SECTION II - REPORTABILITY

Determining Reportability

The MCR requires reporting facilities to submit all cases seen at that facility with neoplasms classified as malignant or *in situ* in the "Morphology of Neoplasms" section of ICD-O-3 (for cases diagnosed in 2001 and thereafter), ICD-O-2 (for diagnoses made between 1992 and 2000), or ICD-O[-1] (for 1982-1992 diagnoses). (This MCR Manual applies to 2001 and 2002 diagnoses, so only ICD-O-3 codes appear here.) If you've changed a listed behavior in an ICD-O book to /**2** or /**3**, that case is also reportable (the "matrix" rule, ICD-O-3 Rule F). The only exceptions to these reportability rules are the site/morphology combinations that follow:

morphology	
8000-8005	malignant neoplasms, NOS, of the skin (C44.0-C44.9)*
8010-8046	epithelial carcinomas of the skin (C44.0-C44.9)*
8050-8084	papillary and squamous cell carcinomas of the skin (C44.0-C44.9)*
8090-8110	basal cell carcinomas of any site except genital sites*

Note: The above lesions are reportable for skin of the genital sites -- vagina, clitoris, vulva, prepuce, penis, and scrotum (C52.9, C51.0-C51.9, C60.0, C60.9, and C63.2).

In addition, the MCR requires reporting of all cases with behavior codes 0, 1, 2 or 3 of the meninges, brain, and central nervous system (C70.0, C70.1, C70.9, C71.0-C71.9, C72.0-C72.5, C72.8, and C72.9). See pages 11 and 13 for more information. **

Beginning with cases diagnosed on or after January 1, 1998, the MCR no longer requires reporting facilities to submit cases of carcinoma *in situ* of the uterine cervix (primary site C53._ with histologic type codes 8000-8110 and behavior code 2). This includes cervical intraepithelial neoplasia, Grade III (CIN III, histology 8077/2), pre-invasive cervical neoplasia, and squamous intraepithelial neoplasia. Invasive carcinomas of the cervix (behavior code 3) are still reportable.

Beginning with cases diagnosed on or after January 1, 1998, the MCR also no longer requires cases of anal, vaginal or vulvar intraepithelial neoplasia, Grade III (AIN, VAIN, VIN, histology 8077/2), nor prostatic intraepithelial neoplasia, Grade III (PIN, histology 8148/2). (This "Grade III" does not refer to the histopathologic grade/differentiation; it refers to the highest category of dysplasia in the Bethesda system for non-invasive lesions.)***

* The ACoS Commission on Cancer requires collection of C44_ skin cancers with histologies 8000-8110 that have an AJCC stage group of II, III or IV by registries reporting to them. The MCR does not want these skin cancers, regardless of stage.

** Pituitary and pineal glands and craniopharyngeal duct (C75.1-C75.3) are not included in this requirement, even though the Central Brain Tumor Registry of the U.S. collects cases of benign and uncertain behavior for these sites. For primary sites C75.1-C75.3, only report cases with invasive or *in situ* behavior (/3, /2) to the MCR.

*** Central registries are supposed to continue collecting VAIN III, VIN III and AIN cases, but the MCR has decided against this. At the MCR, it is not easy to tell if cases reported with these descriptors are actually of a high enough severity of dysplasia to be truly coded with a behavior code of /2.

Definition of a Cancer Diagnosis

A patient is considered to have a reportable diagnosis if the diagnosis is made by a recognized medical practitioner, even if it is never pathologically confirmed. In most instances, the patient's medical record clearly presents the diagnosis of cancer by use of specific terms which are synonymous with cancer. The physician, however, may not always be certain, nor the recorded language definitive. The terms used to describe a tumor may be vague or ambiguous.

The following lists should be used as a guide in determining reportability. A *positive pathology report*, however, takes precedence over any other report or statement in a patient's chart.

Reportable

A case is reportable if any of the following (SEER) terms is used:

- apparently malignant
- appears malignant
- comparable with malignancy
- compatible with malignancy
- consistent with malignancy
- favors malignancy
- malignant appearing
- most likely malignant
- presumed malignant
- probable malignancy
- suspect(ed) malignancy
- suspicious of/for malignancy *
- typical of/for malignancy

* If a **cytology** (only) is reported as "suspicious", do not interpret this as a diagnosis of cancer. Report the case only if a positive biopsy or a physician's clinical impression of cancer supports the cytology findings.

Non-Reportable

A case is not reportable if any of the following (SEER) terms is used (in the absence of more definitive terminology or better information):

- equivocal (for) malignancy
- malignancy cannot be ruled out
- possible malignancy
- potentially malignant
- questionable malignancy
- rules out malignancy
- suggests malignancy
- worrisome

Lobular Carcinoma *in Situ*

Some physicians do not consider cases of lobular carcinoma *in situ* (LCIS) to be malignancies. Because the histologic type is listed in ICD-O-3 with behavior code **2** (8520/2), the disease is reportable to the MCR. (In the future, the AJCC may choose to discontinue its collection and staging of this disease as an *in situ* cancer, but it remains reportable to the MCR.) Abstract and submit these to us.

Tumors of the Brain and Central Nervous System

The MCR requires the reporting of all cases with a benign behavior (**0**), uncertain/borderline behavior (**1**), *in situ* behavior (**2**) or malignant behavior (**3**) for the following ICD-O-3 primary sites:

Meninges

- C70.0 Cerebral meninges
- C70.1 Spinal meninges
- C70.9 Meninges, NOS

Brain

- C71.0 Cerebrum
- C71.1 Frontal lobe
- C71.2 Temporal lobe
- C71.3 Parietal lobe
- C71.4 Occipital lobe
- C71.5 Ventricle, NOS
- C71.6 Cerebellum, NOS
- C71.7 Brain stem
- C71.8 Overlapping lesion of brain
- C71.9 Brain, NOS

Spinal Cord, Cranial Nerves, and Other Parts of Central Nervous System

- C72.0 Spinal cord
- C72.1 Cauda equina
- C72.2 Olfactory nerve
- C72.3 Optic nerve
- C72.4 Acoustic nerve
- C72.5 Cranial nerve, NOS
- C72.8 Overlapping lesion of brain and central nervous system
- C72.9 Nervous system, NOS

Some general morphology terms typical for these primary sites follow. This is not an exhaustive list -- just a guide based on the (ICD-O-2) site/histology combinations considered "passable without review" in edits run by the Central Brain Tumor Registry of the United States. The codes below are the corresponding ICD-O-3 codes.

Tumors of the Meninges (**C70._**)

chondroma / chondrosarcoma.....9220
chondrosarcoma, mesenchymal.....9240
fibrolipoma 8851
fibrosarcoma.....8810
granular cell tumor 9580
hemangioendothelioma 9130
hemangioma, cavernous.....9121
hemangiopericytoma.....9150
Letterer-Siwe disease 9754
lymphangioma, cystic 9173
melanoma 8720
meningioma 9530-9539
neuroectodermal tumor, peripheral.....9364

Tumors of Ventricles (**C71.5**)

astrocytoma, giant cell, subependymal..9384
craniopharyngioma.....9350
ependymoma..... 9393-9394
ganglioglioma 9505
ganglioneuromatosis.....9491
germ cell tumor, mixed.....9085
glioma, subependymal.....9383
granular cell tumor 9580
meningioma 9530-9537
neurocytoma 9506
neurofibroma, melanotic 9541
neurofibroma, plexiform.....9550
neuroma.....9570
neurothekeoma.....9562

Tumors of the Cerebellum (**C71.6)**

astrocytoma, giant cell, subependymal....9384
cyst, dermoid 9084
ependymoma 9393-9394
fibrosarcoma 8810
ganglioglioma.....9505
ganglioneuromatosis 9491
glioma, subependymal.....9383
hemangioblastoma 9161
hemangioendothelioma, epithelioid.....9133
hemangioma 9120-9122
lipoma.....8850
lymphoma, T-cell, peripheral.....9702
meningioma..... 9530-9537
mesenchymoma 8990
neurocytoma.....9506
neurofibroma, melanotic 9541
neurofibroma, plexiform.....9550
neuroma 9570
neurothekeoma 9562
paraganglioma 8680
rhabdomyosarcoma, embryonal.....8910

Tumors of the Brain, Cranial Nerves, and Spinal Cord (**C71.0-C71.4**, **C71.7-C71.9**, **C72.0-C72.5**)

angioendotheliomatosis....9680
astrocytoma, giant cell, subependymal..9384
chondroma / chondrosarcoma....9220
chondrosarcoma, mesenchymal....9240
chondrosarcoma, myxoid....9231
dysgerminoma....9060
endodermal sinus tumor....9071
ependymoma....9393-9394
fibrolipoma / liposarcoma....8851
fibroma, chondromyxoid....9241
ganglioneuromatosis....9491
germ cell tumor, mixed....9085
germinoma....9064
glioma, subependymal....9383
hemangioblastoma....9161
hemangioma....9120-9123
hemangioma, histiocytoid....9125
leiomyoma / leiomyosarcoma....8890
Letterer-Siwe disease....9754
lipoma, spindle cell....8857
lymphangioma, cystic....9173
lymphoma, large cell....9714
lymphoma, T-cell, angiocentric....9719
medulloblastoma....9470-9471
melanoma....8720
meningioma....9531-9538
neurocytoma....9506
neuroectodermal tumor....9364
neuroectodermal tumor, melanotic....9363
neurofibroma, melanotic....9541
neurofibroma, plexiform....9550
neuroma....9570
neurothekeoma....9562
osteoma / osteosarcoma....9180
pineoblastoma....9362
sarcoma, myeloid....9930
sarcomatosis, meningeal....9539
seminoma....9061
teratocarcinoma....9081
teratoma....9080

Tumors of "Other" Nervous System (**C72.8**, **C72.9**)

astrocytoma....9400
astrocytoma, anaplastic....9401
astrocytoma, fibrillary....9420
astrocytoma, giant cell, subependymal....9384
chondroma / chondrosarcoma....9220
ependymoma....9391
ganglioglioma....9505
ganglioneuromatosis....9491
glioblastoma....9440
glioma....9380
hemangioblastoma....9161
hemangioma, cavernous....9121
hemangiopericytoma....9150
lipoma / liposarcoma....8850
meningioma....9530-9537
neurocytoma....9506
neuroectodermal tumor, primitive....9473
neurofibroma, melanotic....9541
neurofibroma, plexiform....9550
neuroma....9570
neurothekeoma....9562
oligodendroglioma....9450
plasmacytoma....9731
sarcoma, Ewing....9260
smooth muscle tumor....8897
teratoma....9080

Identification of the Primary Neoplasm

To ensure the accurate reporting of cancer incidence in Massachusetts, it is essential that the primary neoplasm be identified accurately. The primary neoplasm is the original lesion, as opposed to a tumor that has developed as a result of extension or metastasis.

It is particularly important that metastatic lesions be distinguished from the primary lesion. Metastatic lesions are the result of the dissemination of tumor cells from the primary site to a remote part of the body. These new lesions do not represent primary tumors. Information regarding the nature of primary-versus-metastatic lesions is often found in pathology reports. The term "secondary" is often used to describe metastatic lesions.

Single-Versus-Multiple Primaries

To ensure consistency, the MCR has adopted the SEER rules and definitions for determining whether lesions are single or multiple primaries. As stated by SEER:

> ...the determination of how many primary neoplasms a patient has is, of course, a medical decision; but operational rules are needed to ensure consistent reporting by all participants. Basic factors include the site of origin, date of diagnosis, histologic type, behavior of the neoplasm (i.e., benign versus uncertain versus malignant) and laterality....In some neoplasms...one must be careful since different histologic terms are used to describe progressive stages or phrases of the same disease process.

In general, if there is a difference in the site where the neoplasms originate, then it is fairly easy to determine if they are separate primaries, regardless of dates of detection and histologic differences. Likewise, if there is a clear difference in histology, other data such as site and time of detection are not essential.

A separate case report (abstract) must be submitted for each independent primary neoplasm present at the time of admission, unless it was previously reported by your facility. Neoplasms identified only by history need not be abstracted for the MCR.

Definitions and rules governing the determination of single-versus-multiple primaries follow.

General Principle: Report a single primary or multiple primaries as documented by a physician, remembering that physicians need not adhere to the rules governing cancer registries. If physician determination is absent or unavailable, use the following guidelines.

Definitions Related to Single-Versus-Multiple Primaries

"Site Difference"

For the following, each topographic subcategory (4 characters) as delineated in ICD-O-3 is considered to be a separate site:

colon (C18._)
anus and anal canal (C21._)
bones, joints and articular cartilage (C40._, C41._)
peripheral nerves and autonomic nervous system (C47._)
connective, subcutaneous and other soft tissues (C49._)
nevi and melanomas of skin (C44._, 8720-8790)

Each site grouping shown in Table II.1 (page 17) is to be considered *one site* when determining single-versus-multiple primaries.

For all other sites, each topographic category (3 characters) as delineated in ICD-O-3 is considered to be a separate site.

Examples:

- Transverse colon (C18.4) and descending colon (C18.6) are to be considered separate sites.*
- Base of tongue (C01.9) and border of tongue (C02.1) are considered subsites of the tongue and are to be treated as one site -- either overlapping lesion of parts of the tongue (C02.8), or tongue, NOS (C02.9).
- Trigone of bladder (C67.0) and lateral wall of bladder (C67.2) are considered subsites of the bladder and are to be treated as one site -- either overlapping lesion of subsites of the bladder (C67.8), or bladder, NOS (C67.9).

***** Exceptions: colon polyps

1. *Simultaneous* (diagnoses made within 2 months of each other) lesions and polyps in the *same segment* of the colon are a single primary.
2. Polyps may present in more than one segment of the colon. If the diagnosis reads "adenocarcinoma in multiple polyps", it is one primary of the colon, NOS (C18.9).

Familial polyposis is a genetic disease characterized by polyps that increase in numbers and may cover the mucosal surface of the colon. This benign disease usually develops into adenocarcinoma in adenomatous polyposis coli (8220/3) or adenocarcinoma in multiple adenomatous polyps (8221/3).

Patients with the histologies "adenocarcinoma in adenomatous polyposis coli" (8220/3) and "adenocarcinoma in multiple adenomatous polyps" (8221/3) have a different disease process than those patients with frank adenocarcinoma of the colon or typical colon polyps. If multiple segments of the colon, or of the colon and rectosigmoid, or of the colon, rectosigmoid and rectum are involved with adenocarcinoma in adenomatous polyposis coli or adenocarcinoma in multiple adenomatous polyps, it is a single primary. Code the primary site to colon, NOS (C18.9).

"Histologic Type Difference"

Differences in histologic type refer to differences in the first 3 digits of the morphology code, except for lymphatic and hematopoietic diseases. (See **Multiple Primaries in Hematologic Diseases** on pages 21-27.)

"Simultaneous / Synchronous"

These terms describe diagnoses made within two months of each other.

Single Primaries

The following are to be considered single primaries:

- A single lesion of *one histologic type* is considered a single primary even if the lesion crosses site boundaries.
- A single lesion with *multiple histologic types* is to be considered a single primary.
- A new cancer with the *same histology* as an earlier one, if diagnosed in the **same site** within two months, is considered to be a single primary.
- Multiple lesions of the *same histologic type,* if diagnosed in the **same site** within two months, are to be considered a single primary; further, if one lesion has an *in situ* behavior (/2) and another an invasive behavior (/3), this is still to be considered a single primary whose behavior is invasive (/3).

Table II.1

ICD-O-3 Codes to be Considered ONE Primary Site When Determining Single-Versus-Multiple Primaries

ICD-O-3 Codes	Site Groupings
C01	base of tongue
C02	other and unspecified parts of tongue
C05	palate
C06	other and unspecified parts of mouth
C07	parotid gland
C08	other and unspecified major salivary glands
C09	tonsil
C10	oropharynx
C12	pyriform sinus
C13	hypopharynx
C23	gallbladder
C24	other and unspecified parts of biliary tract
C30	nasal cavity and middle ear
C31	accessory sinuses
C33	trachea
C34	bronchus and lung
C37	thymus
C38.0	heart
C38.1 - C38.3	mediastinum
C38.8	overlapping lesion of heart, mediastinum and pleura
C51	vulva
C52	vagina
C57.7	other specified parts of female genital organs
C57.8 - C57.9	overlapping lesion, female genital tract, NOS
C56	ovary
C57.0	fallopian tube
C57.1	broad ligament
C57.2	round ligament
C57.3	parametrium
C57.4	uterine adnexa
C60	penis
C63	other and unspecified male genital organs
C64	kidney
C65	renal pelvis
C66	ureter
C68	other and unspecified urinary organs
C74	adrenal gland
C75	other endocrine glands and related structures

Multiple Primaries

The following are to be considered separate primaries.

- Multiple lesions of the *same histologic type* that occur in **different sites** are considered separate primaries, unless stated to be metastatic.
- A new cancer of the *same histology* as an earlier one, if diagnosed in the **same site** after two months, should be considered a separate primary unless stated to be metastatic. Exceptions:
  - Bladder cancers (C67._) with histology codes 8120-8131 (transitional cell carcinomas, including (micro)papillary types): For these bladder cancers, a *single abstract is required for the first lesion only*. Any reappearance of disease in the bladder with histology codes 8120-8131 is to be considered a recurrence, regardless of the time that has passed since the initial diagnosis.
  - An *in situ* followed by an invasive cancer in the same site more than two months apart is reported as two primaries even if stated to be a recurrence.*
- Multiple lesions of *different histologic types* within a **single site** are considered separate primaries whether occurring simultaneously or at different times. Exceptions:
  - For multiple lesions within a single site occurring within two months, if one lesion is an NOS term (such as carcinoma, NOS; adenocarcinoma, NOS; or sarcoma, NOS) and the second lesion is a more specific term (such as large cell carcinoma, mucinous adenocarcinoma, or spindle cell sarcoma), consider this to be a single primary and code the more specific histology. The ONLY EXCEPTIONS to this are:
    - When both an adenocarcinoma (8140/3) and an adenocarcinoma (*in situ*) in a(n) (adenomatous) polyp (8210) or an adenocarcinoma (*in situ*) in a (tubulo)villous adenoma (8261, 8263) arise in the same segment of the colon or rectum, use the less specific code -- (8140/3).
    - When both a carcinoma (8010/3) and a carcinoma (*in situ*) in a(n) (adenomatous) polyp (8210) arise in the same segment of the colon or rectum, use the less specific code -- (8010/3).
- Multiple lesions of *different histologic types* in **different sites** are considered separate primaries whether occurring simultaneously or at different times.

* This is a SEER rule, adopted by the NAACCR Uniform Data Standards Committee, for diagnoses as of January 1, 1995. The ACoS/COC does not want the invasive case recorded if a physician has called it a recurrence, but as a central registry, the MCR follows SEER rules on this. You may choose to keep only the noninvasive case on your own data system, but make sure that the MCR receives a case report for the invasive diagnosis as well. Be sure to record the two separate Dates of Diagnosis for us.

Paired Organs (Laterality)

Each "side" of a paired organ (Appendix B) is a separate site, but if only *one histologic type* is reported and if **both sides** of a paired site are involved within two months of diagnosis, a determination must be made as to whether the patient has one or two independent primaries. If it is determined that there are two independent primaries, then two case reports should be sent to the MCR, each with appropriate laterality and staging.

If it is determined that there is only one primary, then laterality should be coded according to the side in which the cancer originated and a single case report should be submitted. If it is impossible to tell in which of the pair a single primary originated, Laterality (see page 76) should be coded as "**4**" and a single case report should be submitted.

There are three exceptions to this rule:

- Simultaneous bilateral involvement of the ovaries (C56.9) in which there is only a single histology is to be considered one primary, and Laterality is to be coded **4**.
- Simultaneous bilateral retinoblastomas (9510-9513) are always considered a single primary and Laterality is coded **4**.
- Simultaneous bilateral nephroblastomas (8960) are always considered a single primary and Laterality is coded **4**.

Breast Duct, Lobular, and Other Carcinomas

A single case report should be prepared for certain combinations of multiple separate carcinomas occurring in the **same breast** within two months of each other, even though they may have different histologies (i.e., a difference in the first three characters of the morphology codes). ICD-O-3 lists the morphology codes 8522, 8523 and 8524* for these combinations. If all the tumors are *in situ,* the behavior code should be /2; but if any part of a tumor is invasive, the behavior code must be /3. Some examples follow:

* Like any other "combination" morphology code, these codes may also be assigned to a single lesion having multiple histologic subtypes. Use 8523 when there is a diagnosis of duct carcinoma mixed with another carcinoma or more than one subtype of duct carcinoma, such as duct carcinoma with elements of cribriform carcinoma, or duct carcinoma mixed with mucinous carcinoma. The same principle applies for 8524 when one of the histologies is lobular carcinoma. Although there are no equivalent terms specifically listed under 8524/3 in ICD-O-3, the "other types of carcinoma" with which the lobular carcinoma is mixed can include histologies such as mucinous, tubular, cribriform and/or solid. Bear in mind that if all parts of a tumor are *in situ*, the behavior code /2 should be used; but if any part of the tumor is invasive, the behavior code must be /3.

- Infiltrating duct carcinoma (8500/3) and lobular carcinoma (8520/3) -- Code as 8522/3.
- Infiltrating duct carcinoma (8500/3) and lobular carcinoma *in situ* (8520/2) -- Code as 8522/3.
- Intraductal carcinoma (8500/2) and lobular carcinoma (8520/3) -- Code as 8522/3.
- Intraductal carcinoma (8500/2) and lobular carcinoma *in situ* (8520/2) -- Code as 8522/2.
- Infiltrating duct carcinoma (8500/3) and tubular carcinoma (8211/3) -- Code as 8523/3.
- Infiltrating lobular carcinoma (8520/3) and colloid carcinoma (8480/3) -- Code as 8524/3.

Separate case reports should be sent for a lesion in one breast and an unrelated lesion in the **other breast** having **different histologies**, whether or not they occur within two months of each other.

Separate case reports should be sent for two lesions in the **same breast** diagnosed more than two months apart.

(Intra)ductal Carcinoma and Paget Disease

The single morphology code 8543/3 should be used for a combination of intraductal carcinoma (8500/2) and Paget disease of the breast (8540/3). Code 8541/3 should be used for a combination of Paget disease of the breast (8540/3) and duct carcinoma (8500/3).

Kaposi Sarcoma

Kaposi sarcoma (9140/3) is reported only once for a patient. Kaposi sarcoma is coded to the site in which it first arises. If Kaposi sarcoma arises in skin and another site simultaneously, code to skin (C44._). If no primary site is stated, code to skin, NOS (C44.9).

Hematologic Diseases

Table II.2 (pages 24-27) is used to help determine single/multiple primaries of hematologic diseases. The inserted fold-out table is identical to the typed Table II.2, except the typed version labels the rows and columns with histologic type codes only, and the code 9699 is listed numerically as a separate row/column in Table II.2.

To compare two diagnoses:

1. assign the best ICD-O-3 histologic type code to each;
2. find the code of the first diagnosis in the row headings;
3. find the code of the second diagnosis in the column headings;
4. find the intersection of that row and column;
   - a **S** in the intersection indicates that the two diagnoses are considered parts of the **s**ame disease process, and are a single primary;
   - a **D** in the intersection indicates that they are considered **d**ifferent disease processes and are two separate primaries.

Examples (see page 24):

- first diagnosis -- lymphoma, NOS (9590)
  second diagnosis -- Hodgkin lymphoma, mixed cellularity (9652)
  The **S** at the intersection of row "9590" and column "9650-9667" indicates that this would be considered one primary.
- first diagnosis -- multiple myeloma (9732)
  second diagnosis -- lymphoma, NOS (9590)
  The **D** at the intersection of row "9731-9734" and column "9590" indicates that these would be considered separate primaries.

Rules and Guidelines:

1. Primary site (topography) is not to be considered in determining single/multiple primaries of hematologic malignancies. Only the histologic types matter.

   Example: A patient has a lymphoma arising in lymph nodes and an extranodal lymphoma. You need to determine the two histologic types and use Table II.2 to determine if these are different diseases; the difference in primary sites is irrelevant.

2. The time interval between diagnoses is not to enter into the decision. Two lymphomas diagnosed years apart could be considered a single primary.

3. The sequence (chronological order) of diagnoses may affect single-versus-multiple primary decisions. Always be careful to look for the earlier diagnosis code down the row labels of the table, and for the more recent diagnosis code across the top column labels.

   Examples: A patient is diagnosed with composite Hodgkin and non-Hodgkin lymphoma (9596) in January 2001, and with lymphoid leukemia (9820) in December 2001. This is a single primary (**S**) (9596), diagnosed in January.

   A patient is diagnosed with lymphoid leukemia (9820) in January 2001, and with composite Hodgkin and NHL (9596) in December 2001. The December diagnosis is a new (**D**) primary.

4. Table II.2 contains only ICD-O-3 codes. It should be used to compare diagnoses made in 2001 and thereafter; it should also be used to compare a diagnosis made before 2001 with one made in 2001 or thereafter. When comparing a pre-2001 diagnosis with a diagnosis made in 2001+, remember to look in the row headings for the best ICD-O-3 code equivalent to the pre-2001 diagnostic term.

   Example: A patient was diagnosed in 1999 with "chronic myelomonocytic leukemia" (ICD-O-2 code 9868, ICD-O-3 code 9945). In 2001 the patient is diagnosed with "myeloid sarcoma" (ICD-O-3 code 9930). Using the ICD-O-3 codes and Table II.2, the intersection of row "9945" and column "9930" contains **S**, so this is a single primary (diagnosed in 1999, so be sure that the ICD-O-2 code 9868 gets assigned to this case).

   When comparing two pre-2001 diagnoses, you should use the old ICD-O-2 version of Table II.2 to decide if these would have been considered the same or different diseases at diagnosis. (See the ROADS or previous MCR coding manual for the ICD-O-2 tables.)

5. When two diagnoses are considered to be the same disease process (**S**), and one is an "NOS" term while the other is more specific, assign the more specific diagnosis code to the single primary regardless of the chronological order of the diagnoses.

   Example: first diagnosis -- lymphoma, NOS (9590)
   second diagnosis --Hodgkin lymphoma, mixed cellularity (9652)

   This single primary will have the diagnosis date of the *first* diagnosis and the histologic type code of the *second* diagnosis because the first term is "NOS".

6. "Lymphoma" is a general term for solid malignancies of the lymphoid series of the hematologic diseases. "Leukemia" is a general term for liquid malignancies of the lymphoid or myeloid series. Because so many hematologic diseases can potentially arise as leukemias or lymphomas or both, all such malignancies are assumed to have the potential to appear in both forms.
7. Malignancies of the lymphoid series are to be considered different diseases from those of the myeloid series; and histiocytic malignancies are considered different diseases from those of both the lymphoid and myeloid series.
8. Hodgkin lymphoma is considered to be different from non-Hodgkin lymphoma. Among non-Hodgkin lymphomas, B-cell malignancies are to be considered different diseases from T-cell and NK cell malignancies.

Table II.2: Single ("S") vs. Subsequent ("D") Primaries for Lymphatic and Hematologic Diseases

Earlier Diagnosis ↓ ↓ ↓ ↓ ↓ / Later Dx →	9590	9591	9596	9650 - 9667	9670 - 9671	9673	9675 - 9684	9687	9689	9690 - 9698	9699	9700, 9701
9590	S	S	S	S	S	S	S	S	S	S	S	S
9591	S	S	D	D	S	S	S	S	S	S	S	S
9596	S	S	S	S	S	S	S	S	S	S	S	S
9650 - 9667	S	D	D	S	D	D	D	D	D	D	D	D
9670 - 9671	S	S	D	D	S	D	S	D	D	D	D	D
9673	S	S	D	D	D	S	D	D	D	D	D	D
9675 - 9684	S	S	D	D	S	D	S	S	D	S	D	D
9687	S	S	D	D	D	D	D	S	D	D	D	D
9689	S	S	D	D	D	D	D	D	S	D	S	D
9690 - 9698	S	S	D	D	D	D	S	D	D	S	D	D
9699	S	S	D	D	D	D	D	D	S	D	S	D
9700, 9701	S	S	D	D	D	D	D	D	D	D	D	S
9702 - 9719	S	S	D	D	D	D	D	D	D	D	D	D
9727	S	S	D	D	D	D	D	D	D	D	D	D
9728	S	S	D	D	D	D	D	D	D	D	D	D
9729	S	S	D	D	D	D	D	D	D	D	D	D
9731 - 9734	D	D	D	D	D	D	D	D	D	D	D	D
9740 - 9742	D	D	D	D	D	D	D	D	D	D	D	D
9750 - 9756	D	D	D	D	D	D	D	D	D	D	D	D
9757, 9758	S	S	D	D	D	D	D	D	D	D	D	D
9760	S	S	D	D	S	D	S	D	D	D	D	D
9761	S	S	D	D	S	D	S	D	D	D	D	D
9762	S	S	D	D	D	D	D	D	D	D	D	D
9764	S	S	D	D	D	D	D	D	D	D	D	D
9800, 9801	S	S	D	D	D	D	D	S	D	D	D	D
9805	S	S	D	D	S	S	S	S	S	S	S	S
9820	S	S	D	D	D	D	D	S	D	S	D	S
9823	S	S	D	D	S	D	S	D	D	D	D	D
9826	S	S	D	D	D	D	D	S	D	D	D	D
9827	S	S	D	D	D	D	D	D	D	D	D	D
9832	D	D	D	D	S	D	D	D	D	D	D	D
9833	D	D	D	D	S	D	D	D	D	D	D	D
9834	D	D	D	D	D	D	D	D	D	D	D	D
9835	S	S	D	D	D	D	D	D	D	D	D	D
9836	S	S	D	D	D	D	D	D	D	D	D	D
9837	S	S	D	D	D	D	D	D	D	D	D	D
9840 - 9910	D	D	D	D	D	D	D	D	D	D	D	D
9920	D	D	D	D	D	D	D	D	D	D	D	D
9930	D	D	D	D	D	D	D	D	D	D	D	D
9931	D	D	D	D	D	D	D	D	D	D	D	D
9940	D	D	D	D	D	D	D	D	D	D	D	D
9945	D	D	D	D	D	D	D	D	D	D	D	D
9946	D	D	D	D	D	D	D	D	D	D	D	D
9948	S	S	D	D	D	D	D	D	D	D	D	D
9950	D	D	D	D	D	D	D	D	D	D	D	D
9960	D	D	D	D	D	D	D	D	D	D	D	D
9961	D	D	D	D	D	D	D	D	D	D	D	D
9962	D	D	D	D	D	D	D	D	D	D	D	D
9963	D	D	D	D	D	D	D	D	D	D	D	D
9964	D	D	D	D	D	D	D	D	D	D	D	D
9980 - 9986	D	D	D	D	D	D	D	D	D	D	D	D
9987	D	D	D	D	D	D	D	D	D	D	D	D
9989	D	D	D	D	D	D	D	D	D	D	D	D

Table II.2: Single ("S") vs. Subsequent ("D") Primaries for Lymphatic and Hematologic Diseases

Earlier Diagnosis ↓ ↓ ↓ ↓ ↓ / Later Dx →	9702-9719	9727	9728	9729	9731-9734	9740-9742	9750-9756	9757, 9758	9760	9761	9762	9764
9590	S	S	S	S	S	S	S	S	S	S	S	S
9591	S	S	S	S	D	D	D	S	S	S	S	S
9596	S	S	S	S	D	D	D	D	S	S	S	S
9650 - 9667	D	D	D	D	D	D	D	D	D	D	D	D
9670 - 9671	D	D	D	D	D	D	D	D	D	S	D	D
9673	D	D	D	D	D	D	D	D	D	D	D	D
9675 - 9684	D	D	D	D	D	D	D	D	S	S	S	S
9687	D	D	D	D	D	D	D	D	D	D	D	D
9689	D	D	D	D	D	D	D	D	D	D	D	D
9690 - 9698	D	D	D	D	D	D	D	D	D	D	D	D
9699	D	D	D	D	D	D	D	D	D	D	D	D
9700, 9701	D	D	D	D	D	D	D	D	D	D	D	D
9702 - 9719	S	D	D	D	D	D	D	D	S	D	D	D
9727	D	S	S	S	D	D	D	D	D	D	D	D
9728	D	S	S	D	D	D	D	D	D	D	D	D
9729	D	S	D	S	D	D	D	D	D	D	D	D
9731 - 9734	D	D	D	D	S	D	D	D	D	D	D	D
9740 - 9742	D	D	D	D	D	S	D	D	D	D	D	D
9750 - 9756	D	D	D	D	D	D	S	D	D	D	D	D
9757, 9758	D	D	D	D	D	D	D	S	D	D	D	D
9760	D	D	D	D	S	D	D	D	S	S	S	S
9761	D	D	D	D	D	D	D	D	S	S	D	D
9762	D	D	D	D	D	D	D	D	S	D	S	S
9764	D	D	D	D	S	D	D	D	S	D	S	S
9800, 9801	S	S	S	S	D	D	D	D	D	D	D	D
9805	S	S	S	S	D	D	D	D	D	D	D	D
9820	S	S	S	S	D	D	D	D	S	S	S	D
9823	D	D	D	D	D	D	D	D	S	D	D	D
9826	D	D	D	D	D	D	D	D	D	D	D	D
9827	D	D	D	D	D	D	D	D	D	D	D	D
9832	D	D	D	D	D	D	D	D	D	D	D	D
9833	D	D	D	D	D	D	D	D	D	D	D	D
9834	D	D	D	D	D	D	D	D	D	D	D	D
9835	D	S	S	S	D	D	D	D	D	D	D	D
9836	D	S	S	D	D	D	D	D	D	D	D	D
9837	D	S	D	S	D	D	D	D	D	D	D	D
9840 - 9910	D	D	D	D	D	D	D	D	D	D	D	D
9920	D	D	D	D	D	D	D	D	D	D	D	D
9930	D	D	D	D	D	D	D	D	D	D	D	D
9931	D	D	D	D	D	D	D	D	D	D	D	D
9940	D	D	D	D	D	D	D	D	D	D	D	D
9945	D	D	D	D	D	D	D	D	D	D	D	D
9946	D	D	D	D	D	D	D	D	D	D	D	D
9948	S	D	D	D	D	D	D	D	D	D	D	D
9950	D	D	D	D	D	D	D	D	D	D	D	D
9960	D	D	D	D	D	D	D	D	D	D	D	D
9961	D	D	D	D	D	D	D	D	D	D	D	D
9962	D	D	D	D	D	D	D	D	D	D	D	D
9963	D	D	D	D	D	D	D	D	D	D	D	D
9964	D	D	D	D	D	D	D	D	D	D	D	D
9980 - 9986	D	D	D	D	D	D	D	D	D	D	D	D
9987	D	D	D	D	D	D	D	D	D	D	D	D
9989	D	D	D	D	D	D	D	D	D	D	D	D

Table II.2: Single ("S") vs. Subsequent ("D") Primaries for Lymphatic and Hematologic Diseases

Earlier Diagnosis ↓ ↓ ↓ ↓ / Later Dx	9800, 9801	9805	9820	9823	9826	9827	9832	9833	9834	9835	9836	9837	9840-9910	9920
9590	S	S	S	S	S	S	S	S	S	S	S	S	S	S
9591	S	S	S	S	S	S	D	D	D	S	S	S	D	D
9596	S	D	S	S	S	S	D	D	D	S	S	S	D	D
9650 - 9667	D	D	D	D	D	D	D	D	D	D	D	D	D	D
9670 - 9671	D	S	S	S	D	D	S	S	D	D	D	D	D	D
9673	D	S	D	D	D	D	D	D	D	D	D	D	D	D
9675 - 9684	D	S	S	S	D	D	S	S	D	D	D	D	D	D
9687	S	S	S	D	S	D	D	D	D	D	D	D	D	D
9689	D	S	D	D	D	D	D	D	D	D	D	D	D	D
9690 - 9698	D	S	D	D	D	D	D	D	D	D	D	D	D	D
9699	D	S	D	D	D	D	D	D	D	D	D	D	D	D
9700, 9701	D	S	S	D	D	D	D	D	D	D	D	D	D	D
9702 - 9719	D	S	S	D	D	D	D	D	D	D	D	D	D	D
9727	S	S	S	D	D	D	D	D	D	S	S	S	D	D
9728	S	S	S	D	D	D	D	D	D	S	S	D	D	D
9729	S	S	S	D	D	D	D	D	D	S	D	S	D	D
9731 - 9734	D	D	D	D	D	D	D	D	D	D	D	D	D	D
9740 - 9742	D	D	D	D	D	D	D	D	D	D	D	D	D	D
9750 - 9756	D	D	D	D	D	D	D	D	D	D	D	D	D	D
9757, 9758	D	D	D	D	D	D	D	D	D	D	D	D	D	D
9760	D	D	D	D	D	D	D	D	D	D	D	D	D	D
9761	D	D	S	S	D	D	D	D	D	D	D	D	D	D
9762	D	D	S	S	D	D	D	D	D	D	D	D	D	D
9764	D	D	D	D	D	D	D	D	D	D	D	D	D	D
9800, 9801	S	S	S	D	S	S	D	D	D	S	S	S	S	S
9805	S	S	S	S	S	S	S	S	S	S	S	S	S	S
9820	S	S	S	S	S	S	S	S	S	S	S	S	D	D
9823	D	S	S	S	D	D	S	S	D	D	D	D	D	D
9826	S	S	S	D	S	D	D	D	D	D	D	D	D	D
9827	D	S	S	D	D	S	D	D	D	D	D	D	D	D
9832	D	S	S	S	D	D	S	S	S	D	D	D	D	D
9833	D	S	S	S	D	D	S	S	D	D	D	D	D	D
9834	D	S	S	D	D	S	S	D	S	D	D	D	D	D
9835	S	S	S	D	D	D	D	D	D	S	S	S	D	D
9836	S	S	S	D	D	D	D	D	D	S	S	D	D	D
9837	S	S	S	D	D	D	D	D	D	S	D	S	D	D
9840 - 9910	S	S	D	D	D	D	D	D	D	D	D	D	S	S
9920	S	S	D	D	D	D	D	D	D	D	D	D	S	S
9930	S	S	D	D	D	D	D	D	D	D	D	D	S	S
9931	S	S	D	D	D	D	D	D	D	D	D	D	S	S
9940	S	S	D	D	D	D	D	D	D	D	D	D	D	D
9945	S	S	D	D	D	D	D	D	D	D	D	D	S	S
9946	S	S	D	D	D	D	D	D	D	D	D	D	S	S
9948	S	S	S	D	D	D	D	D	D	D	D	D	D	D
9950	S	D	D	D	D	D	D	D	D	D	D	D	D	D
9960	S	S	D	D	D	D	D	D	D	D	D	D	S	S
9961	S	S	D	D	D	D	D	D	D	D	D	D	S	S
9962	S	D	D	D	D	D	D	D	D	D	D	D	S	S
9963	S	D	D	D	D	D	D	D	D	D	D	D	S	S
9964	S	D	D	D	D	D	D	D	D	D	D	D	S	S
9980 - 9986	S	S	D	D	D	D	D	D	D	D	D	D	S	S
9987	S	S	D	D	D	D	D	D	D	D	D	D	S	S
9989	S	S	D	D	D	D	D	D	D	D	D	D	S	S

Table II.2: Single ("S") vs. Subsequent ("D") Primaries for Lymphatic and Hematologic Diseases

Earlier Diagnosis ↓ ↓ ↓ ↓ / Later Dx →	9930	9931	9940	9945	9946	9948	9950	9960	9961	9962	9963	9964	9980-9986	9987	9989
9590	S	S	S	S	S	S	D	D	D	D	D	D	D	D	D
9591	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
9596	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
9650 - 9667	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
9670 - 9671	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
9673	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
9675 - 9684	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
9687	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
9689	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
9690 - 9698	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
9699	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
9700, 9701	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
9702 - 9719	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
9727	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
9728	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
9729	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
9731 - 9734	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
9740 - 9742	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
9750 - 9756	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
9757, 9758	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
9760	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
9761	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
9762	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
9764	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
9800, 9801	S	D	D	S	S	D	D	S	S	D	S	S	D	S	S
9805	S	S	S	S	S	S	D	S	S	D	D	D	S	S	S
9820	D	D	S	D	D	S	D	D	D	D	D	D	D	D	D
9823	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
9826	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
9827	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
9832	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
9833	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
9834	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
9835	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
9836	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
9837	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
9840 - 9910	S	S	D	S	S	D	D	S	S	S	S	S	D	S	S
9920	S	S	D	S	S	D	D	D	S	D	D	D	D	S	S
9930	S	S	D	S	S	D	D	S	S	S	S	D	D	S	S
9931	S	S	D	S	S	D	D	D	S	D	D	D	D	S	S
9940	D	D	S	D	D	D	D	D	D	D	D	D	D	D	D
9945	S	S	D	S	S	D	D	S	S	D	S	D	D	S	S
9946	S	S	D	S	S	D	D	D	S	D	D	D	D	S	S
9948	D	D	D	D	D	S	D	D	D	D	D	D	D	D	D
9950	D	D	D	D	D	D	S	S	S	D	D	D	D	D	D
9960	S	S	D	S	D	D	D	S	S	S	S	D	D	D	D
9961	S	S	D	S	S	D	D	S	S	S	S	D	D	S	S
9962	S	S	D	S	D	D	D	S	S	S	S	D	D	D	D
9963	S	S	D	S	D	D	D	S	S	S	S	D	D	D	D
9964	S	S	D	S	S	D	D	S	S	D	D	S	D	D	D
9980 - 9986	S	S	D	S	S	D	D	S	S	D	D	D	S	S	S
9987	S	S	D	S	S	D	D	S	S	D	D	D	S	S	S
9989	S	S	D	S	S	D	D	S	S	D	D	D	S	S	S

Differences in Reportability Between ICD-O-2 and ICD-O-3

The year of diagnosis determines coding and other data standards for case reporting.* If a case was first diagnosed before 2001 and was reportable to the MCR under ICD-O-2 coding, then that case is reportable to the MCR regardless of when you abstract and report the case. If a case was first diagnosed before 2001 and was *not* reportable under ICD-O-2 coding, then it is *not* reportable. If a case was first diagnosed in 2001 or thereafter, then only its ICD-O-3 coding determines whether or not it is reportable.

Examples: Refractory anemia first diagnosed in 2000 and first seen at your facility in 2002 -- case is *not* reportable because the ICD-O-2 code is 9980/1. Had the case been first diagnosed in 2001, it *would* be reportable.

Serous cystadenoma, borderline malignancy, diagnosed in 2001 -- case is *not* reportable because the ICD-O-3 code is 8442/1. Had the case been diagnosed before 2001, it *would* be reportable.

Chronic myeloproliferative disease first diagnosed before 2001 is *not* reportable because its ICD-O-2 code is 9960/1. The same disease first diagnosed in 2001 *would* be reportable because its ICD-O-3 code is 9960/3.

Myeloproliferative disease, *NOS* (9960/1 in ICD-O-2 and 9975/1 in ICD-O-3) is *not* reportable under either pre-2001 or 2001+ rules.

Remember that, in North America, coding rules state that 9421/1 pilocytic astrocytomas diagnosed in 2001 and thereafter should be reported with the ICD-O-3 morphology code changed to 9421/**3**. Such cases are reportable to the MCR even with the /1 code because of our brain/CNS tumor collection rules, but please remember to change the Behavior Code to /3 when reporting histologic type code 9421. SEER, the ACoS/COC, NAACCR and CDC/NPCR agree on this rule.

* If the year of diagnosis is unknown to you, try to estimate it. If you cannot estimate the diagnosis year, use the "Date of First Contact" year (the year of your facility's first contact with the patient for this case, or "Year First Seen for This Primary") to determine which coding rules pertain.

Negative Biopsies

Cases in which a positive cytology is followed by a negative biopsy must be carefully evaluated. The case should not be reported if the biopsy rules out the presence of cancer; if a negative biopsy does *not* rule out cancer, the case is considered cytologically confirmed and it should be reported. (Also see the "suspicious cytology" notes on page 10.)

Pathology-Only and Consultation-Only Cases

Cases diagnosed by a hospital pathology department strictly on the basis of slides or specimens submitted from outside the facility (without the patient being seen there), and cases seen for consultation-only should not be included in regular data submissions to the MCR. It is important, however, that the MCR be made aware of such cases to ensure that all reportable cancers in Massachusetts have been recorded. Therefore, the MCR requests (*not* a requirement) that you submit pathology-only and consult-only cases separately from regular data submissions.

You may submit **pathology-only** cases on a separate diskette that is clearly labeled "Path-Only", or (if necessary) on paper. You need not try to fill each of the data fields collected by the MCR with specific information. At a minimum, you should include the:

- patient's name
- date of birth
- primary site
- morphology
- ordering physician's name

It would be extremely helpful if you could also include the patient's Social Security number and the pathology specimen's collection date. Any additional patient identifiers or tumor information will be greatly appreciated.

The MCR will check that a complete case for each of these patients has been reported by someone. If we have no corresponding case on file, the MCR will try to follow back to the diagnosing physician to obtain the additional information needed to include the case in our database.

It may be difficult to identify a **consultation-only** case. As a general guideline, the MCR suggests determination of who is responsible for the treatment decisions and follow-up of the patient: if the reporting hospital is responsible, a case report should be submitted; if the reporting hospital is merely confirming a diagnosis made elsewhere, rendering a second opinion, or recommending treatment to be delivered and managed elsewhere, a case report is not required but, as noted above, the MCR *requests* that we be notified of the case in a separate data submission.

Cases of **Class 6** are not required, but IF your facility chooses to collect Class 6 cases, they should be sent to the MCR along with your *regular* cases (analytic and nonanalytic). It may be difficult to distinguish pathology-only cases from some Class 6 cases (diagnosis and entire first course of treatment in the office of a physician on your medical staff). The physician office should be able to help identify which cases are truly Class 6* (see pages 96-97 for Class definitions). The basic question to ask about these types of cases is, "If I don't report this case to the MCR, will it never be reported at all?" If no hospital diagnosed or helped treat the patient, then you may be our only source of information.

Whenever there is doubt about whether or not to submit a particular case, consult MCR Data Acquisition Supervisor (Mary Jane King) at 617-624-5622.

* If the case under consideration is truly a Class 6 case, then we require that the patient demographics (including the patient's address) be filled in along with the patient identifiers and tumor information (as for any nonanalytic case). True Class 6 cases should be included in your regular MCR data submissions. Do *not* include true Class 6 cases in a file of pathology-only / consult-only cases.