CANCER REPORTING IN CALIFORNIA:
STANDARDS FOR AUTOMATED REPORTING

CALIFORNIA CANCER REPORTING SYSTEM STANDARDS for 2014

VOLUME II

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PART I INTRODUCTION

The reporting of cancer is mandatory under provisions of California's Health and Safety Code.

Hospitals and other reporting facilities are required to report cancer information to the California Cancer Registry using computer reporting systems that meet State standards. This manual, *Cancer Reporting in California: Standards for Automated Reporting, California Cancer Reporting System Standards for 2014, Volume II (CCR Volume II)* is intended for hospitals and other reporting facilities or vendors wishing to update their own automated reporting systems or create new reporting systems that comply with State requirements.

The intended audience for this document is system analysts and software developers. It describes the format in which collected data must be reported.

Detailed instructions for collecting and coding data can be found in *Cancer Reporting in California: California Cancer Reporting System Standards, Volume I: Abstracting and Coding Procedures for Hospitals*.

Documentation for computer edits can be found in *Cancer Reporting in California: Data Standards for Regional Registries and California Cancer Registry, California Cancer Reporting System Standards, Volume III*.

Section I.1 Summary of Changes for 2014

Changes for 2014 are identified by with dark red font color.

In response to requests from users of this document, the exchange records (Appendices A, B, C, & D) are now posted in an Excel (PDF) spreadsheet.

On CCRCAL.ORG, this volume and its related appendix will be listed as follows:

VOLUME II
2014
California Cancer Reporting Standards: Volume II-2013 (dated dd/mm/yy)
Volume II Appendices: California Cancer Reporting Standards: (dated dd/mm/yy)

Appendices A, B, C, & D identify each data item with a unique CCR Identifier. This identifier will never change and can be used to uniquely identify a data item to a database system, if such an identifier is needed in your database system.

See Appendix A for the following updates:

- NAACCR Record Version [140] (CCR Identifier E1003) has been revised from 130 to 140 to reflect NAACCR version 14.0.
- Census Occ Code 1970-2000 (CCR Identifier E1036) is now not generated for extract.
- Census Ind Code 1970-2000 (CCR Identifier E1037) is now not generated for extract.
- Census Occ/Ind Sys 70-00 (CCR Identifier E1042) is now not generated for extract.

- Grade Path Value (CCR Identifier E1064) is now conditional.
- Grade Path System (CCR Identifier E1065) is now conditional.
- TNM Path Descriptor (CCR Identifier E1150) is now required if available.
- TNM Clin Descriptor (CCR Identifier E1156) is now required if available.
- CER_Height (CCR Identifier E1263) is now conditional.
- CER_Weight (CCR Identifier E1264) is now conditional.
- TobaccoUseCigarette (CCR Identifier E1277) is now conditional.
- TobaccoUseOtherSmoke (CCR Identifier E1278) is now conditional.
- TobaccoUseSmokeless (CCR Identifier E1279) is now conditional.
- TobaccoUseNOS (CCR Identifier E1280) is now conditional.
- SourceComorbidity (CCR Identifier E1281) is now conditional.
- Over-ride HospSeq/DxConf (CCR Identifier E1448) is now not required.
- Coding Proc (CCR Identifier E1576) has been updated from 30 to 31.
- Census Ind Code 2010 (CCR Identifier 1775) is now not generated for extract.
- Census Occ Code 2010 (CCR Identifier 1776) is now not generated for extract.
- Census Tr Poverty Indictr (CCR Identifier E1777) is now not generated for extract.
- Secondary Diagnosis 1 (CCR Identifier E1778) is now required.
- NAACCR Identifier, 3720, assigned to Reserved NPCR (No CCR Identifier).

See Appendix B for the following updates:

- NAACCR Record Version [140] (CCR Identifier E1003) has been revised from 130 to 140 to reflect NAACCR version 14.0.

No updates made to Appendix C and D.

Additional Instructions:

The California Cancer Registry requires the use of Collaborative Staging for all cases. For this reason the use of Over-ride CS 20, CCR Identifier E1508, is not allowed and the value should always be transmitted as blank. All edits for Collaborative Staging will be enforced and all edits associated with Collaborative Staging must be cleared before transmission to the CCR.

PART II DATA TRANSMISSION STANDARDS

Section II.1 Summary

Communication between a reporting facility and the California Cancer Registry (CCR) can be of two forms: some types of records are transmitted from the reporting facility to the CCR, and other types of records are transmitted from the CCR to the reporting facility.

There are four record types that must be transmitted from the reporting facility to the central registry. They are: New Case records, Correction records, Follow-Up

Only records, and Deletion records. All four of these record types are described in Section II.3. A reporting facility cancer registry is required to submit all four types of records, following the procedures described below, to be in compliance with the California Cancer Reporting System Standards, Volume II.

There is one type of record that is sent from the central registry to the reporting facility. This is Shared Follow-Up, described in Section II.4. Acceptance of that record by the reporting facility is optional (although we strongly recommend it).

Cases should NOT be transmitted to the CCR using a format that is earlier than the year that the case is reportable. For example, 2010 cases, as defined by the CCR casefinding rules, cannot be submitted in the format required in 2009.

Section II.2 Explanatory Notes

Reporting requirements vary by item and record type and are listed in the "CCR Required from Reporting Facility" column in the Appendices. Each record type is described in a table, which must be consulted to determine whether or not a particular item is required. The following key explains the terms used in the "CCR Required from Reporting Facility" column.

Key to Symbols

no	Not required. It is optional for the facility to submit this data item value to the central registry.
yes	Required. The facility must submit this data item value to the central registry.
yes*	Required if available. If the information can be obtained, the facility must submit it to the central registry. If not available or not applicable, may be left blank.
conditional	Required on selected cases dependent on one or more conditions being true, such as the case's diagnosis date being before or after a certain date.
yes, gen by facility	Required, but the facility's registry software must generate the data item value based on a standard algorithm, rather than a user manually entering the data item value.

Items that are facility-generated are described in more detail, including allowable values in Cancer Reporting in California, Data Standards for Regional Registries and California Cancer Registry (California Cancer Reporting System Standards, Volume III).

Section II.3 Transmission between Hospitals and Regions

II.3.1 Selection of Cases

Only cases which are reportable under California Cancer Registry (CCR) requirements are to be included in transmissions to the CCR. A reporting facility may elect to abstract certain benign conditions or skin cancers to meet local interest or ACoS requirements; however, these cases are not to be transmitted to the CCR.

Transmit all cases with a 2 or 3 (in situ or malignant) in Histology - Behavior, EXCEPT the following histologies occurring in the skin (site codes C44.0 -C44.9):

8000-8005 Neoplasms, malignant, NOS of the skin

8010-8046 Epithelial carcinomas of the skin

8050-8084 Papillary and squamous cell carcinomas of the skin

8090-8110 Basal cell carcinomas of the skin

In addition, for cases diagnosed after 1995, do not transmit any in situ (Histology - Behavior of 2) of the cervix (site codes C53.0 - C53.9). Beginning with cases diagnosed January 1, 2001, benign (behavior code 0) and uncertain behavior (behavior code 1) intracranial and central nervous system tumors are reportable. In addition, borderline ovarian tumors (behavior code 1) in ICD-O-3 are reportable.

II.3.2 New Case Record

For every abstract of a reportable case that is completed at the reporting facility, a New Case Record must be sent to the CCR. Timing considerations for reporting are discussed in Standards, Volume I, Section IX.1.1.

The format for the New Case record is specified in Appendix A. (Key to symbols is in Section II.2.)

II.3.3 Update (Correction) Record

An Update (Correction) record must be sent to the CCR every time a data item designated as "yes" in the column entitled "Update" is changed at the facility.

The following special items are used in the record layout for corrections:

Changed Data Item Number	The changed data item number is the updated/corrected data item's CCR Identifier.
Changed Item New Value	This field holds the new contents of the changed item. The data should be left-justified in a field of 1000 characters. The field may be blank if blanks are an allowable value for the item being changed.
Correction Comments	This is a 200-Character field (4 lines of 50 characters). It should contain a comment indicating the reasons for the changes. It should be left-justified beginning with the first of the 4 lines.
Old Item Value	This field holds the original contents of the changed item.

If a change is made solely because of information furnished by the CCR or one of the CCR's regional registries, the Update (Correction) Comments field should contain only an "R" or "REGION" (all upper case).

If the same field is changed more than once in a series of Update (Correction) records, the last correction on the transaction file is the one that prevails.

The Update (Correction) record may be used to change any field. When a change is being made to any of the data items listed in the identifier fields, the old values should appear in the identifier fields of the Update (Correction) record, with the new values in the Changed Item Value field.

Whenever a correction to a date field is transmitted, the corresponding date flag must *always* be transmitted as well, regardless as to whether the date change precipitates a change to the date flag and vice-versa.

II.3.3A Update (Correction) Record Layout

See Appendix B for the record layout for Update (Correction) records.

II.3.4 Follow-Up Only Shared Follow-Up Record

II.3.4.1 Follow-Up Only

A Follow-Up Only record must be sent to the CCR whenever the reporting facility changes data in any of the fields on the following list:

Item Name

- Date of Last Patient Contact or
- Death
- Vital Status
- Tumor Status
- Date of Last Tumor Status

Although only these items should trigger a Follow-Up Only record, all data items in the record are to be sent.

PLEASE NOTE: Whenever these items change due to the receipt of shared follow-up from the CCR, DO NOT SEND a Follow-Up record.

II.3.4.2 Shared Follow-Up

Reporting facilities which agree in advance may be able to receive shared follow-up. Whenever the CCR receives follow-up on a reporting facility's patient (and, possibly, that patient's tumor) from a different source (another reporting facility, State death tapes, DMV, etc.), the CCR may make available to the reporting facility the most current follow-up data available on that patient and tumor. The fields Follow-Up Hospital (Last) and Follow-Up - Last Type (Patient) and Follow-Up - Last Type (Tumor) in the Shared Follow-Up record will indicate the sources of the follow-up information being provided. The record format for Shared Follow-Up is the same as the record format for reporting facilities reporting follow-up to the CCR.

II.3.4A Follow-Up Only and Shared Follow-Up Record Layout

See Appendix C for the record layout for Follow-Up Only and Shared Follow-Up records. (Key to symbols is in Section II.2.)

II.3.5 Deletion Record

Whenever a reporting facility decides to delete from its database a case that has previously been reported to the CCR, a Deletion record must be transmitted to the CCR, EXCEPT when the reporting facility is deleting a duplicate.

The following special item is used in the record layout for this record type:

Text - Transaction Remarks - This is a 150-character field (3 lines of 50). It must contain a comment indicating the reason for deleting the record.

If a deletion is made because the CCR's regional registry instructed the reporting facility to do so, the Text-Transaction Remarks field should contain only an "R" or "REGION" (all upper case).

II.3.5A Deletion Record Layout

See Appendix D for layout of deletion records. (Key to symbols is in Section II.2.)

Section II.4 Data Transmittal Format

Transmitted Data Files

All electronic files must be encrypted and password protected. File names must conform to the following schema:

- A three-letter abbreviation assigned by the CCR regional registry to the hospital (the case file suffix).
- Plus the four-digit year (YYYY) showing the year the file was created.
- Plus the three-digit day of the year (001 through 366) showing the day the file was created.
- Plus a single letter (A-Z) showing the sequence within one day the file was created. (Different file types can have the same sequence letter.)
- Plus a standard suffix according to the record type (see below).

For example, the first file of new cases created on February 1 at hospital abbreviated STJ would be named STJ2014032A.XAA and the second file of new cases created that day would be STJ2014032B.XAA.

The following files may be included, in any order.

Record Type	File Suffix	Record Length	
New Case	.XAA	22824	plus CR/LF
Correction	.XCO	2585	plus CR/LF
Follow-Up and Shared Follow-Up	.XFU	804	plus CR/LF
Shared Follow-Up	.XSH	804	plus CR/LF
Deletion	.XDL	368	plus CR/LF

Section II.5 Rules for Computer-Generated Data Items Required by California

Please refer to California Cancer Reporting System Standards, Volume III, for specifications for generating the data items referred to in Section II.5.1.2-4.II.5.1 Data Items.

To determine which items to generate in facility software, refer to the *CCR Required from Reporting Facility Software* column in Appendices A, B, C, or D.

Appendix A: New Case Record, NAACCR Version 12.2

Data Item Name	CCR Identifier	NAACCR Identifier	Col Start	Col End	Length	CCR Required from Reporting Facility Software	Supplied by CCR	Correction Record Required
NPI--Reporting Facility	E1080	545	691	700	10	yes*		yes*
Reporting Facility	E1081	540	701	710	10	yes		yes
NPI--Archive FIN	E1082	3105	711	720	10	no		no
Archive FIN	E1083	3100	721	730	10	no		no
Accession Number--Hosp	E1084	550	731	739	9	yes		yes

II.5.2 End of Record

Must be a period (.).

II.5.3 Record Type

This is a one-character field used to identify the type of record being processed. The hospital computer system must supply the appropriate code letter at the time that the file is created. The appropriate code for each record type is listed below:

New Case	A
Correction	U
Follow-Up Only	F
Deletion	D

The code for the record type generated by the central registry is:

Shared Follow-Up	S

II.5.4 (NAACCR or Central Registry Record Version)

This field must contain the version code that identifies which revision of a record layout was used to create a record for the recipient. Once your software system has been modified to transmit records using the latest record layouts in this volume, all records transmitted must include the latest record version code(s), shown parenthetically after the record version data item name in each record layout.

Section II.6 Rules to Computer Generate Data Items for Standard Setting Organizations

The California Cancer Registry is required to submit data to standard-setting organizations. There are a number of data items that are generated for these submissions. These organizations include the North American Association of Central Cancer Registries (NAACCR), NCI's Surveillance, Epidemiology and End Results Program (SEER) and the Center for Disease Control and Prevention's National Program of Cancer Registries (NPCR). Please refer to California Cancer Reporting System Standards, Volume III, for specifications for the data items listed below.

II.6.1 Data Items

- Census Tract Coding System 1970/80/90
- COC Coding Sys - Current
- COC Coding Sys - Original
- Coding System for EOD

- Computer-Derived Ethnicity (formerly Spanish Surname)
- Computer-Derived Ethnicity Source
- ICD Revision Number
- Industry Source
- Follow-Up Source- Central (Mapped from Last Type of Follow-Up (Patient))
- Morph Coding Sys - Current
- Morph Coding Sys – Original
- Occupation Source
- Race Coding Sys - Current
- Race Coding Sys - Original
- RX Coding System - Current
- SEER Coding Sys - Current
- SEER Coding Sys – Original
- SEER Type of Follow-Up
- SEER Record Number
- Site Coding Sys - Current
- Site Coding Sys - Original

Part III Quality Control Standards

Section III.1 Summary

One method used by the regional registry for insuring data quality is to pass submitted records through computer edits to assess whether coding rules have been properly followed. Two types of computer edits will be applied to submitted data: item edits and interfield edits. These edits are described in Cancer Reporting in California: Standards for Regional Registries and the California Cancer Reporting System Standards, Volume III. See Section III.4 in this manual for the acceptance standards.

Section III.2 Item Edits

Most individual items will be checked for valid codes or other types of allowable values. Valid values for specific items can be found in California Cancer Reporting System Standards, Volume III. This document is available on the CCR website at www.ccrcal.org.

Section III.3 Interfield Edits

An interfield edit compares the contents of two or more fields for consistency. Only the New Case record will be edited. Other types of records will be checked for consistency with the previously sent New Case record, as it would be modified by this newer information. A large number of interfield edits will be applied to any data records submitted. Interfield edits are documented in California Cancer Reporting System Standards, Volume III.

Section III.4 Acceptance Procedure

III.4.1 Acceptance Standards for Software

Hospitals (and other reporting sources) wishing to develop their own systems for automated reporting to the regional registry, or vendors wishing to market software which meets California Cancer Registry requirements, are required to demonstrate

that they have procedures in place to assure the accuracy of the data being collected. In order for another method of automated reporting to be accepted for reporting to the California Cancer Registry and its regional registries, the hospital or vendor must demonstrate the following:

1. Data must conform to the specifications described in this document.
2. Software must allow all valid values in data item fields.
3. All records must pass the item edits (California Cancer Reporting System Standards, Volume III).
4. All records must pass the interfield edits (California Cancer Reporting System Standards, Volume III).
5. A percentage of incoming records must contain data in required fields, but may be left blank if the information is not available. This percentage will vary by item. Data items are indicated by yes* on the record layouts.

A hospital or vendor must demonstrate its ability to meet these standards before its system is accepted and it will be expected to continue to meet these standards. Each time a hospital or vendor changes the registry software (i.e., changes the version) it must again demonstrate its ability to meet these standards.

III.4.2 Test Submission

In order for the California Cancer Registry to determine whether a hospital or vendor meets the above requirements, the hospital or vendor must submit test records of each type for approximately 50 cases, covering one-month, three-months, or six-months; whichever time period is closest to 50 cases. A test file cannot contain only easy cases, but must contain a sample that is representative of the normal caseload. After the submission is evaluated by the California Cancer Registry, the reporting facility or vendor will receive notification of problems detected and what changes, if any, need to be made before the reporting facility's or vendor's software can be accepted for automated reporting.

When Volume II requirements change in such a way that vendor software must be revised, then the vendor must submit additional test files to demonstrate that they meet the new requirements.

Appendices A, B, C, & D (Exchange Records)

Exchange records. Appendices A, B, C, & D, are presented in spreadsheet format. Click here to open the appendices.