

North American Association of Central Registries, Inc

GUIDELINES FOR 2023 ICD-O-3.2 HISTOLOGY CODE AND BEHAVIOR UPDATE

Effective January 1, 2023

Prepared by:

NAACCR ICD-O-3 Update
Implementation Work Group

2023 ICD-O-3 Update to be used jointly with ICD-O-3.2, Solid Tumor Rules, and
Hematopoietic and Lymphoid Neoplasm Database

December 1, 2022

Summary of changes covered in the 2023 ICD-O-3 Update:

The 2023 ICD-O-3.2 Update Guidelines includes comprehensive tables listing changes to ICD-O-3.2 including new ICD-O codes, terminology and reportability changes effective for cases diagnosed 1/1/2023 forward. The 2023 update represents changes identified in recently published 5th Ed WHO Classification of Tumors books. Included in these guidelines are instructions for using the tables together with ICD-O-3.2. ***This update includes important behavior information on pilocytic astrocytoma in Central Nervous System (CNS) sites. Please see section 2.5 for information.***

TABLE OF CONTENTS

1 INTRODUCTION.....5

2 BACKGROUND AND IMPLEMENTATION ISSUES.....6

2.1 Why is there an update to ICD-O-3.2 at this time?.....6

2.2 Is the 2023 ICD-O-3.2 update to be used beginning January 1,2023?.....6

2.3 Is ICD-O-3.2 available in print or .pdf format?.....6

2.4 How extensive are the changes for 2022?.....6

2.5 Information concerning this update.....7

2.6 What about training for data collectors?.....8

2.7 Are there any conversions with this update?.....8

2.8 Will documents be available to registry software vendors?.....8

2.9 Where can the 2021 ICD-O-3 update tables be found?.....8

3 Specific tables.....8

3.1 TABLE 1: 2023 ICD-O-3.2 UPDATE (NUMERICAL ORDER).....8

3.2 TABLE 2: 2023 ICD-O-3.2 UPDATE (ALPHABETIC ORDER).....8

3.3 HOW TO USE TABLES 1 AND 2.....8

4 Continuing issues.....9

5 Addendum to 2022 ICD-O-3.2 Update.....10

ICD-O-3 WORK GROUP MEMBERS

Member Name	Organization	Email
Lois Dickie, Chair	NCI SEER	dickielo@mail.nih.gov
Melissa Alvarado	CDC	Ouq6@cdc.gov
Connie Boone	SC Cancer Registry	boonecr@dhec.sc.gov
Michelle Esterly	CDC	Hjf7@cdc.gov
Gail Gautreau	Alberta Cancer Registry	Gail.gautreau@aha.ca
Donna Gress	AJCC	dgress@facs.org
Ann Griffin	UCSF	Ann.Griffin@ucsfmedctr.org
Terri Handel	Manitoba Cancer Care	thandel@cancercare.mb.ca
Elizabeth Harvey	Texas State Registry	Elizabeth.Harvey@dshs.texas.gov
Megsys Herna	Florida Cancer Data System	MHerna@med.miami.edu
Jim Hofferkamp	NAACCR	jofferkamp@naacr.org
Keren Hulkower	College of American Pathologist	khulkow@cap.org
Annette Hurlbut	Elekta	annette.hurlbut@elekta.com
Tiffany Janes	Seattle Cancer Registry	tjanes@fredhutch.org
Susanne Kessler	ACOS	Skessler@facs.org
Sarah Manson	CDC	lze5@cdc.gov
Mary Elizabeth O'Neil	CDC	dbi8@cdc.gov
Loria Pollack	CDC	lops@cdc.gov
Winnie Roshala	Greater California Cancer Registry	wroshala@crgc-cancer.org
Melissa Scott	Manitoba Cancer Registry	Mscott4@cancercare.mb.ca
Reda Wilson	CDC	dfo8@cdc.gov

INTRODUCTION

These implementation guidelines, developed by the North American Association of Central Cancer Registries, Inc (NAACCR) ICD-O-3 Implementation Work Group and approved by the High-Level Strategic Group (HLSG), address implementation of updated histology terms and new codes for cases diagnosed on or after January 1, 2023. Members of the work group represent standard setting organizations, central registries, hospital registries, and cancer registry software vendors.

The 2023 ICD-O-3.2 update includes changes identified during review of recently published World Health Organization's *International Histological Classification of Tumors* 5th Edition books (WHO "Blue Books"). This series covers all principal sites of cancer and includes ICD-O morphology codes for each neoplasm. Each new edition underwent thorough review to identify new histologies and ICD-O codes, behavior changes to existing ICD-O codes, and new terminology. The ICD-O-3 Implementation Work Group recommended adopting the changes for 2023 and implementation of the changes were approved by the standard setting agencies.

The 2023 ICD-O-3.2 histology code and behavior update includes comprehensive tables listing all changes made after the 2022 update and is effective for cases diagnosed 1/1/2023 forward. The 2023 update tables include columns for each standard setter which indicates if each code and/or term is required for data collection and submission.

The ICD-O-3 Implementation Work Group created this guide for users which provides important information on the background and issues for this update along with how to use the tables. The 2023 guidelines are modified to include only two tables, numeric and alpha, listing new ICD-O codes, terminology, behavior changes, and required status. The Work Group strongly recommends users read the guidelines to efficiently use ICD-O-3.2 and the 2023 Update tables.

Note: Use of these guidelines is required for determining reportability and accurate coding.

Following the release of the 2022 Guidelines for ICD-O-3.2 Histology Code and Behavior Update, the ICD-O-3 Implementation Work Group reviewed the recent 5th Ed WHO Blue Books published after the creation of ICD-O-3.2. The Work Group submitted their implementation recommendations to the NAACCR Mid-level Technical Group (MLTG) and High-level Strategic Group (HLSG) in March 2022. The MLTG and HLSG reviewed and accepted the recommendations for implementation in 2023.

The ICD-O-3 Implementation Work Group was charged with developing the implementation documents and to also act as the clearinghouse for the review and resolution of new histology code implementation questions. If there are any questions, they are to be submitted through Ask A SEER Registrar at the following link: <https://seer.cancer.gov/registrars/contact.html>. Implementation guidelines and updates are posted on NAACCR's web site (www.naacr.org). The Work Group also communicates updates via email using the NAACCR listserv and mailing lists of all organizations.

2 BACKGROUND AND IMPLEMENTATION ISSUES

Implementation of new standards is never 100 percent issue or error-free. In anticipation of questions that may arise in this update, the Work Group has developed the following explanations.

2.1 Why is there an update to ICD-O-3.2 at this time?

In developing the previous editions and the present edition of ICD-O, a particular effort was made to use the nomenclature appearing in the World Health Organization's *International Histological Classification of Tumors* series (WHO "Blue Books"). This series covers all the principal sites of cancer and includes morphology codes of ICD-O for each neoplasm.

Since the International Agency for Research on Cancer (IARC) and WHO released ICD-O-3.2 in April 2019, they continued publishing new editions of the WHO Classification of Tumors (Blue Book) series. As part of each new edition, subject matter experts review current literature pertaining to the organ or body system covered in the WHO Classification and make recommendations regarding revised histologic terminology. These revisions are reviewed pre-publication by the WHO/IARC Committee on ICD-O-3 to ensure recommended code changes and additions are appropriate. When each new Blue Book edition is published, the terminology and codes are introduced into contemporary pathology terminology to be used in pathology reports. ICD-O-3.2 remains the standard reference for reportable conditions, yet malignant diagnoses from the Blue Books are being used by pathologists and specialists and may not be listed in the current ICD-O-3 edition. This is because not all the WHO Blue Book updates have been adopted by the standard setters in the U.S. and Canada. This becomes an issue if there is no histology code available to properly register a case.

The following fifth editions were released after the 2022 ICD-O-3.2 update:

WHO Classification of Thoracic Tumors (2020)

WHO Classification of Central Nervous System Tumors (2021)

2.2 Is the 2023 ICD-O-3.2 update to be used beginning January 1, 2023?

Yes. Effective for cases diagnosed January 1, 2023, forward, the 2023 Update should be used jointly with ICD-O-3.2, Hematopoietic and Lymphoid Neoplasm Database, and Solid Tumor rules.

2.3 Is ICD-O-3.2 now available in print or downloadable .pdf format?

The .pdf version of ICD-O-3.2 continues to be delayed and the IARC/WHO ICD-O Committee do not have an estimated release date at this time. Continue using the ICD-O-3.2 excel document until such time the .pdf version is released.

2.4 How extensive are the changes for 2023?

For 2023, the major changes apply to behavior code changes to a CNS neoplasm and reportable terminology. The 2023 update includes: 5 new ICD-O codes/terms, one histology changed behavior and is reportable, and 41 new preferred or related terms.

While all standard setters approved implementation of these changes, the work group recommends you refer to the appropriate program manual for further guidance on reportable neoplasms. It is important to understand that cancer registry reportability rules based on behavior code still apply. With

the exception of primary intracranial and central nervous system benign and borderline tumors, the addition of a /0 or /1 coded term to ICD-O-3 does not imply that it is now reportable. Some /2 behaviors may not be reportable or are reportable for a select site or sites. Again, please refer to your standard setter reporting requirements if you have questions.

2.5 Information concerning this update

IMPORTANT: Changes to Pilocytic Astrocytoma behavior

Background:

From 1976 to 2000, WHO assigned code 9421/3 to pilocytic astrocytoma of the brain. Beginning with the release of ICD-O-3 in 2001, WHO changed the behavior for this neoplasm from /3 to /1 making it non-reportable. 9421/3 was removed from ICD-O-3, however, the standard setting organizations in North America opted to continue collecting these tumors as 9421/3 in CNS sites. The practice did not change once benign/borderline CNS tumors became reportable in 2004. The exception being pilocytic astrocytoma/optic glioma of the optic nerve which are coded 9421/1 effective 2018 and forward.

The 5th Ed Central Nervous System Tumors reinstated code 9421/3 for a newly identified neoplasm: High-grade astrocytoma with piloid features (HGAP).

IMPORTANT FOR CASES Diagnosed 2023 FORWARD: Beginning 1/1/2023, all cases diagnosed with pilocytic astrocytoma/juvenile pilocytic astrocytoma and related terminology are to be reported with behavior /1. They will no longer be collected with malignant behavior (/3). ICD-O code 9421/3 will be valid for the diagnosis of high-grade astrocytoma with piloid features or HGAP *only*. Coding instructions are included in the remarks section for 9421/1 and 9421/3 in the 2023 ICD-O Update Tables 1 and 2.

The 2023 Solid Tumor Rules Update for Malignant CNS and Non-malignant CNS provides coding instructions based on diagnosis date for pilocytic astrocytoma occurring in the CNS.

****IMPORTANT REMINDERS:***

Please check the 2023 ICD-O-3 Update Table 1 or 2 to determine if the histology is listed. If the histology is not included in the update, then review ICD-O-3.2 and/or Hematopoietic and Lymphoid Database and/or Solid Tumor Rules (MP/H).

ICD-O-3.2 included changes from all 4th Ed WHO Classification of Tumors books. New editions released following the publication of 4th editions are not included in 3.2. A new ICD-O version will be released once all 5th Ed Blue Books are published.

Currently in ICD-O-3, a topography (C code) listed in parentheses next to the morphology term indicates the morphology is most common to that site. The morphology may occur in other sites as well. Many of the new codes, terms, and behaviors listed in this update are site-specific and may not apply to all sites. Applicable C codes are noted next to the term in **bold** font. These site- and histology-specific combinations are not added to the “Impossible combination” edit (Primary Site, Morphology-Type, Beh ICDO3 (SEER IF25)). However, if a site other than the one listed with the morphology code is assigned, the case does not pass the edit, must be reviewed, and the Over-ride-Site/Type flag set if appropriate.

2.6 What about training for data collectors?

Educational materials/presentations are planned at both the national and state level. Additional education will be available through CTR education sites.

2.7 Are there any conversions with this update?

There are no data conversions with this update.

2.8 Will documents be available to registry software vendors?

The new histology codes/terms, new behavior codes/terms, new associated terms, and coding instructions if applicable, are combined into a single excel spreadsheet file for use in abstracting software. Vendors should use the 2023 Annotated Histology List.

2.9 Where can the 2023 ICD-O-3 update tables be found?

These documents will be posted to the NAACCR web site. Blast emails from the standard setting organizations will also include the link to the updated tables. The documents can then be saved to your desktop or printed. A link to the tables will also be posted on SEER.cancer.gov (<https://seer.cancer.gov/registrars/index.html>)

3 2023 ICD-O-3.2 UPDATE TABLES

Each table in section 3 provides the list of new ICD-O codes and associated terms, codes which have changed behavior, and new preferred or related terminology. The guidelines include two tables, one in alphabetic order and one in numerical order.

3.1 TABLE 1: 2023 ICD-O-3.2 UPDATE (NUMERICAL ORDER)

Table 1 lists all changes for 2023 including five new ICD-O codes and terms, one code with changes to behavior, and 41 new preferred or related terms, in numerical order by ICD-O number.

3.2 TABLE 2: 2023 ICD-O-3.2 UPDATE (ALPHABETIC ORDER)

Table 2 lists all changes for 2023 including five new ICD-O codes and terms, one code with changes to behavior, and 41 new preferred or related terms, in alpha order by histology term.

3.3 HOW TO USE TABLES 1 AND 2

Table 1 and 2 each have seven columns:

- **ICD-O-3 Morphology Code:** lists code number and behavior
- **Term:** Histology name per WHO. Preferred terms are indicated in **BOLD** font
- **Required SEER (Y/N):** indicates if the histology is reportable or non-reportable to SEER
- **Required NPCR (Y/N):** indicates if the histology is reportable or non-reportable to NPCR
- **Required CoC (Y/N):** indicates if the histology is reportable or non-reportable to CoC
- **Required CCCR (Y/N):** indicates if the histology is reportable or non-reportable to CCCR
- **Remarks:** This column provides information related to the ICD-O code and identifies it as a new ICD-O code, new term, or change to behavior. Coding instructions, if applicable, are also noted in this column.

4 CONTINUING ISSUES:

While the WHO “Blue Books” reflect current thinking and current terminology among the international community of pathologists and specialists, population-based cancer registries may not share the same principles in terms of reportability rules. Previously, questionable terminology related to gastrointestinal neoplasms were under review prior to implementation. The recent 5th Ed Thoracic Blue Book includes moderate/severe dysplasia of the lung and assigns the terms to ICD-O code 8077/2. WHO indicates these neoplasms are precursors to squamous cell in situ, are incidental findings on bronchoscopy, and unstageable. NAACCR will continue to review problematic lung terminology and coding changes to identify the potential challenges in implementing them as reportable neoplasms in the United States. The implications of accepting new terms as reportable will be carefully studied as

they may impact not only reporting legislation, but also workload in case ascertainment (casefinding), abstracting, follow-up (as applicable) and incidence reporting. The ICD-O-3 Work Group will continue working with NAACCR work groups, committees, and the College of American Pathologists (CAP) (among others) to make recommendations on the adoption of proposed changes by WHO and IARC as indicated in new Blue Book editions.

The North American standard setting organizations provide guidance on how to handle new codes, obsolete codes, other changes, and timing of implementation. In conjunction with the assessments of the impact of additions and changes on incidence, there should be assessments of the impact on the Solid Tumor Rules and Hematopoietic & Lymphoid Neoplasms Database.

5 ADDENDUM TO 2022 ICD-O-3.2 UPDATE

The addendum lists eight (8) histologies which were approved by the Mid-Level Tactical Group for use with primaries of the cervix (C53._) for diagnosis year 2021. Previously, registrars had been instructed to use these histologies for cervical primaries for cases diagnosed January 1, 2022, and forward. For additional information for data collection of these neoplasms, please see the NAACCR 2023 Implementation Guidelines, **13.4 AJCC Version 9 Cervix Uteri Adenocarcinoma**.

Note: Manual review of cases currently in registry databases and recoding of cases is not required by the standard setters. Registries may elect to review and recode cases.

ICD-O-3.2 Update
Effective January 1, 2023

Table 2: 2023 ICD-O-3.2 Update (Alphabetic)

- Codes/terms listed alphabetically by term
- Only new terminology to existing ICD-O-3.2 codes are included in the 2023 ICD-O Implementation Guidelines and documentation. Terms are those listed in WHO Blue Books
- Update based on the following 5th Ed Classification of Tumors books: Thoracic and CNS

ICD-O Code	Term	Required SEER	Required NPCR	Required CoC	Required CCCR	Remarks
9430/3	Astroblastoma, MN1-altered	Y	Y	Y	Y	New term
9400/3	Astrocytoma, IDH-mutant, grade 2	Y	Y	Y	Y	New term
9401/3	Astrocytoma, IDH-mutant, grade 3	Y	Y	Y	Y	New term
9445/3	Astrocytoma, IDH-mutant, grade 4	Y	Y	Y	Y	New term
8140/0	Bronchiolar adenoma/ciliated muconodular papillary tumor	N	N	N	N	New terms/Not reportable
8693/3	Cauda equina neuroendocrine tumor (cranial and paraspinal nerves)	Y	Y	Y	Y	New related term
9473/3	CNS embryonal tumor, NEC/NOS	Y	Y	Y	Y	New term
9500/3	CNS tumor with BCCR internal tandem duplication	Y	Y	Y	Y	New term
9500/3	CNS neuroblastoma, FOXR2-activated	Y	Y	Y	Y	New term
8821/1	Desmoid fibromatosis	N	N	N	N	New term/not reportable
9421/1	Diffuse astrocytoma, MYB- or MYBL1-altered	Y	Y	Y	Y	New preferred term for “pilocytic astrocytoma” Beginning with cases diagnosed 1/1/2023, pilocytic astrocytoma are coded 9421/1. Cases diagnosed prior to 1/1/2023 are coded 9421/3.
9385/3	Diffuse hemispheric glioma, H3 G34-mutant	Y	Y	Y	Y	New term
9421/1	Diffuse low-grade glioma, MAPK pathway-altered †	Y	Y	Y	Y	Related term for “pilocytic astrocytoma”

						Beginning with cases diagnosed 1/1/2023, pilocytic astrocytoma are coded 9421/1. Cases diagnosed prior to 1/1/2023 are coded 9421/3.
9680/3	Diffuse large B-cell lymphoma associated with chronic inflammation of the pleura (C38.4)	Y	Y	Y	Y	New term
9509/3	Diffuse leptomeningeal glioneuronal tumor	Y	Y	Y	Y	New code/new term/new behavior
9385/3	Diffuse midline glioma, H3 K27-altered	Y	Y	Y	Y	New term
9385/3	Diffuse pediatric-type glioma, H3-wildtype and IDH-wildtype	Y	Y	Y	Y	New term
9050/3	Diffuse pleural mesothelioma (C38.4)	Y	Y	Y	Y	New term
9170/3	Diffuse pulmonary lymphangiomatosis (C34._)	Y	Y	Y	Y	New term
9680/3	Fibrin-associated diffuse B-cell lymphoma (C38.0)	Y	Y	Y	Y	New term
9421/3	High-grade astrocytoma with piloid features (HGAP)	Y	Y	Y	Y	New code/new term. Beginning 1/1/2023, cases diagnosed as high-grade astrocytoma with piloid features (HGAP) are coded 9421/3. Beginning 1/1/2023, cases diagnosed as Pilocytic astrocytoma in the C71._ are to be coded 9421/1
8310/3	Hyalinizing clear cell carcinoma	Y	Y	Y	Y	New term
9385/3	Infant-type hemispheric glioma	Y	Y	Y	Y	New term
9749/1	Juvenile xanthogranuloma (C71.5)	Y	Y	Y	Y	New code/new term/new behavior
9050/3	Localized pleural mesothelioma (C38.4)	Y	Y	Y	Y	New term
8260/3	Low-grade papillary adenocarcinoma (C34._)	Y	Y	Y	Y	New term
9174/3	Lymphangioleiomyomatosis	Y	Y	Y	Y	Behavior code change from /1 to /3. Reportable for cases diagnosed 1/1/2023 forward.
9540/3	Malignant melanotic nerve sheath tumor	Y	Y	Y	Y	New term
9699/3	MALT lymphoma of the dura	Y	Y	Y	Y	New term

9470/3	Medulloblastoma, histologically defined (C71.6)	Y	Y	Y	Y	New term
9050/2	Mesothelioma in situ (C38.4)	Y	Y	Y	Y	New code/behavior. Reportable 1/1/2023
8077/2	Moderate squamous dysplasia (C34._)	N See remarks*	N See remarks*	N See remarks*	N See remarks*	New term. *Note: moderate and severe squamous dysplasia are incidental findings on bronchoscopy. Considered precursor to squamous carcinoma in situ (SCIS). Reportability has not yet been determined.
9509/0	Multinodular and vacuolating neuronal tumor	Y	Y	Y	Y	New code/new term/new behavior. Cases diagnoses prior to 1/1/2023 use code 9505/0. Cases diagnosed 1/1/2023 forward use code 9509/0.
9509/1	Myxoid glioneuronal tumor	Y	Y	Y	Y	New term
9450/3	Oligodendroglioma, IDH-mutant and 1p/19q-codeleted, grade 2	Y	Y	Y	Y	New term
9451/3	Oligodendroglioma, IDH-mutant and 1p/19q-codeleted, grade 3	Y	Y	Y	Y	New term
8820/0	Papillary fibroelastoma	N	N	N	N	New term/not reportable
8272/3	Pituitary adenoma/pituitary neuroendocrine tumor (PitNET) (C75.1)	Y	Y	Y	Y	New term. Per WHO, both terms may be used in the diagnosis or pituitary neuroendocrine tumor, or PitNET. All are coded 8272/3. Pituitary adenoma, NOS is coded 8272/0
9413/0	Polymorphous low-grade neuroepithelial tumor of the young	Y	Y	Y	Y	New term
9391/3	Posterior fossa ependymoma, NOS	Y	Y	Y	Y	New term
9396/3	Posterior fossa group A (PFA) ependymoma	Y	Y	Y	Y	New term
9396/3	Posterior fossa group B (PFB) ependymoma	Y	Y	Y	Y	New term

9480/3	Primary intracranial sarcoma, DICER1-mutant	Y	Y	Y	Y	New term
9749/3	Rosai-Dorfman disease	Y	Y	Y	Y	New term
8077/2	Severe squamous dysplasia (C34._)	N See Remarks*	N See remarks*	N See remarks*	N See remarks*	New term. Note: moderate and severe squamous dysplasia are incidental findings on bronchoscopy. Considered precursor to squamous carcinoma in situ (SCIS). Reportability has not yet been determined
9391/3	Spinal ependymoma, NOS (C72.0)	Y	Y	Y	Y	New term
9396/3	Spinal ependymoma, MYCN-amplified (C72.0)	Y	Y	Y	Y	New term
9391/3	Supratentorial ependymoma, NOS	Y	Y	Y	Y	New term
9396/3	Supratentorial ependymoma, YAP1 fusion-positive	Y	Y	Y	Y	New term
9396/3	Supratentorial ependymoma, ZFTA fusion-positive	Y	Y	Y	Y	New term
8044/3	Thoracic SMARCA4-deficient undifferentiated tumor (C34._)	Y	Y	Y	Y	New term

Table 1: 2023 ICD-O-3.2 Update (Numerical)

- Codes/terms listed numerically
- Only new terminology to existing ICD-O-3.2 codes are included in the 2023 ICD-O Implementation guidelines and documentation. Terms are those listed in WHO Blue Books
- Update based on the following 5th Ed Classification of Tumors books: Thoracic and CNS

ICD-O Code	Term	Required SEER	Required NPCR	Required CoC	Required CCCR	Remarks
8044/3	Thoracic SMARCA4-deficient undifferentiated tumor (C34._)	Y	Y	Y	Y	New term
8077/2	Moderate squamous dysplasia Severe squamous dysplasia	N See remarks*	N See remarks*	N See remarks*	N See remarks*	New term. *Note: moderate and severe squamous dysplasia are incidental findings on bronchoscopy. Considered precursor to squamous carcinoma in situ (SCIS). Reportability has not yet been determined.
8140/0	Bronchiolar adenoma/ciliated muconodular papillary tumor	N	N	N	N	New terms/Not reportable
8260/3	Low-grade papillary adenocarcinoma	Y	Y	Y	Y	New term
8272/3	Pituitary adenoma/pituitary neuroendocrine tumor (PitNET) (C75.1)	Y	Y	Y	Y	New term. Per WHO, both terms may be used in the diagnosis or pituitary neuroendocrine tumor, or PitNET. All are coded 8272/3. Pituitary adenoma, NOS is coded 8272/0
8310/3	Hyalinizing clear cell carcinoma	Y	Y	Y	Y	New term
8693/3	Cauda equina neuroendocrine tumor (cranial and paraspinal nerves)	Y	Y	Y	Y	New related term
8820/0	Papillary fibroelastoma	N	N	N	N	New term/not reportable
8821/1	Desmoid fibromatosis	N	N	N	N	New term/not reportable
9050/2	Mesothelioma in situ	Y	Y	Y	Y	New code/behavior. Reportable 1/1/2023
9050/3	Localized pleural mesothelioma (C38.4) Diffuse pleural mesothelioma (C38.4)	Y Y	Y Y	Y Y	Y Y	New term New term

9170/3	Diffuse pulmonary lymphangiomatosis (C34._)	Y	Y	Y	Y	New term
9174/3	Lymphangioliomyomatosis	Y	Y	Y	Y	Behavior code change from /1 to /3. Reportable for cases diagnosed 1/1/2023 forward.
9385/3	Diffuse midline glioma, H3 K27-altered	Y	Y	Y	Y	New term
	Diffuse hemispheric glioma, H3 G34-mutant	Y	Y	Y	Y	New term
	Diffuse pediatric-type glioma, H3-wildtype and IDH-wildtype	Y	Y	Y	Y	New term
	Infant-type hemispheric glioma	Y	Y	Y	Y	New term
9391/3	Supratentorial ependymoma, NOS (C71._)	Y	Y	Y	Y	New term
	Posterior fossa ependymoma, NOS (C71._)	Y	Y	Y	Y	New term
	Spinal ependymoma, NOS (C72.0)	Y	Y	Y	Y	New term
9396/3	Supratentorial ependymoma, ZFTA fusion-positive	Y	Y	Y	Y	New term
	Supratentorial ependymoma, YAP1 fusion-positive	Y	Y	Y	Y	New term
	Posterior fossa group A (PFA) ependymoma	Y	Y	Y	Y	New term
	Posterior fossa group B (PFB) ependymoma	Y	Y	Y	Y	New term
	Spinal ependymoma, MYCN-amplified (C72.0)	Y	Y	Y	Y	New term
9400/3	Astrocytoma, IDH-mutant, grade 2	Y	Y	Y	Y	New term
9401/3	Astrocytoma, IDH-mutant, grade 3	Y	Y	Y	Y	New term
9413/0	Polymorphous low-grade neuroepithelial tumor of the young	Y	Y	Y	Y	New term
9421/1	Diffuse astrocytoma, MYB- or MYBL1-altered	Y	Y	Y	Y	Replaces the term “pilocytic astrocytoma” Beginning with cases diagnosed 1/1/2023, pilocytic astrocytoma are coded 9421/1.

	Diffuse low-grade glioma, MAPK pathway-altered †					Cases diagnosed prior to 1/1/2023 are coded 9421/3.
9421/3	High-grade astrocytoma with piloid features (HGAP)	Y	Y	Y	Y	New code/new term. Beginning 1/1/2023, cases diagnosed as <i>high-grade astrocytoma with piloid features (HGAP)</i> are coded 9421/3. Beginning 1/1/2023, cases diagnosed as Pilocytic astrocytoma in the C71. _ are to be coded 9421/1
9430/3	Astroblastoma, MN1-altered	Y	Y	Y	Y	New term
9445/3	Astrocytoma, IDH-mutant, grade 4	Y	Y	Y	Y	New term
9450/3	Oligodendroglioma, IDH-mutant and 1p/19q-codeleted, grade 2	Y	Y	Y	Y	New term
9451/3	Oligodendroglioma, IDH-mutant and 1p/19q-codeleted, grade 3	Y	Y	Y	Y	New term
9470/3	Medulloblastoma, histologically defined (C71.6)	Y	Y	Y	Y	New term
9473/3	CNS embryonal tumor, NEC/NOS	Y	Y	Y	Y	New term
9480/3	Primary intracranial sarcoma, DICER1-mutant (C71.6)	Y	Y	Y	Y	New term
9500/3	CNS neuroblastoma, FOXR2-activated CNS tumor with BCCR internal tandem duplication	Y Y	Y Y	Y Y	Y Y	New term New term
9509/0	Multinodular and vacuolating neuronal tumor	Y	Y	Y	Y	New code/new term/new behavior Cases diagnoses prior to 1/1/2023 use code 9505/0. Cases diagnosed 1/1/2023 forward use code 9509/0.
9509/1	Myxoid glioneuronal tumor	Y	Y	Y	Y	New term
9509/3	Diffuse leptomeningeal glioneuronal tumor	Y	Y	Y	Y	New code/new term/new behavior
9540/3	Malignant melanotic nerve sheath tumor	Y	Y	Y	Y	New term
9680/3	Diffuse large B-cell lymphoma associated with chronic inflammation of the pleura (C38.4)	Y	Y	Y	Y	New term

	Fibrin-associated diffuse B-cell lymphoma (C38.0)	Y	Y	Y	Y	New term
9699/3	MALT lymphoma of the dura	Y	Y	Y	Y	New term
9749/1	Juvenile xanthogranuloma (C71.5)	Y	Y	Y	Y	New code/new term/new behavior
9749/3	Rosai-Dorfman disease	Y	Y	Y	Y	New term

Addendum to 2022 ICD-O-3.2 Update, Tables 1 and 2

The table lists eight (8) histologies which were approved by the Mid-Level Tactical Group for use with primaries of the cervix (C53. _) for cases diagnosed 1/1/2021 forward. Previously, registrars had been instructed to use these histologies for cervical primaries for cases diagnosed January 1, 2022, forward. For additional information see the NAACCR 2023 Implementation Guidelines, **13.4 AJCC Version 9 Cervix Uteri Adenocarcinoma**.

Manual review of cases currently in registry databases and recoding of cases is not required by the standard setters. Registries may elect to review and recode cases.

ICD-O Code	Term	Required SEER	Required NPCR	Required CoC	Required CCCR	Remarks
8085/3	Squamous cell carcinoma, HPV-associated	See remarks	See remarks	See remarks	See remarks	Valid for uterine cervix 1/1/2021 forward
8086/3	Squamous cell carcinoma, HPV-independent	See remarks	See remarks	See remarks	See remarks	Valid for uterine cervix 1/1/2021 forward
8310/3	Adenocarcinoma, HPV-independent, clear cell type	See remarks	See remarks	See remarks	See remarks	Valid for uterine cervix 1/1/2021 forward
8380/3	Adenocarcinoma, HPV-independent, endometrioid type Note: This term is AJCC specific and is not included in WHO 5th Ed GYN book or CAP protocol	See remarks	See remarks	See remarks	See remarks	Valid for uterine cervix 1/1/2021 forward
8482/3	Adenocarcinoma, HPV-independent, gastric type	See remarks	See remarks	See remarks	See remarks	Valid for uterine cervix 1/1/2021 forward
8483/3	Adenocarcinoma, HPV-associated	See remarks	See remarks	See remarks	See remarks	Valid for uterine cervix 1/1/2021 forward
8484/3	Adenocarcinoma, HPV-independent, NOS	See remarks	See remarks	See remarks	See remarks	Valid for uterine cervix 1/1/2021 forward
9110/3	Adenocarcinoma, HPV-independent, mesonephric type	See remarks	See remarks	See remarks	See remarks	New related term for 9110/3 and is not site specific. The term may be coded for cervix cases diagnosed prior to 1/1/2022.