




ICD-O-3 Histology Code and Behavior

Changes for 2021

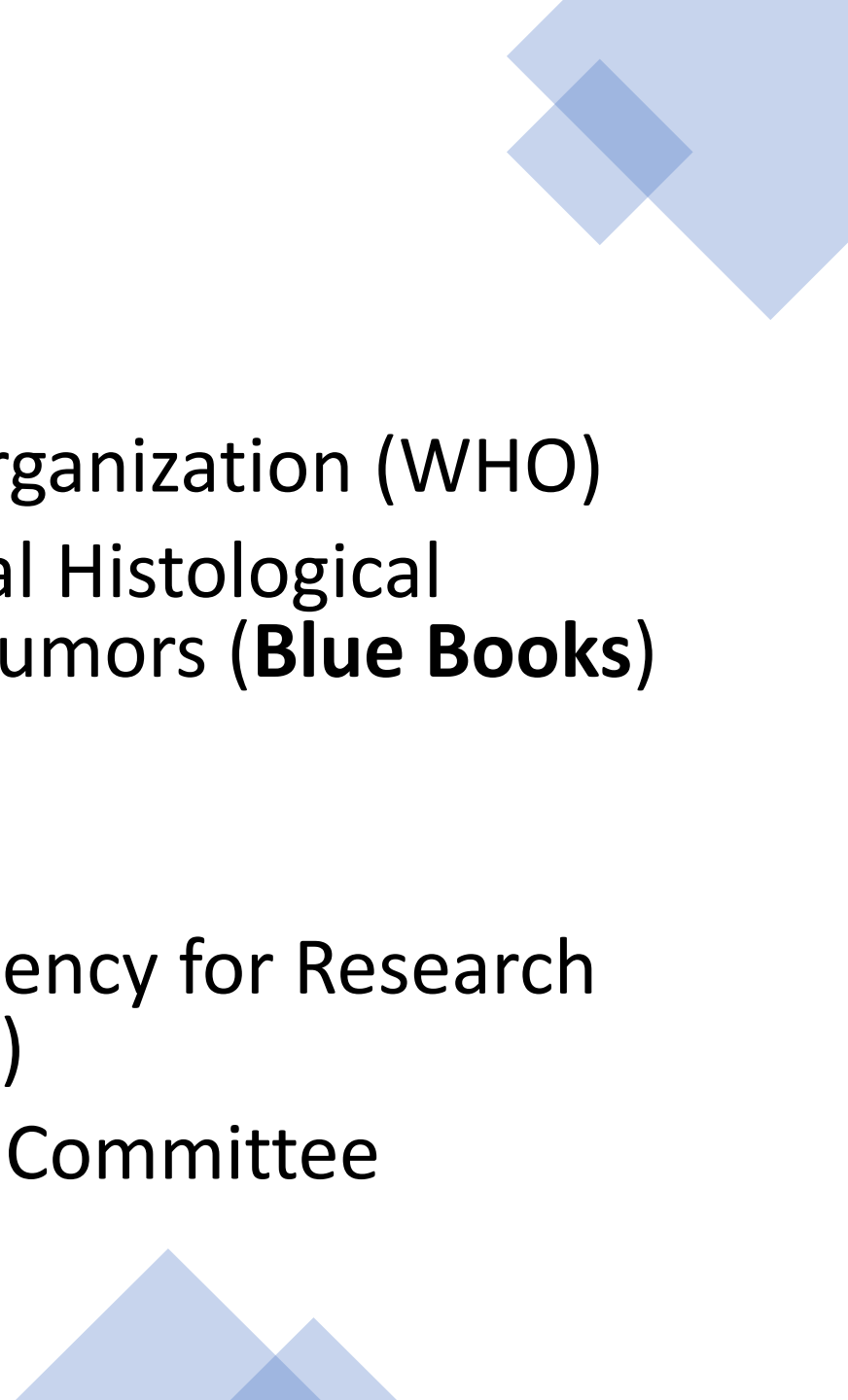
Presented by: Frances Ross

KCR Director of Operations



Introduction: Source
of ICD-O-3.2 codes

- World Health Organization (WHO)
International Histological
Classification of Tumors (**Blue Books**)

 - International Agency for Research
on Cancer (IARC)
IARC/ICD-O Committee
- 

International Histological Classification of Tumors, 4th Ed.

- The WHO Blue Books are a series that covers all principle sites of cancer, and describes histology, behavior, and specific syndromes, (such as Familial Adenomatous Polyposis and Neurofibromatosis).
- After the release of the 2018 NAACCR ICD-O update, WHO published the remaining 4th Edition WHO Classification of Tumors books.
 - Each new edition of a Blue Book undergoes a thorough review by subject matter experts to identify new terminology, new histologies and new ICD-O codes, and changes to behavior codes.
 - Recommendations reviewed by WHO/IARC ICD-O committee; then changes become provisional once published.

ICD-O-3.2 Implementation

- As of April 2019, the International Association of Cancer Registries (IARC) and the WHO ICD-O committee finalized ICD-O-3.2. ICD-O-3.2 includes changes from all twelve 4th Edition Classification of Tumor books.
- Then the NAACCR ICD-O Implementation Work Group reviewed 4th ed. WHO Blue Books, and provided rationale and recommendations to adopt changes. The NAACCR ICD-O work group developed the guidelines, tables and documentation for vendors, manuals, and databases needed for implementation.
- The Work Group recommended ICD-O-3.2 be implemented January 1, 2021 to which the standard setting agencies agreed. Beginning with cases diagnosed January 1, 2021, ICD-O-3.2 is the preferred morphology coding reference manual.

ICD-O-3.2

Effective for cases diagnosed January 1, 2021 forward

Tables with changes are available in alpha and numeric .pdf

Consolidated table of all ICD-O-3.2 codes is available in Excel






Access at: <https://www.naaccr.org/icdo3/>

ICD O 3 Coding Updates

ICD-O-3 IMPLEMENTATION GUIDELINES

ICD O 3.2 Previous Guidelines

These documents address the implementation of ICD-O-3 for cases diagnosed on or after January 1, 2021.

-  [2021 ICD O 3.2 Coding Guidelines – 10/01/2020](#)
-  [2021 ICD O 3.2 Numeric Table – 10/01/2020](#)
-  [2021 ICD O 3.2 Coding Table – 10/01/2020](#)
-  [2021 ICD O 3.2 Tables 1-5 – 10/01/2020](#)
-  [2021 ICD O 3.2 Coding Table Excel – 10/01/2020](#)

Tables of Changes for 2021

There are seven Tables plus one Excel file:

- Table 1: Behavior code changes: Non-reportable to Reportable 16
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- Table 3: Deleted codes-histology terms moved to other codes 10
- Table 4: Change in reportable terminology 13
- Table 5: New codes and terms 12
- Table 6: Tables 1-5 plus new preferred & related terms, synonyms Numerical order
- Table 7: Tables 1-5 plus new preferred & related terms, synonyms Alpha order

Important Reminders when Using Tables

- Comments column: If applicable, the comments will provide coding instructions for cases diagnosed prior to 2021, 2021 forward, or primary site
- Tables may not list all possible terminology
- In some instances, terms which were previously considered synonyms are now the preferred term
- Use in tandem with Solid Tumor rules and Hematopoietic & Lymphoid database

Table 1: Behavior Change – Non-Reportable to Reportable

Action	ICD-O Code	Term/Site	Comments
New behavior	8077/2	Squamous intraepithelial neoplasia, grade II	Change from /0 Excludes cervix
New behavior	8150/3	Pancreatic endocrine tumor, NOS (C25.4) Islet cell adenoma (C25.4) Islet cell adenomatosis (C25.4) Nesidioblastoma (C25.4) Islet cell tumor, NOS (C25.4)	Change from /1 Change from /0 Change from /0 Change from /0 Change from /1
New behavior	8151/3	Insulinoma, NOS (C25.4) Beta cell adenoma (C25.4)	Change from /0 Change from /0
New behavior	8158/3	ACTH-producing tumor Endocrine tumor, functioning, NOS	Change from /1
New behavior code and term	8380/2	Endometrioid intraepithelial neoplasia (C54.1)	
New behavior code	8408/3	Aggressive digital papillary adenoma (C44. _)	Change from behavior /1
New behavior/term	8452/3	Solid pseudopapillary neoplasm of pancreas	Change from /1

Table 1: Behavior Change – Non-Reportable to Reportable

Action	ICD-O Code	Term/Site	Comments
New behavior code and term	8620/3	Granulosa cell tumor, adult type (C56.9)	Reportable for cases diagnosed 1/1/2021 forward
New behavior/term	8690/3	Middle ear paraganglioma (C30.1, C755.5)) Glomus jugulare tumor, NOS (C75.5) Jugular paraganglioma (C75.5) Jugulotympanic paraganglioma (C75.5)	Change from /1
New behavior code	8691/3	Aortic body tumor (C75.5) Aortic body paraganglioma (75.5) Aorticopulmonary paraganglioma (C75.5)	Change from /1
New behavior/term	8692/3	Carotid body paraganglioma (C75.4) Carotid body tumor (75.4)	Change from /1

Table 1: Behavior Change – Non-Reportable to Reportable

Action	ICD-O Code	Term/Site	Comments
New behavior code	8693/3	Extra-adrenal paraganglioma, NOS Nonchromaffin paraganglioma, NOS Chemodectoma Composite paraganglioma Laryngeal paraganglioma Vagal paraganglioma	Change from /1
New behavior	8700/3	Pheochromocytoma, NOS (74.1) Adrenal medullary paraganglioma (74.1) Chromaffin paraganglioma (C74.1) Chromaffin tumor Chromaffinoma Composite pheochromocytoma (C74.1) Pheochromoblastoma C74.1)	Change from /0
New behavior code	8936/3	Gastrointestinal autonomic nerve tumor GANT Gastrointestinal pacemaker cell tumor	Change from /1
New behavior/term	9505/0	Multinodular and vascolating neuronal tumor (MVNT) (C71.2)	
New behavior/term	9766/3	Lymphomatoid granulomatosis, grade 3	

Table 2: Behavior Change – Reportable to Non-Reportable

Action	ICD-O Code	Term/Site	Comments
New behavior	8832/1	Dermatofibrosarcoma protuberans, NOS (C44. _) Dermatofibrosarcoma, NOS (C44. _)	Change from /3
New behavior	8833/1	Pigmented dermatofibrosarcoma protuberans (C44. _) Bednar tumor (C44. _)	Change from /3
New behavior code (<i>for specific sites only</i>)	9080/1	Immature teratoma of the lung (C34. _) Immature teratoma of thymus (C37.9) Immature teratoma of thyroid (C73.9)	Change from behavior /3 for the histology/site combinations only
New behavior code	9709/1	Primary cutaneous CD4-positive small/medium T-cell lymphoma (C44. _)	Change from /3
New behavior code	9718/1	Primary cutaneous CD30+ T cell lymphoproliferative disorder (C44. _) Lymphoid papulosis (C44. _)	Change for /3
New behavior/term	9725/1	Hydroa vacciniforme-like lymphoproliferative disorder	Change from /3.
New behavior code	9751/1	Langerhans cell histiocytosis, NOS Langerhans cell histiocytosis, monostotic Langerhans cell histiocytosis, polystotic	Change from /3
New behavior	9971/1	Polymorphic Post Transplant Lymphoproliferative Disorder (PTLD)	Change from /3
New behavior & term	8335/1	Follicular tumor of uncertain malignant potential (C73.0) Follicular carcinoma, encapsulated (C73.9)	Change from /3

Table 3: Deleted & Moved ICD-O codes

ICD-O-3.2 code (use 1/1/2021)	Term	ICD-O-3 code (pre-2021)	Comments
8470/3	Papillary mucinous cystadenocarcinoma (C56.9)	8471/3	Prior to 1/1/2021, code to 8471/3; 1/1/2021 forward code to 8470/3
8815/3	Hemangiopericytoma, malignant	9150/3	Prior to 1/1/2021 code to 9150/3; 1/1/2021 forward code to 8815/3
9364/3	Ewing sarcoma	9360/3	Prior to 1/1/2021 code to 9360/3; 1/1/2021 forward code to 9364/3
9823/3	Malignant lymphoma, small B lymphocytic, NOS (see M-9823/3)	9670/3	Prior to 1/1/2021 code to 9670/3; 1/1/2021 forward code to 9823/3
9811/3	Precursor B-cell lymphoblastic lymphoma (see M-9836/3)	9728/3	Prior to 1/1/2021 code to 9728/3; 1/1/2021 forward code to 9811/3

Table 3: Deleted & Moved ICD-O codes

ICD-O-3.2 code (use 1/1/2021)	Term	ICD-O-3 code (pre-2021)	Comments
9837/3	Precursor T-cell lymphoblastic lymphoma (see M-9837/3)	9729/3	Prior to 1/1/2021, code to 9729/3; 1/1/2021 forward code to 9837/3
9687/3	Burkitt cell leukemia (see M-9687/3)	9826/3	Prior to 1/1/2021 code to 9826/3; 1/1/2021 forward code to 9687/3
9811/3	Precursor B-cell lymphoblastic leukemia (see M-9738/3)	9836/3	Prior to 1/1/2021 code to 9836/3; 1/1/2021 forward code to 9811/3
9980/3	Refractory neutropenia	9991/3	Prior to 1/1/2021 code to 9991/3; 1/1/2021 forward code to 9980/3
9980/3	Refractory thrombocytopenia	9992/3	Prior to 1/1/2021 code to 9992/3; 1/1/2021 forward code to 9980/3

Table 4: Change in Terminology: No longer need 'malignant' to be reportable

ICD-O-3.2 Code	Term
8151/3	Insulinoma
8152/3	Glucagonoma
8153/3	Gastrinoma
8155/3	Vipoma
8156/3	Somatostatinoma
8580/3	Thymoma, NOS (C37.9); Sclerosing and Intrapulmonary thymoma (C34._)
8581/3	Type A Thymoma including atypical variant (C37.9)
8582/3	Type AB thymoma (C37.9)
8583/3	Type B1 thymoma (C37.9)
8584/3	Type B2 thymoma (C37.9)
8585/3	Type B3 thymoma (C37.9); Thymoma, atypical; Thymoma, epithelial
8693/3	Paraganglioma
8700/3	Pheochromocytoma

Table 4: Change in Reportable Terminology

*** Exceptions ***

ICD-O-3.2 code	Term	Comment
8580/0	Microscopic thymoma Thymoma, benign	New preferred term Still behavior code /0
8580/1	Micronodular thymoma with lymphoid stroma	New preferred term; used to be Thymoma, NOS
8587/0	Ectopic hamartomatous thymoma	No change; remains /0

Table 5: New Terms and ICD-O codes

ICD-O-3.2 Code	Term
8273/3	Pituitary blastoma; Embryoma
9749/3	Erdhiem-Chester Disease
9766/3	Lymphomatoid granulomatosis, grade 3
9819/3	B-lymphoblastic leukemia/lymphoma, BCR-ABL1-like
9877/3	Acute myeloid leukemia with mutated NPMM1
9878/3	Acute myeloid leukemia with biallelic mutations of CEBPA
9879/3	Acute myeloid leukemia with mutated RUNX1
9912/3	Acute myeloid leukemia with BCR-ABL1
9968/3	Myeloid/lymphoid neoplasm with PCM1-JAK2
9993/3	Myelodysplastic syndrome with ring sideroblasts and multilineage dysplasia
9715/3	Anaplastic large cell lymphoma ALK-negative Breast implant-associated anaplastic large cell lymphoma

New Code and Behavior: NIFTP (C73.9)

Action	ICD-O Code	Term/site	Comment
New code/term	8349/1	Non-invasive follicular thyroid neoplasm with papillary-like nuclear features (NIFTP) C73.9) Non-invasive FTP (C73.9)	This term was previously coded to 8343/2. The new code and behavior will make this non-reportable

From 1/1/2017 to 12/31/2020: The standard setters agreed to collect NIFTP using the ICD-O-3 code 8343/2.

Now, 1/1/2021 forward: WHO 4th Ed Endocrine Tumors blue book assigned a new ICD-O code and behavior to this neoplasm: 8349/1; This Code and Behavior make this neoplasm non-reportable.

Continue to be reportable for cases diagnosed 1/1/2017 through 12/31/2020 using code 8343/2

Tables 6 and 7

- Table 6: Tables 1-5 plus new preferred & related terms, synonyms
Numerical order
- Table 7: Tables 1-5 plus new preferred & related terms, synonyms
Alpha order
- Each Table has 5 columns

Status	ICD-O code	Term/site	Reportability	Comments
New code, new term, behavior change, synonym, etc.	Histology code and behavior	Histology term per WHO; C codes if term applies only to specific sites	Yes/No	Additional notes if relevant

Sample from Table 6

Status	ICD-O-3.2 Morphology Code	Term(s)	Reportable Y/N	Comments
RT	8020/3	Anaplastic undifferentiated carcinoma (C73.9)	Y	
RT	8020/3	Carcinoma, poorly differentiated, NOS	Y	
RT	8020/3	Dedifferentiated carcinoma	Y	
RT	8054/3	Warty-basaloid carcinoma	Y	
RT	8071/3	Keratoacanthoma	Y	
RT	8074/3	Pseudovascular squamous cell carcinoma	Y	
Syn	8077/2	High grade squamous intraepithelial lesion	Y	
Syn	8077/2	Squamous dysplasia, high grade	Y	
Syn	8077/2	Squamous intraepithelial neoplasm, grade II	See comments	The term "squamous intraepithelial neoplasm, grade II" is NOT reportable for C53. _
RT	8083/3	Papillary-basaloid carcinoma	Y	
RT	8090/3	Basal cell carcinoma with adnexal differentiation (C44. _)	N	Not reportable
PT	8091/3	Superficial basal cell carcinoma (C44. _)	N	Not reportable
Syn	8091/3	Multifocal superficial basal cell carcinoma (C44. _)	N	Not reportable
PT	8110/3	Pilomatrix carcinoma (C44. _)	N	Not reportable
Syn		Pilomatrix carcinoma (C44. _)	N	Not reportable
RT	8120/3	Squamotransitional carcinoma	Y	
PT	8122/3	Urothelial carcinoma, sarcomatoid	Y	
Syn	8122/3	Urothelial carcinoma, spindle cell	Y	
Syn	8122/3	Transitional cell carcinoma, spindle cell		
PT	8130/1	Papillary urothelial neoplasm of low-malignant potential (C67. _)	N	Not reportable
Syn	8130/1	Papillary transitional cell neoplasm of low-malignant potential (C67. _)	N	Not reportable
Syn	8131/3	Transitional cell carcinoma, micropapillary	Y	

Sample from Table 7

Status	ICD-O-3.2 Morphology Code	Term(s)	Reportable Y/N	Comments
RT	8140/3	Acinar adenocarcinoma of prostate (C61.9)	Y	
Syn	8744/3	Acral lentiginous melanoma, malignant (C44. _)	Y	
PT	8744/3	Acral melanoma (C44. _)	Y	
BC	8158/3	ACTH-producing tumor	Y	Reportable for cases diagnosed 1/1/2021 forward. Not reportable prior to 1/1/2021
PT	9840/3	Acute erythroid leukemia	Y	
CC	9687/3	Acute leukemia, Burkitt type [obs]	Y	Cases diagnosed prior to 1/1/2021 use code 9826/3 Cases diagnosed 1/1/2021 forward use code 9687/3
CC	9687/3	Acute lymphoblastic leukemia, mature B-cell type	Y	Cases diagnosed prior to 1/1/2021 use code 9826/3 Cases diagnosed 1/1/2021 forward use code 9687/3
NC/T	9912/3	Acute myeloid leukemia with BCR-ABL1	Y	Reportable for cases diagnosed 1/1/2021 forward
NC/T	9878/3	Acute myeloid leukemia with biallelic mutations of CEBPA	Y	Reportable for cases diagnosed 1/1/2021 forward
NC/T	9877/3	Acute myeloid leukemia with mutated NPM1	Y	Reportable for cases diagnosed 1/1/2021 forward
NC/T	9879/3	Acute myeloid leukemia with mutated RUNX1	Y	Reportable for cases diagnosed 1/1/2021 forward
Syn	9840/3	Acute myeloid leukemia, M6 type	Y	
Syn	8140/3	Adenocarcinoma, usual type	Y	

Hematopoietic Database Changes for 2021

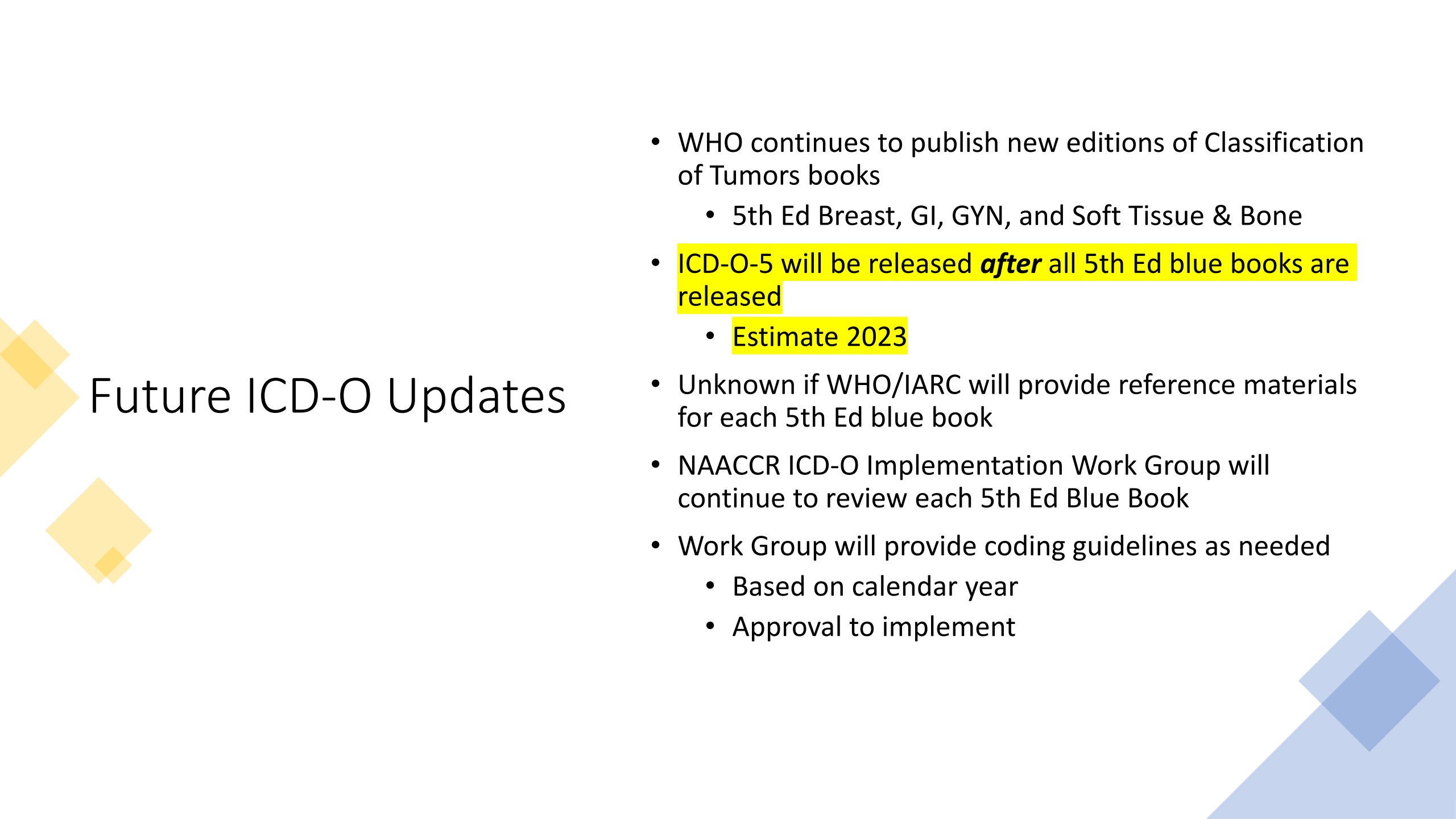
Listed as '2021 Revisions':

(These changes have been included in the Tables shown above.)

- New histologies. These histologies can only be used for cases diagnosed 2021+
- Histologies that are now a /1 (instead of a /3) and are no longer reportable starting with 2021 diagnoses
- Histologies that are now obsolete and have a new code starting with 2021
- **Change in histology 9751/3 - Only Langerhans cell histiocytosis, disseminated is a /3 for 2021+ diagnoses. All other terminology, including Langerhans cell histiocytosis, NOS, is now a /1**
- Histologies that are new but are not reportable (New /1). They have been included in the Hematopoietic Database for informational purposes only.

In Summary: What, When, Where, How

- What: ICD-O-3.2 incorporates all new codes, terminology, behavior updates from WHO 4th Ed Blue Book Series
- When: Effective for cases diagnosed **January 1, 2021**
- Where: WHO/IARC ICD-O-3.2 webpage as well as the NAACCR.org web page
- How: Link to on-line ICD-O-3.2 will be included in the guidelines, NAACCR, and SEER websites
- **As of October 12, 2020, ICD-O-3.2 is available in Excel format *only*. Due to Covid-19, the editors of the pdf version are currently tasked with other responsibilities. The pdf version is still planned.**
- NAACCR ICD-O-3.2 Guidelines were released on October 2, 2020



Future ICD-O Updates

- WHO continues to publish new editions of Classification of Tumors books
 - 5th Ed Breast, GI, GYN, and Soft Tissue & Bone
- ICD-O-5 will be released **after** all 5th Ed blue books are released
 - Estimate 2023
- Unknown if WHO/IARC will provide reference materials for each 5th Ed blue book
- NAACCR ICD-O Implementation Work Group will continue to review each 5th Ed Blue Book
- Work Group will provide coding guidelines as needed
 - Based on calendar year
 - Approval to implement

Where to look:

As of October 12, 2020, ICD-O-3.2 is available in Excel format *only*.

You may download this from:

http://www.iacr.com.fr/index.php?option=com_content&view=category&layout=blog&id=100&Itemid=577

Or from the NAACCR.org web site

The screenshot shows the IACR website's 'Support for registries' page for ICD-O-3. The main content area is titled 'ICD-O-3' and 'INTERNATIONAL CLASSIFICATION OF DISEASES FOR ONCOLOGY'. It includes a menu on the left with 'ICD-O-3' selected. The main text states that the new version, ICD-O-3.2, is recommended for use from 2020. A blue arrow points to the section titled 'ICDO- THIRD EDITION, SECOND REVISION MORPHOLOGY', which contains a list of changes and a link to a listing of all additions, changes, and revisions to the ICD-O-3, 1st revision (ICDO-O-3.1) for ICD-O-3.2. The Japanese translation link is also visible at the bottom.

ICD-O-3
INTERNATIONAL CLASSIFICATION OF DISEASES FOR ONCOLOGY
Third edition Edited by A. Fritz, C. Percy, A. Jack, K. Shanmugaratnam, L. Sobin, D.M. Parkin and S. Whelan
Please consult the previous versions online and the new links for ICD-O (2nd revision) as follows:
ICD-O 3
ICD-O 3 (1st rev)

ICD-O-3.2 TABLES
The IARC/WHO ICD-O Committee¹ has updated the draft ICD-O-3.1 classification, with new morphology codes and terms from the 4th series of WHO Classification of Tumours (Blue Books).
The new version, ICD-O-3.2, is recommended for use from 2020.
The IACR Working Group on ICD-O Updates² has compiled a listing of additions, changes and revisions between ICD-O-3.1 and ICD-O-3.2 as a reference material for cancer registries.
These documents have been revised according to the comments received during the consultation period and the final tables are available for download here:
ICDO- THIRD EDITION, SECOND REVISION MORPHOLOGY

- A summary of the main changes
- Terms that are changing behaviour
- New codes and their terms
- Deleted codes and their terms
- Updated table: "Groups of malignant neoplasms considered to be histologically different for the purpose of defining multiple tumours" to be used with ICD-O-3.2 (The rest of the multiple primary rules remain unchanged.)

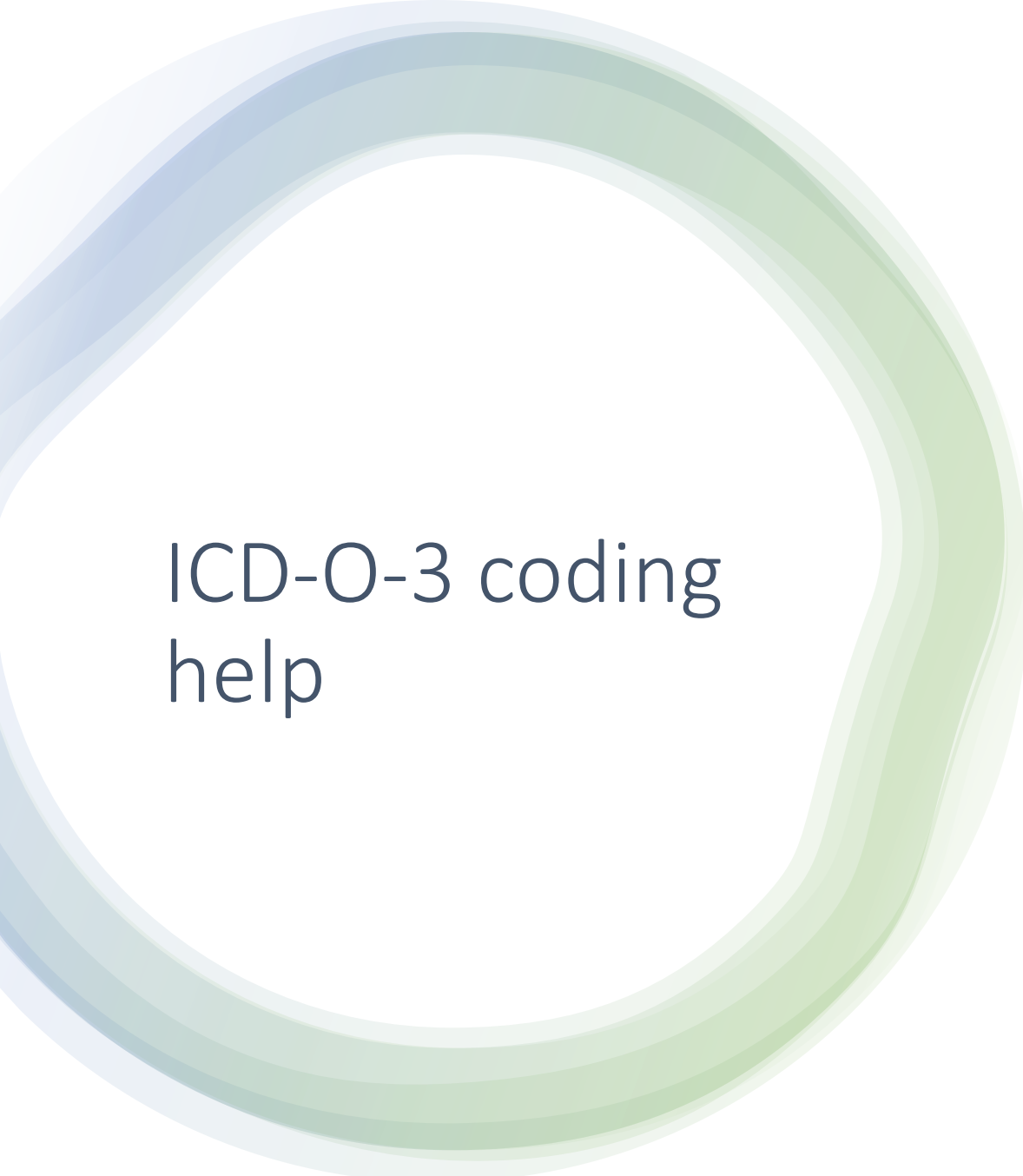
A LISTING OF ALL ADDITIONS, CHANGES AND REVISIONS TO THE ICD-O-3, 1ST REVISION (ICDO-O-3.1) FOR ICD-O-3.2

- **Japanese Translation**

ICD-O- Third Edition, Second Revision Morphology

1

ICDO3.2	Level	Term	Code reference	obs	See also	See r	Includes
69 8035/3	Preferred	Carcinoma with osteoclast-like giant cells					
70 8035/3	Related	Squamous carcinoma with osteoclast-like giant cells					
71 8035/3	Related	Undifferentiated carcinoma with osteoclast-like giant cells					
72 8040/0	Preferred	Tumorlet, benign					
73 8040/0	Related	Diffuse idiopathic neuroendocrine cell hyperplasia					
74 8040/1	Preferred	Tumorlet, NOS					
75 8041/3	Preferred	Small cell carcinoma, NOS					
76 8041/3	Synonym	Reserve cell carcinoma					
77 8041/3	Synonym	Round cell carcinoma					
78 8041/3	Related	Small cell neuroendocrine carcinoma					
79 8041/3	Synonym	Small cell carcinoma, pulmonary type					
80 8042/3	Preferred	Oat cell carcinoma	(C34._)	[obs]			
81 8043/3	Preferred	Small cell carcinoma, fusiform cell					
82 8044/3	Preferred	Small cell carcinoma, intermediate cell					
83 8044/3	Related	Small cell carcinoma, hypercalcemic type	(C56.9)				
84 8045/3	Preferred	Combined small cell carcinoma					
85 8045/3	Synonym	Mixed small cell carcinoma					
86 8045/3	Related	Combined small cell-adenocarcinoma					
87 8045/3	Related	Combined small cell-large cell carcinoma					
88 8045/3	Related	Combined small cell-squamous cell carcinoma					
89 8046/3	Preferred	Non-small cell carcinoma	(C34._)				



ICD-O-3 coding help

- Histology Coding Module in SEER* Educate
- Ask A SEER Registrar
 - <https://seer.cancer.gov/registrar/contact.html>



Thank you!

Frances Ross

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