyyy	____ / ____ / ____ mm dd yyyy	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know
<input type="checkbox"/> Prophylaxis <input type="checkbox"/> Treatment		<input type="checkbox"/> Seasonal <input type="checkbox"/> Non-seasonal <input type="checkbox"/> Unknown		____ / ____ / ____ mm dd yyyy	____ / ____ / ____ mm dd yyyy	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know
<input type="checkbox"/> Prophylaxis <input type="checkbox"/> Treatment		<input type="checkbox"/> Seasonal <input type="checkbox"/> Non-seasonal <input type="checkbox"/> Unknown		____ / ____ / ____ mm dd yyyy	____ / ____ / ____ mm dd yyyy	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know
<input type="checkbox"/> Prophylaxis <input type="checkbox"/> Treatment		<input type="checkbox"/> Seasonal <input type="checkbox"/> Non-seasonal <input type="checkbox"/> Unknown		____ / ____ / ____ mm dd yyyy	____ / ____ / ____ mm dd yyyy	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know



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Antiviral Prophylaxis/Treatment-p.2

Adverse reactions to antiviral medication #1: (check all that apply)

- | | | |
|--|---|--|
| <input type="checkbox"/> Acute respiratory failure | <input type="checkbox"/> Hemorrhagic colitis | <input type="checkbox"/> Pulmonary edema |
| <input type="checkbox"/> Anaphylactic reaction | <input type="checkbox"/> Hepatitis | <input type="checkbox"/> Serious skin rash |
| <input type="checkbox"/> Arrhythmia | <input type="checkbox"/> Hypotension; orthostatic hypotension | <input type="checkbox"/> Suicide or self-harm attempt |
| <input type="checkbox"/> Behavior disturbances | <input type="checkbox"/> Leukopenia; neutropenia | <input type="checkbox"/> Swelling of face or tongue |
| <input type="checkbox"/> Bronchospasm | <input type="checkbox"/> Life threatening overdose | <input type="checkbox"/> Syncope |
| <input type="checkbox"/> Cardiac arrest | <input type="checkbox"/> Liver function test elevation | <input type="checkbox"/> Tachycardia |
| <input type="checkbox"/> Cardiac failure | <input type="checkbox"/> Mydriasis (In patients with untreated angle closure glaucoma) | <input type="checkbox"/> Toxic epidermal necrolysis/Stevens Johnson Syndrome |
| <input type="checkbox"/> Coma | <input type="checkbox"/> Neuroleptic malignant syndrome with abrupt discontinuation or dose reduction | <input type="checkbox"/> Urinary retention |
| <input type="checkbox"/> Convulsions; seizure | <input type="checkbox"/> Oropharyngeal edema | <input type="checkbox"/> Other _____ |
| <input type="checkbox"/> Delirium, delusions, stupor | <input type="checkbox"/> Psychosis | |
| <input type="checkbox"/> Erythema multiforme | | |

Adverse reactions to antiviral medication #2: (check all that apply)

- | | | |
|--|---|---|
| <input type="checkbox"/> Acute respiratory failure | <input type="checkbox"/> Hemorrhagic colitis | <input type="checkbox"/> Pulmonary edema |
| <input type="checkbox"/> Anaphylactic reaction | <input type="checkbox"/> Hepatitis | <input type="checkbox"/> Serious skin rash |
| <input type="checkbox"/> Arrhythmia | <input type="checkbox"/> Hypotension; orthostatic hypotension | <input type="checkbox"/> Suicide or self-harm attempt |
| <input type="checkbox"/> Behavior disturbances | <input type="checkbox"/> Leukopenia; neutropenia | <input type="checkbox"/> Swelling of face or tongue |
| <input type="checkbox"/> Bronchospasm | <input type="checkbox"/> Life threatening overdose | <input type="checkbox"/> Syncope |
| <input type="checkbox"/> Cardiac arrest | <input type="checkbox"/> Liver function test elevation | <input type="checkbox"/> Tachycardia |



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Training



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http://www.cdc.gov/nhsn/training.html

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Webcast training lectures

These training sessions are available for those who need to fulfill the training requirements of the NHSN, or for those who need a refresher on a particular topic.

The NHSN requires that each of its users is thoroughly trained before enrolling in or using the system. The training requirements differ depending on the role of the NHSN user.

Enrollment

- NHSN Enrollment & Facility Start-up
Required for: All new NHSN Facility Administrators
- Overview of NHSN, Device-associated module (CLABSI, VAP, CAUTI)
Audience: All NHSN users including Facility Administrators and Group Administrators.
- Conferring Rights to Groups
Audience: Group Users, Facility administrators already joined to a group or interested in joining a group and conferring rights
- Confer Rights to Group How-to Guide
Audience: Group Users, Facility administrators already joined to a group or

FAQs About...

- NHSN

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4:11 PM

HPS Training

- Live web cast sessions
- Email and telephone support for surveillance and technical advice
- Online archived sessions and documents, including FAQs and newsletters
- Members meetings at national conferences
- Hands-on training*
- NHSN Members Conferences*



Planned

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Healthcare Personnel Safety Component

- Influenza Vaccination Module
Audience: Administrators, the Healthcare Personnel Safety Primary contact, occupational health professionals, infection preventionists (IPs), epidemiologists, and data entry staff.
- Setting Up a Facility
Audience: administrators, the Healthcare Personnel Safety Primary contact, occupational health professionals, infection preventionists (IPs), epidemiologists, and data entry staff.
- Overview of the personnel Safety Healthcare Component
Audience: administrators, the Healthcare Personnel Safety Primary contact, occupational health professionals, infection preventionists (IPs), epidemiologists, and data entry staff.
- Blood and Body Fluids Exposure Module
Audience: All NHSN users including Facility Administrators and Group Administrators.

<http://www.cdc.gov/nhsn/training.html>



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Thank you

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The findings and conclusions in this presentation are those of the author(s) and do not necessarily represent the views of the Centers for Disease Control and Prevention.



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