

Data Standardization Work Group (DSWG)

October 25, 2024



Council of State and Territorial Epidemiologists

Please mute phone/ headset/ computer audio!

Agenda

- Welcome (Co-Chairs)
- DSWG Opportunities for Participation (Co-Chairs)
- Announcements and Key Updates (CSTE)
- Race/Ethnicity Key Updates (CDC)
- Status Updates for Closed DESTs (JMC)
- Review of Recent DEST Consensus (JMC):
Industry and Occupation, Laboratory
- DSWG Next Steps (JMC)
- Wrap-Up & Adjourn (Co-Chairs)

Welcome (Co-Chairs)



- Identify core data elements for surveillance **for transmission to CDC**
 - For situational awareness or routine, cross-condition case surveillance
 - For case-based surveillance (not syndromic, not aggregate reporting)
 - Within *selected* data classes (e.g., hospitalization, travel history) that are used for multiple conditions
- Identify common definitions, value sets/code sets, structure, and interpretation notes for those core data elements
- Recommend best practices for how selected data elements are collected, structured or populated within PHA surveillance systems, if/when that will affect the interpretation of the data transmitted to CDC

Core for CDC Transmission ≠ Required

Even if a data element or class is identified as appropriate for transmission to CDC, this does *not* mean we need to fill in or send an answer for every core element for every case!

- It is okay to leave the data field as blank or Unknown if the information is not available, not a priority, or not useful for particular conditions.

- What information is needed at the national level?
- How can we best take advantage of electronic records and automation?
- How can we best take advantage of and feed into other standardization efforts (e.g., HL7, USCDI, USCDI+)?
- How can we reduce the manual surveillance burden on public health and health care entities?
- Can we position ourselves for a more efficient process for adding emergent conditions to our systems? Exchanging information? Case notification onboarding?

Meeting ground rules



Discussion Guidelines

- "Raise" your hand
- Use the chat to provide feedback and ask questions
- When called, state your name and affiliation
- Stay on point, be brief, and within the context of the discussion in progress
- Co-Chairs/moderators' prerogative to move the discussion forward as needed
 - [Post-meeting survey](#) provided for additional input
- Be courteous and be open to new ideas

Active participation encouraged for all!

- Chats, voting, comments, etc.
- Includes STLT jurisdictions + CDC Programs + CSTE, etc.

DSWG Opportunities for Participation (Co-Chair)



Data Element-Specific Teams



Purpose

These teams will focus on pre-identified topics determined by the DSWG Leadership Group (Co-Chairs, CSTE, CDC) based on multiple variables, including:

- Previous input from DSWG members
- Potential for collaboration across other groups of interest
- Common themes heard across various membership groups, including CSTE Sub-committees

Membership is encouraged from state/local/territorial jurisdictions, tribal entities, CDC and other federal agencies.

- To sign up fill in this interest form: <https://app.smartsheet.com/b/form/3da89d48bda94fc7a33c4a8a505fe54a>

Data Element-Specific Teams



Team Member Expectations

- Attend monthly Team meeting(s) regularly to discuss data element(s)
- Participate actively during and between meetings
- Provide feedback on how your jurisdiction or program (if applicable) collects and uses information related to the data element prior to the first Team meeting
 - All DSWG members are invited to participate in this step, but expectation is higher for Team members
- Respond to surveys/polls conducted between Team meetings
- Review and provide input and comments between meetings on any draft documentation using shared Word documents

There is **NO** expectation for Team members to write documents, lead meetings, or prepare slides.

Team Topics



- Upcoming Data Element-Specific Teams include
 - **Social Determinants of Health**
 - **November 8 (Call #3), 1-2 PM ET**
 - **November 15 (Call #4), 1-2 PM ET**
 - **These calls will focus on: Language, Education, Insurance, Income**
- Individuals can opt-in to more than one team. Please keep in mind active participation is expected when participants sign up.
- Two Data Element-Specific Teams run concurrently. When discussions for one data element are concluded, a new data element convenes in the existing meeting time.
- After guidance documents are developed for the data element topic, a team is sunset.

Purpose

The larger DSWG Membership will convene bi-monthly, hear updates from Data Element-Specific Teams, and continue to provide feedback on written recommendations being developed by the DSWG.

DSWG meetings may also serve as a forum for discussion of broader topics or questions.

Member Responsibilities

- Attend meetings, as able, to hear updates and provide input to written recommendations
- Consider joining Data Element-Specific Teams
- Provide input on materials shared with the larger DSWG group in between meetings via polls or in shared documents
- Invite colleagues or other participants to relevant topic-specific sessions as able

Announcements and Key Updates (CSTE)



Announcements & Key Updates



- CSTE Brief - *Pending Steering Committee approval*
 - Standardizing Core Case Notification Public Health Data Elements to Improve National and Jurisdictional Surveillance and Situational Response
 - Appendix – Consensus Building Process
 - *Available for member review on CSTE Connect December*
- CSTE cooperative agreement update – more to come!

Announcements & Key Updates



- Coming soon: **DSWG on CSTE Connect!**

A screenshot of the CSTE Connect website. The top navigation bar includes the CSTE Connect logo, links for Member Home, Communities, Directory, Events, and Browse, a search bar, a user profile icon, and a Create button. Below this is a blue banner for the "Data Standardization Workgroup". Under the banner is a sub-navigation bar with links for Community Home, Discussion (0), Library (17), Events (3), and Members (4). The Library link is highlighted with a red box. The main content area is divided into two columns. The left column is titled "Announcements" and contains a welcome message for the DSWG Connect Space, a description of the workspace, and contact information for Meredith Eddy. The right column is titled "Latest Library Entries" and lists three entries: "Lab Reporting DEST Materials", "Reporting Source DEST Materials", and "Identifiers DEST Materials", all by Meredith Eddy.

Race/Ethnicity (CDC)





SPD-15 Race and Ethnicity Updates

Office of Public Health Data, Surveillance, and Technology

Agenda

- Overview of Statistical Policy Directive No. 15 (SPD-15)
- Major Updates and Changes to SPD-15
- Introduction of New Race and/or Ethnicity Data Elements
- Next Steps
- Open Discussion and Q&A



Introduction to SPD-15

- On March 28, 2024, the Office of Management and Budget (OMB) released updates to **Statistical Policy Directive No. 15: Standards for Maintaining, Collecting, and Presenting Federal Data on Race and Ethnicity** (SPD 15).
- The updated SPD 15 is effective as of **March 28, 2024**. Agencies should begin collecting data under the 2024 SPD 15 as soon as possible, **no later than March 28, 2029**.
- CDC is required to follow the updated 2024 race and ethnicity standards for federal data collections – comprising both federal agency-conducted or -sponsored data collections – that include race and ethnicity.

Changes from the 1997 Directive (Slide 1 of 3)

1. Collect race and ethnicity information using **one combined race/ethnicity question**
2. Add “**Middle Eastern or North African**” (**MENA**) as a **new** minimum category
3. Require the collection of **more detail beyond the minimum** race and ethnicity categories by default
4. Whenever possible, the “Another group” detail category checkboxes should be replaced with write-in fields that allow respondents to self-identify

What is your race and/or ethnicity?
Select all that apply and enter additional details in the spaces below.

☐ **American Indian or Alaska Native** – Enter, for example, Navajo Nation, Blackfeet Tribe of the Blackfeet Indian Reservation of Montana, Native Village of Barrow Inupiat Traditional Government, Nome Eskimo Community, Aztec, Maya, etc.

☐ **Asian** – Provide details below.

☐ Chinese	☐ Asian Indian	☐ Filipino
☐ Vietnamese	☐ Korean	☐ Japanese

Enter, for example, Pakistani, Hmong, Afghan, etc.

☐ **Black or African American** – Provide details below.

☐ African American	☐ Jamaican	☐ Haitian
☐ Nigerian	☐ Ethiopian	☐ Somali

Enter, for example, Trinidadian and Tobagonian, Ghanaian, Congolese, etc.

☐ **Hispanic or Latino** – Provide details below.

☐ Mexican	☐ Puerto Rican	☐ Salvadoran
☐ Cuban	☐ Dominican	☐ Guatemalan

Enter, for example, Colombian, Honduran, Spaniard, etc.

☐ **Middle Eastern or North African** – Provide details below.

☐ Lebanese	☐ Iranian	☐ Egyptian
☐ Syrian	☐ Iraqi	☐ Israeli

Enter, for example, Moroccan, Yemeni, Kurdish, etc.

☐ **Native Hawaiian or Pacific Islander** – Provide details below.

☐ Native Hawaiian	☐ Samoan	☐ Chamorro
☐ Tongan	☐ Fijian	☐ Marshallese

Enter, for example, Chuukese, Palauan, Tahitian, etc.

☐ **White** – Provide details below.

☐ English	☐ German	☐ Irish
☐ Italian	☐ Polish	☐ Scottish

Enter, for example, French, Swedish, Norwegian, etc.

Changes from the 1997 Directive (Slide 2 of 3)

Examples of Terminology Changes:

- Remove “majority” and “minority” terminology from SPD 15, except when
 - Statistically accurate and used for statistical descriptions *OR*
 - When legal requirements call for use of the terms
- Use “race and/or ethnicity” in the question stem

Changes from the 1997 Directive (Slide 3 of 3)

Category	Changes in 2024	Current – 2024 (most substantive additions bolded)	Previous – 1997
Hispanic or Latino	Streamlines definition, removes repetition	Includes individuals of Mexican, Puerto Rican, Salvadoran , Cuban, Dominican , Guatemalan , and other Central or South American or Spanish culture or origin	A person of Cuban, Mexican, Puerto Rican, Cuban, South or Central American, or other Spanish culture or origin, regardless of race. The term, “Spanish origin”, can be used in addition to “Hispanic or Latino”
Middle Eastern or North African	New minimum category and definition	Individuals with origins in any of the original peoples of the Middle East or North Africa, including, for example, Lebanese, Iranian, Egyptian, Syrian, Iraqi, and Israeli	N/A
White	Remove “the Middle East, or North Africa” & adds European specific examples	Individuals with origins in any of the original peoples of Europe, including, for example, English, German, Irish, Italian, Polish, and Scottish	A person having origins in any of the original peoples of Europe, the Middle East, or North Africa

Final Category Definitions (slide 1 of 2)

American Indian or Alaska Native	Individuals with origins in any of the original peoples of North, Central, and South America, including, for example, Navajo Nation, Blackfeet Tribe of the Blackfeet Indian Reservation of Montana, Native Village of Barrow Inupiat Traditional Government, Nome Eskimo Community, Aztec, and Maya
Asian	Individuals with origins in any of the original peoples of Central or East Asia, Southeast Asia, or South Asia, including, for example, Chinese, Asian Indian, Filipino, Vietnamese, Korean, and Japanese
Black or African American	Individuals with origins in any of the Black racial groups of Africa, including, for example, African American, Jamaican, Haitian, Nigerian, Ethiopian, and Somali
Hispanic or Latino	Includes individuals of Mexican, Puerto Rican, Salvadoran, Cuban, Dominican, Guatemalan, and other Central or South American or Spanish culture or origin

Final Category Definitions (slide 2 of 2)

Middle Eastern or North African	Individuals with origins in any of the original peoples of the Middle East or North Africa, including, for example, Lebanese, Iranian, Egyptian, Syrian, Iraqi, and Israeli
Native Hawaiian or Pacific Islander	Individuals with origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands, including, for example, Native Hawaiian, Samoan, Chamorro, Tongan, Fijian, and Marshallese
White	Individuals with origins in any of the original peoples of Europe, including, for example, English, German, Irish, Italian, Polish, and Scottish

***Note:** Category name change to **‘Native Hawaiian or Pacific Islander’** from **‘Native Hawaiian or Other Pacific Islander’**

Thoughtful disaggregation can reveal important disparities

Centers for Disease Control and Prevention

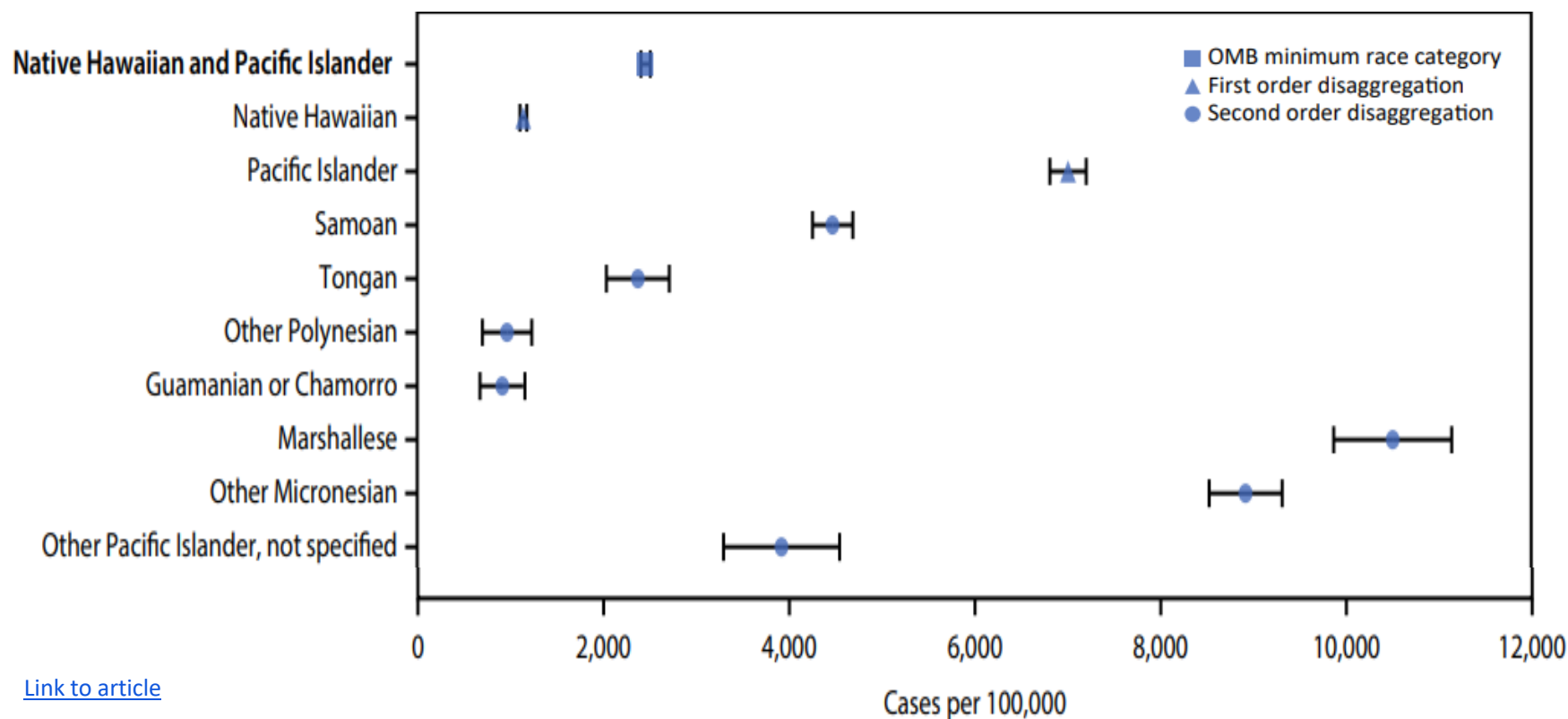
MMWR

Weekly / Vol. 70 / No. 37

Morbidity and Mortality Weekly Report

September 17, 2021

Disaggregating Data to Measure Racial Disparities in COVID-19 Outcomes and Guide Community Response — Hawaii, March 1, 2020–February 28, 2021



[Link to article](#)

Current Data Elements in GenV2

Data Element (DE) Name	Data Element Description	Data Type	Value Set Name
Race Category	Race category - Major OMB Race Categories. Detailed race information would be rolled up to these major OMB race categories.	Coded	<u>Race Category including Null Flavor</u>
Other Race Text	Other Race Text	Text	N/A
Ethnic Group	Based on the self-identity of the subject as Hispanic or Latino	Coded	<u>Ethnicity Group including Unknown</u>

New Data Element (1)

- **DE:** Race and/or Ethnicity
- **Definition:** Person's race and/or ethnicity using the OMB 7 minimum categories. Select all that apply.
- **Valid Values**
 - Asian
 - American Indian or Alaska Native
 - Black or African American
 - Hispanic or Latino
 - Middle Eastern or North African
 - Native Hawaiian or Pacific Islander
 - White
 - Not provided
 - Unknown

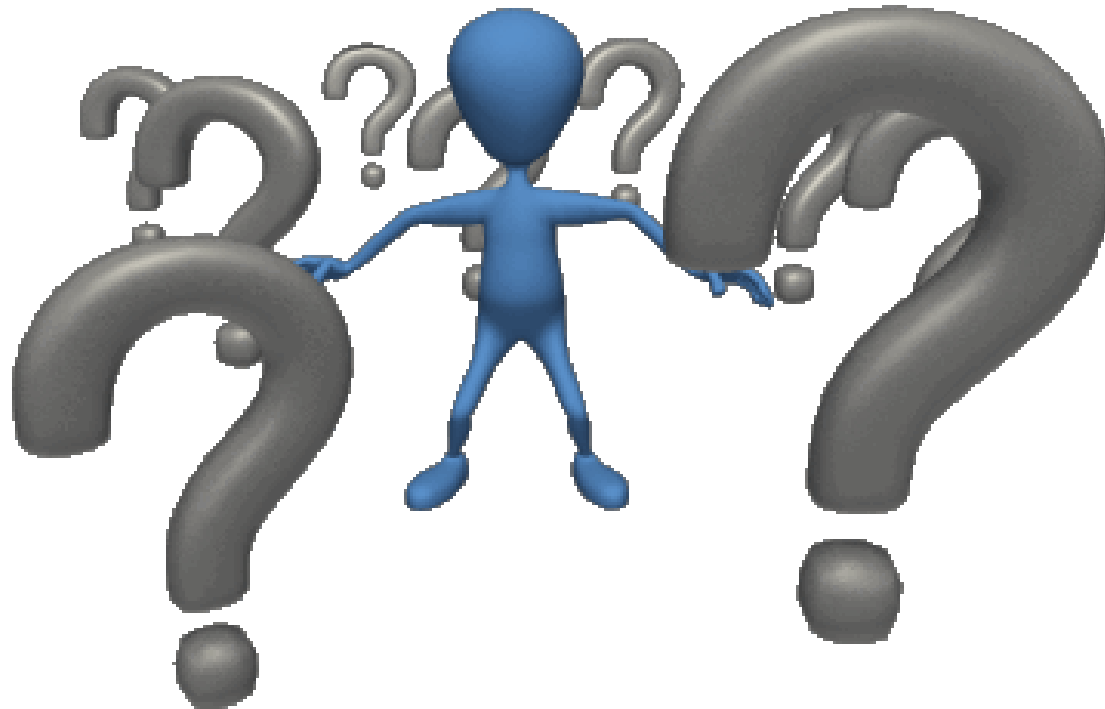
New Data Element (2)

- **DE:** Detailed Race and/or Ethnicity
- **Definition:** Detailed Person's race and/or ethnicity. Select all that apply.
- **Valid Values.** Will be using CDCREC code system, but examples include:
 - Chinese, Asian Indian, Filipino, Vietnamese, Korean, Japanese
 - African American, Jamaican, Haitian, Nigerian, Ethiopian, Somali
 - Mexican, Puerto Rican, Salvadoran, Cuban, Dominican, Guatemalan
 - Lebanese, Iranian, Egyptian, Syrian, Iraqi, Israeli
 - Native Hawaiian, Samoan, Chamorro, Tongan, Fijian, Marshallese
 - English, German, Irish, Italian, Polish, Scottish
 - ***Ak-Chin Indian Community, Alabama-Coushatta Tribe of Texas, Alturas Indian Rancheria, Apache Tribe of Oklahoma***
 - Other (Please Specify)
 - Not provided
 - Unknown

Next Steps

- The deadline for compliance with revised SPD 15 is March 28, 2029
- ASPE/HHS is coordinating several discussions including with OMB and Tribal consultation
- CDC is working internally to ensure that data collections/ data systems funded by the federal government that include racial or ethnic information are compliant with SPD-15 race/ ethnicity standards

Q & A



Thank you!

For more information, contact CDC
1-800-CDC-INFO (232-4636)
TTY: 1-888-232-6348 [cdc.gov](https://www.cdc.gov)

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the U.S. Centers for Disease Control and Prevention.





CDC Race and Ethnicity Code System Overview

Jenny Couse, MPH, MBA, RN (NI-BC)
Health Scientist (Informatics)

25 Oct 2024, CDC/NCHS

CDCREC 1.0 Background & Purpose

- **OMB SPD-15 Revision - 30 Oct 1997**
 - Comprehensive exchangeable data across federal agencies
- **CDCREC 1.0, 2000, Purpose**
 - HL7 race and ethnicity value set not aligned with federal race and ethnicity data collection standards
 - Align and harmonize federal data standards
 - Improve interoperability, data exchange, and federal administrative data collection and reporting
- **Data Source**
 - U.S. Census Bureau decennial survey data - 2000

CDCREC 1.0 Development Team

- **CDC**
 - Daniel Pollock, MD, Medical Epidemiologist (retired from CDC, 2021)
- **CDC/NCHS**
 - Demographer statistician SMEs
 - Computer programmers - vital records processing
 - Interoperability and data standards SMEs
- **USCB**
 - Census demographer SMEs

CDCREC 1.0 History and Adoption

■ CDCREC 1.0

- 5 OMB minimum categories plus other race from Census category
- No meaningful update since its publication in 2000
- HL7 adoption of CDCREC as HL7 R&E data standards in 2005
 - CDCREC Value Sets are used in many HL7 implementation guides
 - Assistant Secretary for Technology Policy 's (ASTP) Electronic Health Records Certification Requirement
 - Patient demographics and observations | HealthIT.gov
 - United States Core Data for Interoperability for USCDI v5
 - <https://www.healthit.gov/isp/taxonomy/term/741/uscdi-v5>

NCHS CDCREC 1.0 Update Efforts

- **Data Standards and Interoperability Team**
 - Received many requests to update American Indian or Alaska Native(AIAN) race category
 - Began working with US Census Bureau staff in Nov 2021
 - Completed update in Mar 2023
 - Conducted national seminar in Mar 2023
 - CDCREC 2.0 system was open for public comment in Mar - Apr 2023
 - Comments included concerns related to implementation
 - Publication of CDCREC 2.0 (originally planned for Sept 2023) was postponed

NCHS Established Interagency CDCREC Technical Work Group (CDCREC TWG)

- **CDCREC TWG Purpose**

- Seek collaboration and input from federal agency race and ethnicity SMEs
- Keep CDCREC up-to-date through regular CDCREC TWG review and update

- **CDCREC TWG Current Goal**

- Update CDCREC AIAN Race Category
- Publish CDCREC 1.3 and background paper by 30 Nov 2024

- **CDCREC TWG Future Goal**

- Align CDCREC to Revised SPD-15, 2024

CDCREC TWG Federal Agency Representation

- **HHS/ASTP** – Senior Terminology Advisor
- **CDC CIOs**
 - Data Standards, Policy, Interoperability, Vocabulary, and AIAN SMEs
 - Cancer, School, Immunization Epidemiologist
 - Public Health Law SME, Office of Science
- **CB/POP FED** – Racial Statistics SME
- **HHS/CMS**
 - Data and Policy Analytics Group SMEs
- **HHS/ASPE** – Office of Science and Data Policy
- **HHS/IHS/HQ** – Indian Health Services AIAN SME, Statistician

CDCREC File Overview

CDCREC Race and Ethnicity Category

- **OMB SPD-15, 1997 Revision**
- **Race Categories**
 - 5 OMB Minimum and 1 USCB 2000 Decennial Census
 - American Indian or Alaska Native
 - Asian
 - Black or African American
 - Native Hawaiian or Other Pacific Islander
 - White
 - Other Race
- **Ethnicity Categories**
 - Hispanic or Latino
 - Not Hispanic or Latino

CDCREC File Name and Structure

■ Concept Code

- Permanently assigned numeric code value
- Intended for electronic exchange of the coded race and ethnicity data and concept.
- Non-hierarchical and convey no semantic meanings.
- Serve simply to identify a specific race or ethnicity concept.
- Created using Mod 10 Check Digit algorithm

Concept Code ▾	Hierarchical Code ▾	Concept Name ▾	Preferred Concept Name ▾	SDOConceptStatus ▾	
1000-9	R	Race	Race	Active	2
1002-5	R1	American Indian or Alaska Native	American Indian or Alaska Native	Active	2
1004-1	R1.01	American Indian	American Indian	Active	2
1006-6	R1.01.001	Abenaki	Abenaki	Active	2
1008-2	R1.01.002	Algonquian	Algonquian	Active	2
1010-8	R1.01.003	Apache	Apache	Active	2
1011-6	R1.01.003.001	Chiricahua	Chiricahua	Active	2
1012-4	R1.01.003.002	Fort Sill Apache	Fort Sill Apache	Active	2

CDCREC File Name and Structure

■ Hierarchical Code

- Alphanumeric code that conveys semantic information.
- Places each discrete concept in a hierarchical relationship with other concepts

Concept Code ▾	Hierarchical Code ▾	Concept Name ▾	Preferred Concept Name ▾	SDOConceptStatus ▾	
1000-9	R	Race	Race	Active	2
1002-5	R1	American Indian or Alaska Native	American Indian or Alaska Native	Active	2
1004-1	R1.01	American Indian	American Indian	Active	2
1006-6	R1.01.001	Abenaki	Abenaki	Active	2
1008-2	R1.01.002	Algonquian	Algonquian	Active	2
1010-8	R1.01.003	Apache	Apache	Active	2
1011-6	R1.01.003.001	Chiricahua	Chiricahua	Active	2
1012-4	R1.01.003.002	Fort Sill Apache	Fort Sill Apache	Active	2
Concept Code ▾	Hierarchical Code ▾	Concept Name ▾	Preferred Concept Name ▾	SDOConceptStatus ▾	
1735-0	R1.02	Alaska Native	Alaska Native	Active	
1737-6	R1.02.001	Alaska Indian	Alaska Indian	Active	
1739-2	R1.02.001.001	Alaskan Athabascan	Alaskan Athabascan	Active	
1740-0	R1.02.001.001.001	Ahtna	Ahtna	Active	
1741-8	R1.02.001.001.002	Alatna	Alatna	Active	
1742-6	R1.02.001.001.003	Alexander	Alexander	Active	
1743-4	R1.02.001.001.004	Allakaket	Allakaket	Active	

CDCREC File Structure

- **Concept Name**
 - Full description of concept
- **Preferred Concept Name**
 - Short description of concept for user friendly readability and electronic data exchange purpose
- **SDO Concept Status**
 - Active, retired, or reclassified, etc.
- **SDO Concept Create Date**
 - Date concept is added to CDCREC version
- **Code System OID**
 - Unique Object Identifier assigned to CDCREC

CDCREC File Location

- **Downloadable file locations**

- PHIN Tools and Resources/PHIN Vocabulary

- <https://www.cdc.gov/phn/php/vocabulary/index.html>

- CDC Developed Code Systems

- CDCREC 1.0
 - CDCREC 1.2
 - CDCREC 1.0 Background and Purpose paper

- PHIN VADS Hot Topics Technical Page

- <https://phinvads.cdc.gov/vads/SearchVocab.action>
 - CDC Race Category and Ethnicity Group
 - Link to CDCREC
- 
- A decorative graphic at the bottom of the slide consisting of overlapping teal and green geometric shapes, primarily triangles and polygons, creating a modern, abstract border.

CDCREC Contact Information

- CDCREC Org Email
 - recodes@cdc.gov
- NCHS CDCREC Team
 - Jenny Couse, lrz3@cdc.gov
 - Cindy Bush, pdz1@cdc.gov

Status Updates for Closed DESTs (JMC)



Status update for closed DESTs



- DSWG review complete and drafts are with CSTE for next steps.
 - Hospitalization
 - Travel
 - Pregnancy
 - Immunizations
 - Death
 - Sexual Orientation and Gender Identity
 - Disability
 - Identifiers
- Draft recommendations are in progress, when complete will be shared with DESTs for review
 - Laboratory
- With DSWG for review
 - Medications – out for review through November 4
- JMC is working closely with Co-Chairs to reconcile comments on the following recommendations before handing over to CSTE for their next steps
 - Signs, Symptoms, and Clinical Manifestations
 - Exposures, Risk Factors, and Underlying Conditions
 - Industry and Occupation (updates for “employment status”)

Clinical Manifestations



Clinical Manifestations



Data Element Name	Data Element Definition
Clinical Manifestations Repeating Group → <i>Signs and Symptoms Repeating Group?</i>	Clinical manifestations, including signs and symptoms, associated with the condition being reported
Clinical Manifestations Data Class Indicator → <i>Any Signs or Symptoms Indicator?</i>	Indicator that the person experienced any listed clinical manifestations associated with the condition being reported
From Dates of Public Health Importance: Symptom Onset Date → <i>Sign or Symptom Onset Date?</i>	The earliest date of the onset of <i>[clinical manifestations, including]</i> signs or symptoms relevant to the reported condition.

Poll – CM or SS?



What name should we use when we implement our current "Clinical Manifestations" repeating group data elements?

- Keep "Clinical Manifestations" and encourage its use
- Rename to "Signs or Symptoms"

General Updates for Closed DESTs



DEST Summary (as of 10/25/2024)



Data Class	WG Discussion	DEST	Draft Complete	DEST Feedback	Feedback Addressed	DSWG Feedback	Document Finalized*
Hospitalization							with CSTE
Travel							with CSTE
Pregnancy							with CSTE
Industry and Occupation							In progress
Sexual Orientation and Gender Identity							with CSTE
Immunization History							with CSTE
Death							with CSTE
Exposures/Risk Factors/ Underlying Conditions							In progress
Signs/Symptoms/ Clinical Manifestations							In progress
Disability							with CSTE
Identifiers							with CSTE
Medication/Treatment						In progress	
Laboratory			In progress				
Reporting Source			In progress				
Social Determinants of Health		Two calls in November					

* Document is with CSTE for final approval.

Legend	
	Completed
	In Progress
	Not applicable

DSWG Next Steps (JMC)



Next Steps



- These draft recommendations are in development and will be shared with DESTs for input as the next step
 - Laboratory
- Documents out for DSWG Review
 - Medications – Through November 4, 2024

Other Next Steps



Upcoming meetings

- Social Determinants of Health
(Language, Education, Insurance Income)
 - **November 8 (Call #3), 1-2 PM ET**
 - **November 15 (Call #4), 1-2 PM ET**

The next broad DSWG is expected to be held on **December 13 from 1-2 ET.**

NOTE:

All drafts released for DEST/DSWG review are drafts and the resulting recommendations passed to CSTE for final steps have not been made available. Please do not pass on draft documents as final products.

Wrap-Up & Adjourn (Co-Chairs)



Wrap-Up



Anything else for the good
of the group?

