

Colon & Rectum Schema EOD & Summary Stage 2018-2024 dx V3.1

Presented by Melissa Riddle, ODS C
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Colon Staging Systems- old and new

- Dukes (Stage A (in wall, not in muscle), Stage B (in muscle wall), Stage C (in lymph nodes), Stage D (distant spread/mets))
- Summary Stage (insitu, local, regional, distant)
- EOD (Extent of Disease- extending away from primary site, lymph nodes)- used by SEER
- TNM (tumor spread, lymph nodes, mets)- used by physicians and hospital cancer programs
- CS Stage: set of data items that describe how far a cancer has spread at the time of diagnosis. (Combines TNM & EOD)
*Version 1 started with 2004 DX cases; *Version 2 spanned 2010-2017 DX cases (2.02 > 2.03 > 2.04)
- **EOD starts with 2018 dx**



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Extent of Disease v3.1

EOD Primary Tumor

EOD Regional LN

EOD Mets



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EOD Staging

EOD Primary Tumor

EOD Regional Lymph Nodes (LNs involved)

EOD Mets at DX (distant spread in distant LNs)

General instructions for EOD:

<https://seer.cancer.gov/tools/staging/eod/>



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EOD Schemas



- Colon & Rectum (combined for 2018)
- NET Colon & Rectum
- GIST
- Appendix C181
- Anus C210-C212, C218

GIST = Gastrointestinal Stromal Tumor
NET = Neuroendocrine Tumor



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SEER*RSA

- From the SEER*RSA page
 - https://staging.seer.cancer.gov/eod_public/list/3.1/
- Select Colon and Rectum Schema
 - Scroll down to see the Data Items specific for this schema
 - Selecting EOD Primary Tumor brings up the site-specific notes to code this data item
 - Notes at top of data item codes will overrule any general rules



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EOD Primary Tumor



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EOD Primary Tumor - Notes

Note 1: Code 000 (/2) cells confined within glandular basement membrane (intraepithelial) or in situ.

Note 2: Code 050 (/3) intramucosal NOS, lamina propria, mucosa nos, confined to but not thru muscularis mucosa.

Note 3: Ignore intraluminal extension, code depth of invasion



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EOD Primary Tumor - Notes

Note 4: Adherent to other organs, code 600 or 700.
If path neg in adhesion, code 100-500

Note 5 & 6: Next slides...

Note 7: Involvement of serosal surface (visceral peritoneum) by direct ext or perforation, code 500



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EOD Primary Tumor

Note 5: Code 300 vs 400

Colon and rectum may be entirely peritonealized, partially or non-peritonealized. Use list to help distinguish between EOD 300 and 400 (see also note 6)

Site	Peritonealized	Non-Peritonealized
Cecum (C180)	All surfaces	
Ascending (C182)	Anterior/Lat Surface	Posterior Surface
Hepatic Flexure (C183)	Anterior/Lat Surface	Posterior Surface
Transverse (C184)	All surfaces	
Splenic Flexure (C185)	Anterior/Lat Surface	Posterior Surface
Descending (C186)	Anterior/Lat Surface	Posterior Surface
Sigmoid (C187)	All surfaces	
Rectosigmoid (C199)	All surfaces	
Upper 1/3 Rectum	Anterior/Lat Surface	Posterior Surface
Middle 1/3 Rectum	Anterior Surface	
Lower 1/3 Rectum		All surfaces

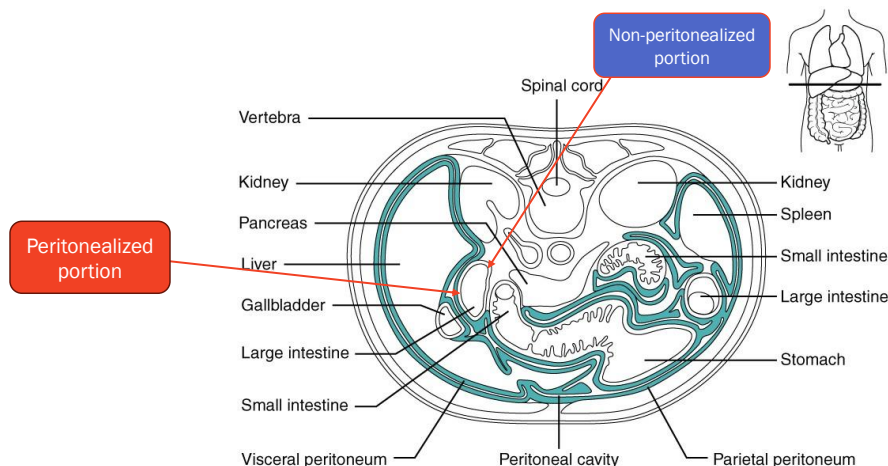
Rectum
C209



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Anatomy of Peritoneum



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EOD Primary Tumor

Note 6: Invasion into “pericolonic/pericorectal tissue”: can be either 300 or 400, depending on primary site and if peritonealized or not.

- Code 300 may **NOT** be used for entirely peritonealized sites, as this would be equivalent to peritonealized pericolic/perirectal tissue invasion (code 400)
 - **ONLY** used for sites when the extension is described using other terms listed under code 300, not “pericorectal tissue”
- Partially peritonealized sites “pericolonic/pericorectal tissue” may indicate either non-peritonealized (300) or peritonealized (400) tissue
- If pathologist doesn’t further describe the tissue as either non-peritonealized or peritonealized and the op report and/or gross description doesn’t describe the tumor relation to serosa/peritoneal surface and can’t be determined, code 300



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EOD Pri Tumor: Colon & Rectum

Code	Description
000	In situ: noninvasive, intraepithelial Adenoca in a polyp or adenoma, noninvas.
050	Intramucosal, NOS, Lamina propria, Mucosa NOS. Confined to but not thru muscularis mucosa
100	Submucosa (superficial invasion); Localized NOS
200	Muscularis propria invaded
300*	Ext thru wall, NOS; Subserosa/Subserosa fat
400*	Adj tissue NOS; Fat NOS



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EOD Pri Tumor: Colon & Rectum

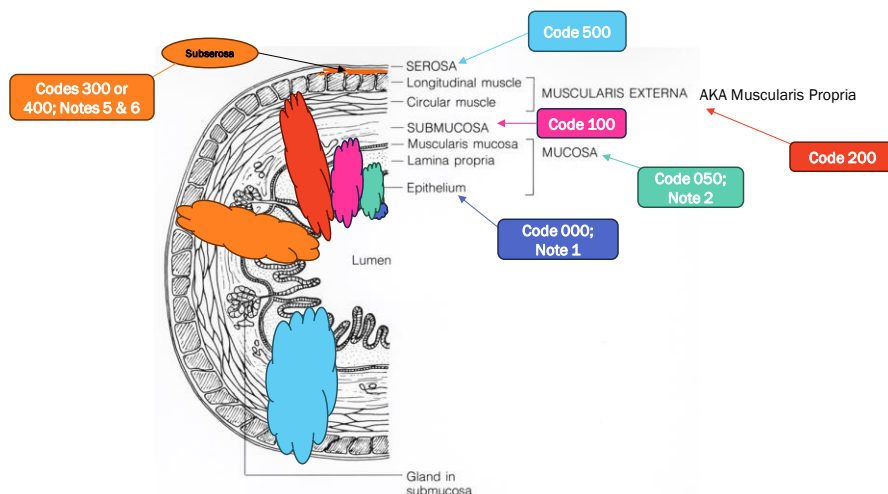
Code	Description
500	Mesothelium; Serosa; Tunica Serosa; Invasion visceral peritoneum
600	Adherent to other organs or structures with NO microscopic exam; Tumor found in adhesion(s) if microscopic exam performed; see code for sites and organ involvement
700	Involvement of other organs/structures; see code for sites and organ involvement
800	No evidence of primary tumor
999	Unknown; extension not stated; primary tumor can't be assessed; not documented; DCO



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Anatomy Review



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Case Scenario 1

- Right colon resection for 5.5 cm mass. Histologic type and grade: Adenocarcinoma, moderately differentiated Microscopic tumor extension: Into subserosal tissue. Margins: Clear by 7.0cm. 0/17 LNs pos. LVI and PNI neg.
- **Where is the primary site?**
 - Right colon – Ascending colon C182
- **Is it peritonealized or non-peritonealized?**
 - Peritonealized portion: anterior/lateral surface
 - Non-Peritonealized portion: posterior surface
- **Do we know what is involved per the pathologist?**
 - Yes, the subserosa tissue is involved
 - Code EOD Primary Tumor 300 – stated to be subserosa



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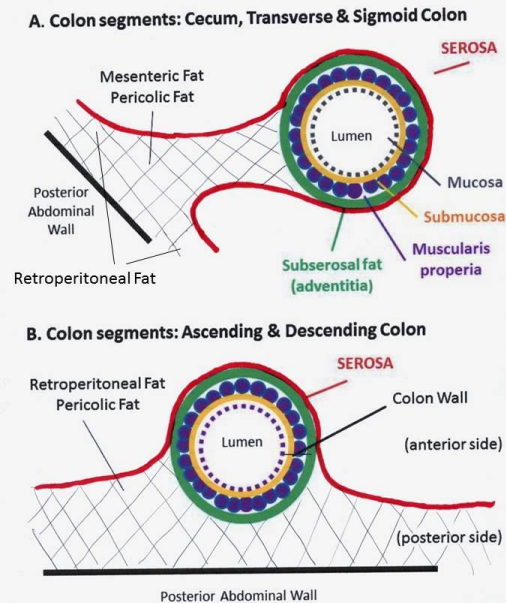
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Mesentery (Mesenteries):
folds of peritoneum- these attach the colon to the posterior abdominal wall.

Visceral peritoneum: =
Serosa covering of colon (organs)

Parietal peritoneum: =
Serosa covering of ABD cavity (body cavities)

Figure C-3: Peritoneum



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Case Scenario 2

RT HEMICOLECTOMY. Pathology: 8 cm PD adenocarcinoma in cecum, **invades thru the muscularis propria into pericolic tissue and pericolic fat**. NO LVI, PNI or tumor deposits. Margins free of tumor. 3/13 nodes pos for cancer.

- Where is the primary site?
 - Cecum C180
- Is this a peritonealized or non-peritonealized site?
 - Cecum is fully peritonealized
- What is the appropriate EOD Primary Tumor code?
 - **Code 400** – peritonealized site with involvement of pericolic tissue/fat
 - Muscularis propria invasion is code 200

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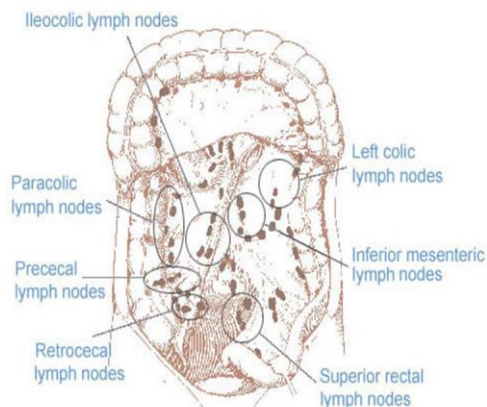
EOD Regional Nodes



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Regional LN Anatomy



<https://training.seer.cancer.gov/colorectal/anatomy/lymph-nodes.html>



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EOD Regional Nodes

Note 1: Code only regional nodes and nodes, NOS in this field.
Distant nodes are coded in EOD mets.

Note 2: For colon and rectum **ONLY** (C180-C189, C199, C209), any unnamed nodes that are removed with a colon or rectal resection are presumed (regional) pericolic or perirectal LNs. Code 300 if positive.

Note 3: Code 200 “path assessment only”

- Primary tumor or site surgically resected with
 - Any positive microscopic exam of tumor deposits **WITHOUT** positive LN
 - Code 300 if LN are positive



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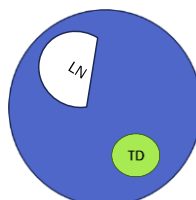
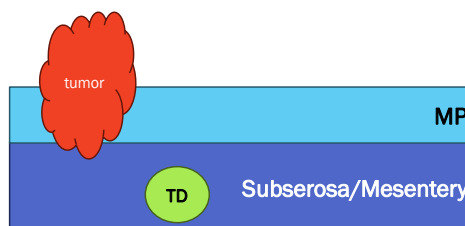
Tumor Deposits

• Code 200

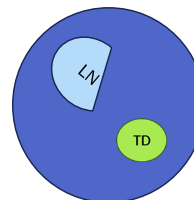
- Pathologic Assessment
- Tumor Deposit and LN negative
 - Subserosa
 - Mesentery
 - Mesorectal
 - Nonperitonealized pericolic or perirectal tissue

• Code 300

- Tumor Deposit + LN involved



LN neg and TD+
Code 200



LN + and TD +
Code 300



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EOD Reg Nodes Colon & Rectum

Code	Description
000	No regional LN involvement and no tumor deposits (TD)
200	Tumor deposits (TD) in subserosa, mesentery, mesorectal or nonperitonealized pericolic or perirectal tissues WITHOUT Reg LN mets (path assessed only)
300	See long list of all regional nodes by primary site/subsite
800	Regional LNs NOS, Lymph Nodes NOS



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Case Scenario 3

RT HEMICOLECTOMY. Pathology: 8 cm PD adenocarcinoma in cecum, **invades thru the muscularis propria into pericolic tissue and pericolic fat**. NO LVI, PNI or tumor deposits. Margins free of tumor. 3/13 nodes pos for cancer.

- Primary Site: C180
- EOD Primary Tumor: 400
- What is the appropriate EOD Regional Node code?
 - Code 300
 - Involvement of LN (Note 2)



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EOD Mets



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EOD Mets

- **Note 1:** Use code 70 when only info:
 - Distant nodes involved, but not stated single or multiple
 - Distant mets present, but not stated as single or multiple
- **Note 2:** Peritoneal involvement WITH or WITHOUT other mets code 50
- **Note 3:** Distant LNs for colon, rectum, and rectosigmoid include:
 - Colon [see list]
 - Rectosigmoid [see list]
 - Rectum [see listed]



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EOD Mets: Colon & Rectum

Code	Description
00	No distant mets, Unknown if mets
10	Single distant LN chain
20	Single distant organ (except peritoneum)
30	Single distant node WITH distant organ Mets to multiple distant nodes W/WO single distant organ
40	Mets to multiple distant organs W/WO distant nodes
50	Carcinomatosis
70	Distant NOS



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Mets at Diagnosis

- **Bone** excludes bone marrow
- **Brain** excluding spinal cord and other CNS
- **Liver** single or multiple, clinical or path
- **Lung** excluding pleura and pleural fluid
- **Distant LN** not for regional LNs
- • **Other** includes bone marrow, malign pleural effusion, pleural nodules, pericardial effusion, spinal cord mets, CNS mets
- Code 0 when EOD Mets is 00

Reference: SPCSM 2024 Manual

https://seer.cancer.gov/manuals/2024/SPCSM_2024_MainDoc.pdf



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Summary Stage v3.1



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Summary Stage 2018

<https://seer.cancer.gov/tools/ssm/>

For SHRI – this is derived field

For CoC – this is a directly coded field

Information available on SEER*RSA



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Summary Stage – Colon/Rectum

- Located in the Digestive and Hepatobiliary Systems section
 - Table of anatomic structures can be helpful for staging information
- **Note 2:** The following histologies not included:
 - Soft Tissue section (8710-8714, 8800-8934, 8940-9138, 9141-9582)
 - GIST (8935-8936)
 - Kaposi Sarcoma (9140)
 - Mycosis Fungoides (9700-9701)



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Summary Stage – Colon/Rectum

- **Note 3:** Code 0 (behavior/2) includes confined within glandular basement membrane (intraepithelial) or described as in situ
- **Note 4:** AJCC 8th ed stages the following as in situ but for SS2018 these are localized (behavior /3)
 - Intramucosal, NOS
 - Lamina Propria
 - Mucosa, NOS
 - Confined to but not through muscularis mucosa
- **Note 5:** Ignore intraluminal extension to adjacent segment(s) of colon/rectum or to the ileum from the cecum; code depth of invasion or extracolonic spread



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Summary Stage – Colon/Rectum

- **Notes 6 and 7:** Peritonealized, partially peritonealized, or non-peritonealized sites
 - Use note 6 list to help distinguish between localized and regional tumors
 - Invasion of “pericolonic/pericorectal tissue” can be either localized (1) or regional (2) depending on primary site and whether it is peritonealized or not
- **Note 8:** Tumor adherent to other organs/structures macroscopically code as regional (2) or distant (7)
 - If no tumor is present in adhesion microscopically it should be localized (1) or regional (2)
- **Note 9:** Tumors characterized by involvement of serosal surface (visceral peritoneum) by direct extension or perforation in which tumor cells are continuous with serosal surface through inflammation code regional (2)



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Summary Stage Codes

Code	Description	Notes
0	In situ	Confined within basement membrane; intraepithelial; described as in situ (Note 3)
1	Localized	Intramucosa; Lamina propria; mucosa NOS; confined to but not through muscularis mucosa (Note 4)
2	Reg by Direct Exten	Mesentery; Peritonealized sites (Notes 6 & 7) pericolic/perirectal fat/tissue; other sites based on primary site; (Note 8 & 9)
3	Reg LN only	Regional LN involvement and based on primary site
4	Reg DE + LN	Both sites in code 2 and regional LN code 3
7	Distant	Distant sites/LN see list by primary site; Note 8 macroscopic involvement of other organ/structure listed in code 7



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Case Scenario 4

- Right colon resection for 5.5 cm mass. Histologic type and grade: Adenocarcinoma, moderately differentiated Microscopic tumor extension: Into subserosal tissue. Margins: Clear by 7.0cm. 0/17 LNs pos. LVI and PNI neg.
- Primary site: C182
- EOD Primary Tumor: 300
- What is the correct SS2018 code?
 - Code 1 (localized – subserosal involvement)



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Case Scenario 5

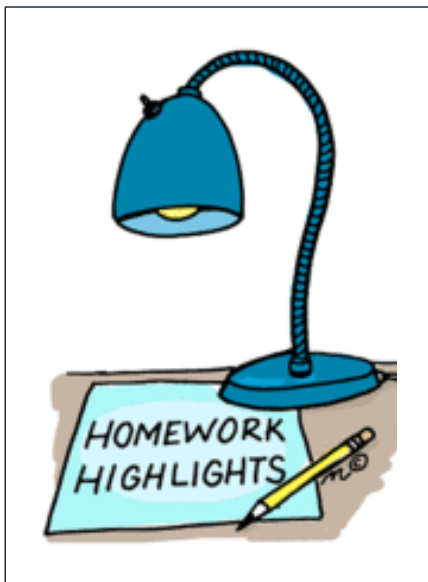
RT HEMICOLECTOMY. Pathology: 8 cm PD adenocarcinoma in cecum, **invades thru the muscularis propria into pericolonic tissue and pericolonic fat**. NO LVI, PNI or tumor deposits. Margins free of tumor. 3/13 nodes pos for cancer.

- Primary site: C180
- EOD Primary Tumor: 400
- EOD Regional Nodes: 300
- EOD Mets: 00
- What is the appropriate SS2018 code?
 - Code 4
 - Peritonealized site w/ involvement of pericolonic tissue/fat and regional LN pos



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Homework

SEER EOD & SS cases on SEER*Edu

- <https://educate.fredhutch.org/Identity/Account/Login>
- Training | Coding – CEs
 - Select DX 2021-2024 EOD and Summary Stage, Grade, SSDI Mashup
 - Colon and rectum 01-05
 - Colon and rectum 06-10
- Complete all 10



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Questions?



Contact Info

Melissa Riddle, ODS-C

Health Records Manager | Training & Education

Iowa Cancer Registry

melissa-riddle@uiowa.edu



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