

The Centers for Disease Control and Prevention
Race and Ethnicity Code System Version 1.3 (CDCREC 1.3)
Prepared by the CDC's National Center for Health Statistics (October 2024)

Background and Purpose

The U.S. Centers for Disease Control and Prevention (CDC) National Center for Health Statistics (NCHS) maintains a Race and Ethnicity Code System (CDCREC). The main purpose of the CDCREC is to facilitate the use of federal standards for race and ethnicity data collection, analysis, and reporting of the data and to promote exchange, storage, and retrieval of data in electronic format. In collaboration with the CDC Race and Ethnicity Technical Work Group (CDCREC TWG), NCHS updated CDCREC to version 1.3. The CDCREC TWG consisted of representatives from 6 different CDC Centers, Institute, and Offices (CIO) and 6 different federal agencies outside the CDC, Assistant Secretary for Technology Policy (ASTP), U.S. Census Bureau (USCB), Centers for Medicare and Medicaid Services (CMS), Health and Human Services of the Office of the Assistant Secretary for Planning and Evaluation (HHS/ASPE), Indian Health Service (IHS), National Institutes of Health (NIH).

The primary goal of the CDCREC TWG was to update American Indian or Alaska Native (AIAN) race category concepts. Most other race and ethnicity concepts from CDCREC 1.2 were carried over unchanged to CDCREC 1.3; one exception was the addition of the Somali concept to the Black or African American race category. This version of CDCREC is only being partially updated to address extensive gaps in AIAN concepts. Therefore, CDCREC 1.3 is not updated to align with OMB SPD 15, 2024. In future work, CDC/NCHS plans to align CDCREC with the March 29, 2024 revision to the Office of Management and Budget (OMB) Statistical Policy Directive No. 15 (SPD-15).

CDCREC Data Source

The race and ethnicity data collected, classified, and published by the USCB provide the most comprehensive and detailed information about the current racial and ethnic composition of the U.S.

population. The CDCREC 1.3 is based on the OMB 1997 standards for maintaining, collecting, and presenting federal data on race and ethnicity SPD-15 ([OMB Revision to the Standards for the Classification of Federal Data on Race and Ethnicity](#)). The CDCREC 1.3 AIAN source data are the USCB 2020 Census State Redistricting Data Summary File, Appendix F ([2020 Census State Redistricting Data](#)), Bureau of Indian Affairs (BIA) federally recognized tribes which was published in the Federal Register on January 8, 2024 ([BIA Federally Recognized Indian Entities](#)), and the BIA tribal leadership directory which is updated more frequently. The directory file was accessed on September 11, 2024, for full and preferred concept AIAN description ([Tribal Leaders Directory | Indian Affairs \(bia.gov\)](#)).

Race and Ethnicity Definition

Race and ethnicity categories are social and political constructs in the United States and are not based on biology, genetics, or anthropology. Because the language used to describe race and ethnicity evolves, an individual term may take on a new meaning, albeit subtly different, from one period to another. For example, some AIAN tribes may merge with other tribes or depart from the tribal entity they were a part of. The departed tribe may form a new tribal entity or merge with a different tribe to form a new tribal entity for economic, political, or BIA federal recognition purpose. As a result, the same terms used to define AIAN race (referred to as “concepts”) used in the CDCREC 1.3 and the CDCREC 1.2 are not necessarily semantically equivalent. The CDCREC 1.3’s adherence to OMB’s race and ethnicity categories and inclusion of the detailed AIAN concepts from USCB’s 2020 decennial census and the BIA 2024 federally recognized tribe list support public health agencies and other organizations’ race and ethnicity data collection efforts in accordance with federal race and ethnicity data standards.

Race and Ethnicity Concepts

CDCREC includes the 1997 OMB minimum categories (five races and two ethnicities) and a sixth race category (“Other Race”) derived from the USCB’s decennial census 2000 data. The 1997 OMB minimum categories for data on race are American Indian or Alaska Native, Asian, Black or African

American, Native Hawaiian or Other Pacific Islander, and White. There are two OMB minimum categories for data on ethnicity: Hispanic or Latino, and Not Hispanic or Latino. More information on the OMB SPD-15, 1997 minimum categories and federal standards for classifying data on race and ethnicity is available at OMB Revision to the Standards for the Classification of Federal Data on Race and Ethnicity.

Concept Specifications

The CDCREC 1.3 includes separate race and ethnicity tables, and individual rows in each table row provide specifications for discrete concepts, e.g., Asian, Hispanic or Latino. Each concept is specified by full concept name and preferred concept name. For BIA federally recognized AIAN tribes, full BIA federally recognized tribes name was used as full AIAN concept name and BIA federal recognition status is annotated in CDCREC 1.3 For non-federally recognized AIAN tribes, USCB's decennial census name was used. For AIAN preferred concept name, AIAN short name from the BIA tribal directory file was used. For non-federally recognized AIAN tribes, USCB's decennial census name was used. In addition to full concept name and preferred concept name, each concept has a unique numerical identifier (concept code), a hierarchical property, and date added to CDCREC.

The unique identifier, or concept code, is a permanently assigned numeric code value intended for electronic exchange of the coded race and ethnicity data and concept. These identifiers are non-hierarchical and convey no semantic meanings. The codes serve simply to identify a specific race or ethnicity concept. A check digit, calculated using the Mod 10 check digit scheme (see appendix), which is used to prevent duplicate code creation, is included at the far right of the unique identifier; it is a single digit separated from the preceding digits by a dash.

The hierarchical property is an alphanumeric code that conveys semantic information. It places each discrete concept in a hierarchical relationship with other concepts, e.g., the hierarchical property for specific ethnicity concepts such as Costa Rican, Guatemalan, and Honduran place them at the same

hierarchical level vis a vis the higher-level concept Central American, which in turn is at the same hierarchical level as Spaniard vis a vis the higher-level concept Hispanic or Latino. The letter in the first position of the hierarchical property, R or E, indicates the location of the concept in one of two hierarchies: Race or Ethnicity. The length of the hierarchical property also conveys information about the hierarchical position of the associated concept in relation to other concepts. In contrast to the concept code, the hierarchical property can change over time to accommodate the insertion of new concepts or to represent changes in the hierarchical organization of concepts.

When a new concept is inserted in the CDCREC System, the date of insertion is documented as the date added. When a concept is retired from the CDCREC, the date retired is documented. However, retired concepts and their specifications will remain visible in the CDCREC tables to allow accurate interpretation of coded data.

Mapping Tables

The CDCREC 1.3 is accompanied by a version 1.2 to 1.3 mapping table. The CDCREC TWG identified a historical change in AIAN tribal names by reviewing the USCB's decennial census technical documentations and crosswalk table for 2000 ([2000 Decennial Census Technical Documentation](#)), 2010 ([2010 Decennial Census Technical Documentation](#)), 2020 ([2020 Decennial Census Technical Documentation](#)). Additionally, the BIA's annual federally recognized tribal list publications from 1982 to 2024 were reviewed to identify the transformation, merger, and separation of AIAN tribes during this period. The mapping table includes the CDCREC 1.2 concept code mapped to a CDCREC 1.3 concept code. The mapping table includes new concepts, reclassified concepts, and retired concepts. A retired concept table and a reclassified concept table include the concept status and comments on updates applied to CDCREC 1.3.

A new concept code was created for completely new concept names in CDCREC 1.3. For example, the CDCREC 1.2 Western Cherokee (1098-3) concept was *retired* and mapped to a completely

new concept, Cherokee Nation, and a new concept code (3080-9) was created. By comparison, the CDCREC 1.2 Eastern Cherokee (1092-6) was *reclassified* to a similar tribe name of Eastern Band of Cherokee Indians, and the 1092-6 concept code was carried over to the similar tribal name.

There are instances where many previous concepts and their respective concept codes now map to one existing new concept in CDCREC 1.3, creating many to one relationship. The concepts with many to one relationship mapping from CDCREC 1.2 and 1.3 are identified in “Many to One” column in Mapping Table. For example, the CDCREC 1.2 Comanche (1175-9) and Oklahoma Comanche (1176-7) concepts were both retired. A new combined concept, Comanche Nation, Oklahoma (3109-6) was added to CDCREC 1.3 and Comanche (1175-9) and Oklahoma Comanche (1176-7) in CDCREC 1.2 are mapped to a new concept, Comanche Nation, Oklahoma (3109-6) in CDCREC 1.3.

Through the review process, CDCREC TWG discovered that some AIAN tribes in decennial census 2020 were not found in CDCREC 1.2. Hence, a new concept code was assigned to these AIAN concepts and added to CDCREC 1.3, with the date added to the CDCREC. For example, the concept name Acadia Band and corresponding concept code 3892-7 were added for the first time to CDCREC on November 30, 2024.

Code System Maintenance

CDC/NCHS maintains the CDCREC in collaboration with CDCREC TWG and plans to align the CDCREC with the March 29, 2024 revision to OMB SPD-15 in the future. BIA publishes a federally recognized tribes list annually in accordance with public law 108-454, section 104(b)([STATUTE-108-Pg4791.pdf](#)). To ensure CDCREC includes the most current federally recognized tribes, CDC/NCHS will update AIAN race category annually following the publication of the BIA federally recognized tribes list. State recognized AIAN tribes are not included in CDCREC 1.3. All other race and ethnicity categories will be updated decennially following the USCB’s decennial census. The USCB’s decennial census data will be used to update other race and ethnicity concepts. Comprehensiveness and accuracy of CDCREC race and ethnicity concepts

are crucial for race and ethnicity data collection, classification, and reporting. CDC/NCHS welcomes CDCREC update requests from public and CDCREC users. Update requests can be sent to the CDC/NCHS CDCREC team by emailing RECodes@cdc.gov

Appendix - Calculating Mod 10 Check Digits

The algorithm for calculating Mod 10 check digits, using the identifier 1234 as an example, is as follows:

Steps Example

- (1) Take the odd digit positions of the identifier counting from the right = 42
- (2) Multiply the number from step (1) by 2 = 84
- (3) Take the even digit positions of the identifier counting from right = 31
- (4) Prepend the number from step (3) to the number from step (2) = 3184
- (5) Add all digits of the number from step (4) together = 16
- (6) Using the number from step (5), find the next highest multiple of 10 = 20
- (7) The check digit is the number from step (6) minus the number from step (5) = 4

Thus, this example demonstrates that 4 is the Mod 10 check digit for 1234