

NSSP Facility Participation Agreement

The Oklahoma State Department of Health (“OSDH”) has signed a Data Use Agreement with the CDC (“Core DUA”) that includes an addendum for the National Syndromic Surveillance Program (“NSSP”). _____ (“Facility”) agrees to voluntarily participate in the CDC’s NSSP.

As a voluntarily participant:

- 1) The Facility is aware of the allowable uses and users of syndromic surveillance data as described in the FAQ (see Attachment A) and memorialized in the Core DUA and NSSP addendum.
- 2) The Facility is aware that OSDH, as an NSSP site administrator, will serve as a liaison to the Facility, which includes assisting the Facility with the BioSense onboarding process.
- 3) The Facility is aware that OSDH, as an NSSP site administrator, may control access to data on the BioSense Platform on an individual or group level. Although it may be modified, the default setting is to allow a facility, upon request, to view the facility-level data it submits to the BioSense platform.
- 4) The Facility is aware that it is the Facility’s responsibility to avoid or reduce sending personally identifying information (“PII”) when submitting Data Elements. Page 30 of the New Facility Onboarding guide lists the information that is considered PII (See Table 10 in Attachment B).
- 5) The Facility is aware that at any time it may elect to withdraw its participation from NSSP.
- 6) The Facility agrees that it has signed or will sign the BioSense Platform Onboarding Process Facility Acknowledgement.
- 7) The Facility agrees that it has signed or will sign the BioSense Platform Code of Conduct.
- 8) The Facility agrees to submit Priority 1 and 2 Data Elements described in the Syndromic Data Element Prioritization (see Attachment C).
- 9) The Facility authorizes OSDH to grant CDC access to the submitted Data Elements.

Agreed and acknowledged by official authorized representatives of the parties:

Oklahoma State Department of Health
(OSDH)

_____ (Facility)

Name:

Name:

Title:

Title:

Date:

Date:

Signature:

Signature:

FAQs of Syndromic Surveillance

What is Syndromic Surveillance? Syndromic surveillance provides public health officials with a timely system for detecting, understanding, and monitoring health events. By tracking symptoms of patients—before a diagnosis is confirmed—public health can detect unusual levels of illness to determine whether a response is warranted. Such responses may be for illness, injuries, drug-related overdoses, outbreaks, or foodborne illnesses.

What is BioSense? BioSense and its platform is a product of CDC. It is a secure integrated electronic health information system built on NSSP's commitment to data interoperability. The cloud-based detection and monitoring system also includes web-based tools for advanced analytics and visualizations, data sharing and integration by and for the public health community.

Are there certain facilities or departments that should participate? Emergency departments, urgent care, ambulatory care, and inpatient settings, and laboratories are mentioned by the CDC.

How Do You Submit the Data? A facility will need to onboard as a New Facility. [NSSP New Facility Onboarding Guide for the BioSense Platform \(cdc.gov\)](#). OSDH staff will help guide your facility through the onboarding process. The link also describes the efforts BioSense and CDC have made to ensure that data remains secure including a code of conduct that all facilities must sign during the onboarding process.

What uses of the data are allowed? Based on a Data Modernization Initiative, the CDC has proposed a new Core DUA that will be used by public health authorities – including OSDH. In addition to other types of provisions, the proposed Core DUA allows for:

1. Analyzing and visualizing the Covered Data to provide an ongoing understanding of the nation's health at the federal and appropriate jurisdictional level, supporting local and regional public health practice at the jurisdictional level, and facilitating a seamless transition into response operations, when necessary;
2. Analyzing and visualizing the Covered Data to inform and improve distribution of HHS, CDC, and other federal resources and other assets;
3. Analyzing and visualizing the Covered Data to improve detecting, characterizing, monitoring, responding to, and recovering from cases and incidence of disease, conditions, and outbreaks;
4. Analyzing and visualizing the Covered Data to improve the monitoring of routine and response-related vaccination and vaccine-related activities, including vaccine safety and assessment of vaccine effectiveness;
5. Analyzing and visualizing the Covered Data to improve the monitoring of routine and response-related testing and diagnostic-related activities, including testing and diagnostic safety and assessment of testing and diagnostic effectiveness;
6. Sharing the Covered Data and analyses thereof with official federal, state, local, tribal, and territorial governmental health agencies, or entities collaborating with them in the execution of their public health role and their outbreak response responsibilities, consistent with applicable federal law and their own statutory authorities;
7. Developing analytic methods using the Covered Data to identify immediate public health events or concerns at the federal, state, local, tribal, and territorial level that warrant further public health investigation or immediate public health intervention actions;

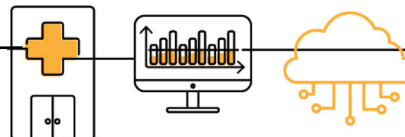
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8. Enabling public health and outbreak response officials, and other appropriate authorized users, to query the Covered Data within CDC or CDC-designated secure data platforms as may be necessary to carry out critical public health functions;
 9. Publishing findings and conclusions in accordance with the DA; and
 10. In case of public health emergencies uses may be expanded.

Are there additional Security and Privacy Settings? In addition to the security and privacy efforts already stated, the CDC has also proposed an addendum to the Core DUA that is specific to the NSSP which mentions:

1. Establishing principles and norms that prescribed how CDC may use NSSP data voluntarily submitted and ensure those are monitored and maintained;
2. Limiting CDC staff will have access to patient record-level data;
3. All Platform users will have access to non-record level data that is aggregated to present minimal risk of re-identification; users can collaborate; and
4. All platform users may develop products so long as it is in accordance with the CDC Policy and Governance.

What does OSDH need from a participating facility? Overall, OSDH is not seeking any additional data elements from those already requested by the CDC to allow for a streamlined direct submission approach to BioSense and is of the opinion that the CDC has implemented sufficient privacy and security safeguards. However, OSDH must still memorialize that facilities are submitting the data through OSDH's authority. This is why OSDH is considering a Participation Agreement rather than a prototypical data sharing agreement (DSA).

5 DATA INTEGRATION



Building a valid data set for syndromic surveillance is the most time-consuming aspect of the onboarding process. Careful and deliberate planning should be exercised.

5.1 Syndromic Surveillance HL7 Implementation Guide

The BioSense Platform is based on the [PHIN Messaging Guide for Syndromic Surveillance: Emergency Department, Urgent Care, Inpatient and Ambulatory Care Settings](#). During HL7 message development, pay careful attention to include all required data elements.

5.2 Excluded Data Elements Containing PII

While not emphasized well in the [PHIN Messaging Guide for Syndromic Surveillance](#), be cautious and **limit sending personally identifiable information (PII) to the BioSense Platform**. Table 10 lists the data elements to **exclude** from HL7 messages that will be sent to the BioSense Platform.

Table 10. Personally Identifiable Information (PII) to EXCLUDE from HL7 Messages	
HL7 Segment/Field	HL7 Description
PID.5.1-6	Patient Name
PID.5.8-12	Patient Name
PID.6	Mother's Maiden Name
PID.9	Patient Alias
PID.11.1-2	Patient Address (Note: Patient ZIP, County, and City are required.)
PID.11.8	Patient Address (Note: Patient ZIP, County, and City are required.)
PID.13-17	Patient Phone Number
PID.19-21	Social Security Number (SSN), Driver's License Number, Mother's Identification
PID.23-28	Birth Information
PID.30.2	Patient Death Indicator
NK Segments	Next of Kin
MRG.7	Merge Patient Information
IN1.16	Name of Insured
IN1.19	Address of Insured
GT1.3-6	Guarantor Name, Address, Phone
GT1.12	Guarantor SSN
GT1.19	Guarantor Employee ID Number

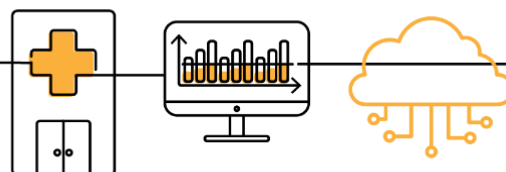
5.3 Facility Mapping Considerations

Follow the guidelines below to make sure data are ready to validate.

- Specify the Sending Facility ID in MSH-4.2.
- Specify the Treating/Event Facility ID in EVN-7.2.
- Make sure the MFT lists every facility that will transmit HL7 messages for the site. If the facility is not listed, its data cannot be processed.

Attachment C

NSSP Job Aid New Facility Onboarding Series



SYNDROMIC DATA ELEMENT PRIORITIZATION

The National Syndromic Surveillance Program (NSSP), in collaboration with the syndromic surveillance community, has assigned *priority levels* to data elements within syndromic HL7 messages. Data elements are described in detail in the [PHIN Messaging Guide for Syndromic Surveillance 2.0](#). Processing details for each element can be found in the [NSSP Data Dictionary](#). Priority levels help guarantee data quality in the production environment and are used when onboarding new facilities or re-onboarding existing facilities. Priority levels are included in the NSSP [New Site Onboarding](#) and [New Facility Onboarding](#) guides.

Priority 1 data elements are the *minimum required* to perform surveillance activities. Shown below are the required fields for maintaining a minimum level of completeness and validity so that a facility can achieve and maintain production status.

Priority 1 Data Elements			
Processed Column	Priority	Required	HL7
Admit_Date_Time	1	R	PV1-44.1
Admit_Reason_Description	1	RE	PV2-3.2, PV2-3
C_Chief_Complaint	1	CRE	OBX or PV2-3
C_Death	1	CRE	PID.30.1
C_Facility_ID	1	CR	EVN-7.2, MSH-4.2 or MSH-4.1
C_FacType_Patient_Class	1	CR	OBX-2,3,5
C_Patient_Age	1	CRE	OBX-2,3,5
C_Patient_Age_Years	1	CRE	OBX-2,3,5
C_Patient_Class	1	CR	PV1.2.1 or calculate
C_Unique_Patient_ID	1	CR	PID.3.1
Chief_Complaint_Text	1	RE	OBX-2,3,5
Diagnosis_Code	1	RE	DG1-3.1, DG1-3.4
Diagnosis_Description	1	RE	DG1-3.2, DG1-3.5
Facility_Type_Code	1	R	OBX-2,3,5
Patient_Class_Code	1	R	PV1.2.1
Patient_Zip	1	RE	PID.11.5
Processing_ID	1	R	MSH.11.1
Sending_Facility_ID	1	R	MSH-4.2 or MSH-4.1
Treating_Facility_ID	1	R	EVN.7.2
Trigger_Event	1	R	MSH.9.2
Visit_ID	1	R	PV1.19.1



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Priority 2 data elements are also useful for surveillance activities and may be required by sites before a facility can move to production. NSSP requires these data elements meet minimum standards of completeness and validity within 12 months of a facility achieving production status.

Priority 2 Data Elements			
Processed Column	Priority	Required	HL7
First_Patient_ID	2	R	PID-3.1
Medical_Record_Number	2	R	PID.3.1
Sending_Facility_ID_Source	2	R	MSH-4.1
Message_Date_Time	2	R	MSH.7.1
Recorded_Date_Time	2	R	EVN.2.1
Discharge_Disposition	2	RE	PV1.36.1
Discharge_Date_Time	2	RE	PV1.45.1
Administrative_Sex	2	RE	PID.8.1
Age_Reported	2	RE	OBX.5.1
Age_Units_Reported	2	RE	OBX.6.2
C_Patient_Age_Units	2	C	OBX.6.2
Race_Code	2	RE	PID-10.1
Ethnicity_Code	2	RE	PID-22.1
Ethnicity_Description	2	RE	PID-22.2
Patient_City	2	RE	PID.11.3
Patient_State	2	RE	PID.11.4
C_Patient_County	2	CRE	PID-11.9
Patient_Country	2	RE	PID.11.6
Admit_Reason_Code	2	RE	PV2-3.1, PV2-3
Chief_Complaint_Code	2	RE	OBX-2,3,5
Diagnosis_Type	2	RE	DG1.6.1
Version_ID	2	R	MSH.12.1

Priority 3 data elements are mostly Optional data elements; still useful for surveillance activities, but not required by most sites. Currently, the NSSP does not require that these fields be populated in incoming data.

Priority 3 Data Elements			
Processed Column	Priority	Required	HL7
First_Patient_ID_Type_Code	3	O	PID-3.5
First_Patient_ID_Assigning_Authority	3	O	PID-3.4
First_Patient_ID_Assigning_Facility	3	O	PID-3.6
Medical_Record_Number_Assigning_Authority	3	O	PID.3.1
Medical_Record_Number_Assigning_Facility	3	O	PID.3.1
Visit_ID_Assigning_Authority	3	O	PV1.19.4
Visit_ID_Assigning_Facility	3	O	PV1.19.6
Patient_Account_Number	3	O	PID.18.1
Alternate_Visit_ID	3	O	PV1.50
Facility_Type_Description	3	O	OBX-2,3,5
Receiving_Facility	3	O	MSH.6.1

Priority 3 Data Elements			
Processed Column	Priority	Required	HL7
Diagnosis_Date_Time	3	O	DG1.5.1
Procedure_Date_Time	3	O	PR1.5
Observation_Date_Time	3	O	OBX.14.1
Onset_Date	3	O	OBX.5.1
Patient_Death_Indicator	3	O	PID.30.1
Death_Date_Time	3	O	PID.29.1
Admission_Type	3	O	PV1.4
Admit_Source	3	O	PV1.14
Ambulatory_Status	3	O	PV1.15
Hospital_Service	3	O	PV1.10
Insurance_Company_ID	3	O	IN1-3
Insurance_Coverage	3	O	IN1-15
Previous_Hospital_Unit	3	O	PV1-6
Provider_Type_Code	3	O	OBX-2,3,5
Provider_Type_Combo	3	O	OBX-2,3,5
Provider_Type_Description	3	O	OBX-2,3,5
Unique_Physician_Identifier	3	O	PV1-7.1
Unique_Physician_Identifier_Assigning_Authority	3	O	PV1-7.9
Hospital_Unit_Code	3	O	OBX-2,3,5
Hospital_Unit_Description	3	O	OBX-2,3,5
Age_Calculated	3	RE	OBX.5.1
Age_Units_Calculated	3	RE	OBX.6.2
Birth_Date_Time	3	O	PID.7.1
Race_Description	3	O	PID-10.2
Triage_Notes	3	O	OBX.5.1
Diagnosis_Priority	3	O	DG1.15
Event_Type_Code	3	O	EVN.1.1
Procedure_Code	3	O	PR1.3.3
Procedure_Description	3	O	PR1.3.2
Clinical_Impression	3	O	OBX-2,3,5
Initial_Acuity_Code	3	O	OBX.5.1
Initial_Acuity_Description	3	O	OBX.5.1
Initial_Evaluation_Note	3	O	OBX-2,3,5
Medication_Code	3	O	OBX.5.1
Medication_Description	3	O	OBX.5.1
Medication_List	3	O	OBX.5.1
Problem_List_Code	3	O	OBX.5.1
Problem_List_Description	3	O	OBX.5.1
Travel_History	3	O	OBX-2,3,5

Priority 3 Data Elements			
Processed Column	Priority	Required	HL7
Initial_Temp	3	O	OBX-5
Initial_Temp_Units	3	O	OBX-6
Initial_Pulse_Oximetry	3	O	OBX-5
Initial_Pulse_Oximetry_Units	3	O	OBX-6
Diastolic_Blood_Pressure	3	O	OBX-5
Diastolic_Blood_Pressure_Units	3	O	OBX-6
Str_Diastolic_Blood_Pressure	3	O	OBX-5
Systolic_Diastolic_Blood_Pressure	3	O	OBX-5
Systolic_Diastolic_Blood_Pressure_Units	3	O	OBX-6
Systolic_Blood_Pressure	3	O	OBX-5
Systolic_Blood_Pressure_Units	3	O	OBX-6
Pregnancy_Status_Code	3	O	OBX-2,3,5
Pregnancy_Status_Description	3	O	OBX-2,3,5
Smoking_Status_Code	3	RE	OBX-2,3,5
Smoking_Status_Description	3	RE	OBX-2,3,5
Body_Mass_Index	3	O	OBX-5
Height	3	RE	OBX-5
Height_Units	3	RE	OBX-6
Weight	3	RE	OBX-5
Weight_Units	3	RE	OBX-6
Assigned_Patient_Location	3	O	PV1-3
Time_Zone	3	O	MSH-7.1

RESOURCES

PHIN Messaging Guide for Syndromic Surveillance 2.0

https://www.cdc.gov/nssp/documents/guides/syndrsurvmessagguide2_messagingguide_phn.pdf

NSSP Data Dictionary

<https://www.cdc.gov/nssp/biosense/docs/NSSP-Data-Dictionary-508.xlsx>

NSSP New Site Onboarding Guide for the BioSense Platform

<https://www.cdc.gov/nssp/biosense/onboarding-guide/pdf/New-Site-OG-508.pdf>

NSSP New Facility Onboarding Guide for the BioSense Platform

<https://www.cdc.gov/nssp/biosense/onboarding-guide/pdf/New-Facility-OG-508.pdf>

FOR MORE INFORMATION

Visit the NSSP website, Onboarding, at <https://www.cdc.gov/nssp/biosense/onboarding.html>.