

RECTUM
BOTH SEXES

TABLE 5A. -- Characteristics of persons reported to the Danish Cancer Registry with an initial cancer of the rectum (excluding rectosigmoid junction and anus), 1943-80+

Category	Male	Female	Total
No. with first primary cancer*	15,442	11,155	26,597
No. who developed a second primary cancer	581	387	968
Average age at diagnosis of first cancer, yr	67	66	67
Average yr of diagnosis of first cancer	1964	1964	1964
Person-yr of follow-up	58,436	48,759	107,195
Average follow-up, yr	3.8	4.4	4.1
Percent given radiotherapy for first cancer	11	11	11

+ ICD-7 code = 154.

* Number excludes all persons who survived less than 2 mo after the diagnosis of their first primary cancer or who developed a simultaneous cancer during this period. First primary cancers diagnosed only at autopsy or by death certificate are also excluded as are in situ cancers.

TABLE 5B. -- Microscopic confirmation among persons who developed second primary cancers after an initial cancer of the rectum (excluding rectosigmoid junction and anus) in Denmark, 1943-80

Microscopically confirmed	No.	Percent+
Both first and second cancers	811	83.8
Only the first cancer	106	11.0
Only the second cancer	30	3.1
Neither first nor second cancer	21	2.2
Total second primary cancers	968	100.0

+ Minor discrepancies between table entries, and row and column sums in this and subsequent tables are due to rounding.

RECTUM
BOTH SEXES

TABLE 5C. -- Observed (O) and expected (E) numbers of second primary cancers by years after diagnosis of an initial cancer of the rectum (excluding rectosigmoid junction and anus) among males and females in Denmark, 1943-80+

Second primary cancer site	Yr after first primary cancer diagnosis												Total		
	<1 yr			1-4 yr			5-9 yr			10+ yr			O	E	O/E
No. starting interval	26,597			17,057			6,299			3,263			26,597		
Person-yr in interval	21,404			39,660			22,534			23,597			107,195		
	O	E	O/E	O	E	O/E	O	E	O/E	O	E	O/E	O	E	O/E
All second cancers	105	244.19	0.4*	339	466.21	0.7*	242	289.98	0.8*	282	362.20	0.8*	968	1,362.59	0.7*
All excluding site of initial cancer	105	224.67	0.5*	339	430.01	0.8*	242	267.96	0.9	282	335.46	0.8*	968	1,258.11	0.8*
Buccal cavity, pharynx	1	6.27	0.2*	11	11.54	1.0	9	6.76	1.3	5	7.79	0.6	26	32.37	0.8
Lip	0	2.97	0.0	3	5.43	0.6	4	3.08	1.3	3	3.38	0.9	10	14.86	0.7
Tongue	0	0.61	0.0	0	1.10	0.0	1	0.66	1.5	0	0.77	0.0	1	3.15	0.3
Salivary gland	0	0.66	0.0	1	1.24	0.8	0	0.75	0.0	0	0.83	0.0	1	3.48	0.3
Gum, other mouth	0	1.04	0.0	4	1.94	2.1	0	1.22	0.0	1	1.64	0.6	5	5.85	0.9
Pharynx	1	1.00	1.0	3	1.82	1.6	4	1.04	3.8*	1	1.17	0.9	9	5.03	1.8
Digestive system	24	94.92	0.3*	80	175.82	0.5*	76	108.79	0.7*	98	136.56	0.7*	278	516.10	0.5*
Esophagus	1	3.88	0.3	5	6.81	0.7	3	3.99	0.8	3	4.77	0.6	12	19.45	0.6
Stomach	9	29.90	0.3*	22	52.56	0.4*	12	30.93	0.4*	33	35.57	0.9	76	148.95	0.5*
Colon	5	23.48	0.2*	35	45.04	0.8	45	29.17	1.5*	47	39.54	1.2	132	137.22	1.0
Rectum	0	19.52	0.0*	0	36.20	0.0*	0	22.02	0.0*	0	26.74	0.0*	0	104.48	0.0*
Liver, biliary	6	5.74	1.0	6	11.45	0.5	8	7.64	1.0	4	10.58	0.4*	24	35.42	0.7
Pancreas	3	9.01	0.3*	8	17.80	0.4*	7	11.54	0.6	8	15.30	0.5	26	53.65	0.5*
Respiratory system	15	33.50	0.4*	54	66.46	0.8	43	40.25	1.1	36	47.97	0.8	148	188.19	0.8*
Nasal cavities, sinuses	1	0.57	1.8	0	1.06	0.0	0	0.64	0.0	0	0.73	0.0	1	3.01	0.3
Larynx	3	2.17	1.4	4	4.20	1.0	3	2.46	1.2	4	2.79	1.4	14	11.62	1.2
Trachea, bronchus, lung	11	28.94	0.4*	45	57.72	0.8	39	34.98	1.1	32	41.81	0.8	127	163.45	0.8*
Female breast	12	17.30	0.7	38	33.66	1.1	26	22.29	1.2	27	29.56	0.9	103	102.80	1.0
Female genital tract	11	15.23	0.7	29	29.84	1.0	16	19.06	0.8	27	23.13	1.2	83	87.26	1.0
Cervix uteri	1	4.68	0.2	6	8.97	0.7	1	5.37	0.2	10	5.73	1.7	18	24.74	0.7
Corpus uteri	3	4.42	0.7	7	8.86	0.8	8	5.75	1.4	10	7.12	1.4	28	26.15	1.1
Uterus, NOS	0	0.41	0.0	0	0.71	0.0	0	0.46	0.0	0	0.59	0.0	0	2.18	0.0
Ovary, fallopian tubes	7	4.63	1.5	13	9.20	1.4	5	6.04	0.8	5	7.65	0.7	30	27.51	1.1
Prostate gland	9	22.37	0.4*	45	43.37	1.0	31	27.14	1.1	22	34.85	0.6*	7	127.72	0.8*
Testis	0	0.46	0.0	1	0.83	1.2	0	0.44	0.0	3	0.43	7.0*	4	2.17	1.8
Kidney, renal pelvis, ureter	9	7.20	1.3	16	14.03	1.1	9	8.83	1.0	9	11.12	0.8	43	41.17	1.0
Bladder, other urinary	12	14.59	0.8	27	28.76	0.9	13	17.96	0.7	18	22.78	0.8	70	84.09	0.8
Melanoma of the skin	1	2.19	0.5	5	4.29	1.2	3	2.70	1.1	2	3.39	0.6	11	12.57	0.9
Eye	1	0.71	1.4	2	1.34	1.5	0	0.80	0.0	0	0.93	0.0	3	3.78	0.8
Brain, central nervous system	1	3.74	0.3	3	7.29	0.4	3	4.32	0.7	4	4.83	0.8	11	20.17	0.5*
Thyroid gland	2	1.02	2.0	0	1.99	0.0	0	1.30	0.0	1	1.67	0.6	3	5.99	0.5
Bone	0	0.44	0.0	0	0.81	0.0	1	0.48	2.1	0	0.55	0.0	1	2.28	0.4
Connective tissue	0	0.84	0.0	2	1.54	1.3	1	0.89	1.1	2	1.01	2.0	5	4.28	1.2
Lymphatic, hematopoietic system	6	14.42	0.4*	24	28.22	0.9	9	17.88	0.5*	21	22.67	0.9	60	83.18	0.7*
Non-Hodgkin's lymphoma	4	3.84	1.0	7	7.53	0.9	1	4.78	0.2	5	6.10	0.8	17	22.25	0.8
Hodgkin's disease	1	0.96	1.0	3	1.85	1.6	0	1.11	0.0	0	1.26	0.0	4	5.19	0.8
Multiple myeloma	0	2.75	0.0	1	5.46	0.2	2	3.52	0.6	3	4.53	0.7	6	16.25	0.4*
Leukemias	1	6.73	0.1*	13	13.12	1.0	6	8.29	0.7	13	10.59	1.2	33	38.72	0.9
Chronic lymphocytic	0	3.63	0.0	8	7.03	1.1	5	4.43	1.1	8	5.69	1.4	21	20.76	1.0
Acute nonlymphocytic	1	1.55	0.6	3	3.16	0.9	1	2.07	0.5	4	2.81	1.4	9	9.59	0.9

+ ICD-7 code = 154.

* P<.05.

RECTUM
MALES

TABLE 5D. -- Observed (O) and expected (E) numbers of second primary cancers by years after diagnosis of an initial cancer of the rectum (excluding rectosigmoid junction and anus) among males in Denmark, 1943-80+

Second primary cancer site	Yr after first primary cancer diagnosis														
	<1 yr			1-4 yr			5-9 yr			10+ yr			Total		
No. starting interval	15,442			9,891			3,471			1,681			15,442		
Person-yr in interval	12,435			22,552			12,000			11,450			58,436		
	O	E	O/E	O	E	O/E	O	E	O/E	O	E	O/E	O	E	O/E
All second cancers	61	158.07	0.4*	203	299.62	0.7*	159	177.77	0.9	158	209.82	0.8*	581	845.29	0.7*
All excluding site of initial cancer	61	144.03	0.4*	203	273.88	0.7*	159	162.82	1.0	158	192.77	0.8*	581	773.50	0.8*
Buccal cavity, pharynx	0	5.08	0.0*	6	9.27	0.6	9	5.22	1.7	4	5.66	0.7	19	25.23	0.8
Lip	0	2.79	0.0	2	5.08	0.4	4	2.84	1.4	3	3.04	1.0	9	13.75	0.7
Tongue	0	0.39	0.0	0	0.70	0.0	1	0.39	2.6	0	0.39	0.0	1	1.87	0.5
Salivary gland	0	0.41	0.0	0	0.76	0.0	0	0.44	0.0	0	0.48	0.0	0	2.09	0.0
Gum, other mouth	0	0.71	0.0	2	1.30	1.5	0	0.76	0.0	0	0.90	0.0	2	3.67	0.5
Pharynx	0	0.79	0.0	2	1.43	1.4	4	0.79	5.0*	1	0.84	1.2	7	3.85	1.8
Digestive system	16	63.22	0.3*	51	115.84	0.4*	50	67.59	0.7*	59	78.42	0.8*	176	325.08	0.5*
Esophagus	1	2.95	0.3	5	5.12	1.0	2	2.83	0.7	2	3.09	0.6	10	13.99	0.7
Stomach	6	21.16	0.3*	15	37.18	0.4*	9	20.91	0.4*	24	22.65	1.1	54	101.90	0.5*
Colon	4	13.95	0.3*	21	26.37	0.8	27	15.96	1.7*	27	19.95	1.4	79	76.22	1.0
Rectum	0	14.04	0.0*	0	25.74	0.0*	0	14.95	0.0*	0	17.05	0.0*	0	71.79	0.0*
Liver, biliary	2	3.14	0.6	3	6.20	0.5	7	3.83	1.8	2	4.86	0.4	14	18.04	0.8
Pancreas	3	5.98	0.5	4	11.70	0.3*	4	7.15	0.6	4	8.68	0.5	15	33.51	0.4*
Respiratory system	14	29.26	0.5*	45	57.90	0.8	35	34.29	1.0	31	39.46	0.8	125	160.92	0.8*
Nasal cavities, sinuses	1	0.44	2.3	0	0.81	0.0	0	0.47	0.0	0	0.51	0.0	1	2.23	0.4
Larynx	3	2.00	1.5	3	3.86	0.8	2	2.23	0.9	3	2.49	1.2	11	10.58	1.0
Trachea, bronchus, lung	10	25.40	0.4*	39	50.51	0.8	32	29.94	1.1	28	34.51	0.8	109	140.36	0.8*
Prostate gland	9	22.37	0.4*	45	43.37	1.0	31	27.14	1.1	22	34.85	0.6*	107	127.72	0.8
Testis	0	0.46	0.0	1	0.83	1.2	0	0.44	0.0	3	0.43	7.0*	4	2.17	1.8
Kidney, renal pelvis, ureter	7	4.96	1.4	12	9.56	1.3	7	5.74	1.2	7	6.82	1.0	33	27.08	1.2
Bladder, other urinary	7	12.19	0.6	23	23.94	1.0	11	14.54	0.8	12	17.77	0.7	53	68.44	0.8
Melanoma of the skin	1	1.18	0.8	1	2.25	0.4	3	1.32	2.3	0	1.52	0.0	5	6.27	0.8
Eye	0	0.47	0.0	0	0.88	0.0	0	0.50	0.0	0	0.55	0.0	0	2.40	0.0
Brain, central nervous system	0	2.24	0.0	2	4.29	0.5	3	2.36	1.3	2	2.38	0.8	7	11.27	0.6
Thyroid gland	2	0.43	4.6	0	0.83	0.0	0	0.49	0.0	1	0.55	1.8	3	2.31	1.3
Bone	0	0.29	0.0	0	0.53	0.0	1	0.30	3.3	0	0.32	0.0	1	1.45	0.7
Connective tissue	0	0.56	0.0	1	1.01	1.0	1	0.55	1.8	2	0.59	3.4	4	2.71	1.5
Lymphatic, hematopoietic system	5	9.92	0.5	15	19.21	0.8	6	11.56	0.5	11	13.67	0.8	37	54.36	0.7*
Non-Hodgkin's lymphoma	3	2.51	1.2	5	4.86	1.0	0	2.90	0.0	2	3.38	0.6	10	13.65	0.7
Hodgkin's disease	1	0.66	1.5	2	1.24	1.6	0	0.71	0.0	0	0.75	0.0	3	3.37	0.9
Multiple myeloma	0	1.84	0.0	0	3.62	0.0	1	2.21	0.5	1	2.65	0.4	2	10.33	0.2*
Leukemias	1	4.81	0.2	8	9.30	0.9	5	5.62	0.9	8	6.76	1.2	22	26.48	0.8
Chronic lymphocytic	0	2.75	0.0	5	5.30	0.9	5	3.21	1.6	6	3.88	1.5	16	15.13	1.1
Acute nonlymphocytic	1	1.04	1.0	2	2.09	1.0	0	1.30	0.0	1	1.65	0.6	4	6.08	0.7

+ ICD-7 code = 154.

* P<.05.

RECTUM
FEMALES

TABLE 5E. -- Observed (O) and expected (E) numbers of second primary cancers by years after diagnosis of an initial cancer of the rectum (excluding rectosigmoid junction and anus) among females in Denmark, 1943-80+

Second primary cancer site	Yr after first primary cancer diagnosis														
	<1 yr			1-4 yr			5-9 yr			10+ yr			Total		
	No. starting interval	11,155		7,166			2,828			1,582			11,155		
Person-yr in interval	8,969		17,108			10,534			12,147			48,759			
	O	E	O/E	O	E	O/E	O	E	O/E	O	E	O/E	O	E	O/E
All second cancers	44	86.12	0.5*	136	166.59	0.8*	83	112.21	0.7*	124	152.38	0.8*	387	517.30	0.7*
All excluding site of initial cancer	44	80.64	0.5*	136	156.13	0.9	83	105.14	0.8*	124	142.69	0.9	387	484.61	0.8*
Buccal cavity, pharynx	1	1.19	0.8	5	2.27	2.2	0	1.54	0.0	1	2.13	0.5	7	7.14	1.0
Lip	0	0.18	0.0	1	0.35	2.9	0	0.24	0.0	0	0.34	0.0	1	1.11	0.9
Tongue	0	0.22	0.0	0	0.40	0.0	0	0.27	0.0	0	0.38	0.0	0	1.28	0.0
Salivary gland	0	0.25	0.0	1	0.48	2.1	0	0.31	0.0	0	0.35	0.0	1	1.39	0.7
Gum, other mouth	0	0.33	0.0	2	0.64	3.1	0	0.46	0.0	1	0.74	1.4	3	2.18	1.4
Pharynx	1	0.21	4.8	1	0.39	2.5	0	0.25	0.0	0	0.33	0.0	2	1.18	1.7
Digestive system	8	31.70	0.3*	29	59.98	0.5*	26	41.20	0.6*	39	58.14	0.7*	102	191.02	0.5*
Esophagus	0	0.93	0.0	0	1.69	0.0	1	1.16	0.9	1	1.68	0.6	2	5.46	0.4
Stomach	3	8.74	0.3	7	15.38	0.5*	3	10.02	0.3*	9	12.92	0.7	22	47.05	0.5*
Colon	1	9.53	0.1*	14	18.67	0.7	18	13.21	1.4	20	19.59	1.0	53	61.00	0.9
Rectum	0	5.48	0.0*	0	10.46	0.0*	0	7.07	0.0*	0	9.69	0.0*	0	32.69	0.0*
Liver, biliary	4	2.60	1.5	3	5.25	0.6	1	3.81	0.3	2	5.72	0.3	10	17.38	0.6
Pancreas	0	3.03	0.0	4	6.10	0.7	3	4.39	0.7	4	6.62	0.6	11	20.14	0.5*
Respiratory system	1	4.24	0.2	9	8.56	1.1	8	5.96	1.3	5	8.51	0.6	23	27.27	0.8
Nasal cavities, sinuses	0	0.13	0.0	0	0.25	0.0	0	0.17	0.0	0	0.22	0.0	0	0.78	0.0
Larynx	0	0.17	0.0	1	0.34	2.9	1	0.23	4.4	1	0.30	3.3	3	1.04	2.9
Trachea, bronchus, lung	1	3.54	0.3	6	7.21	0.8	7	5.04	1.4	4	7.30	0.5	18	23.09	0.8
Female breast	12	17.30	0.7	38	33.66	1.1	26	22.29	1.2	27	29.56	0.9	103	102.80	1.0
Female genital tract	11	15.23	0.7	29	29.84	1.0	16	19.06	0.8	27	23.13	1.2	83	87.26	1.0
Cervix uteri	1	4.68	0.2	6	8.97	0.7	1	5.37	0.2	10	5.73	1.7	18	24.74	0.7
Corpus uteri	3	4.42	0.7	7	8.86	0.8	8	5.75	1.4	10	7.12	1.4	28	26.15	1.1
Uterus, NOS	0	0.41	0.0	0	0.71	0.0	0	0.46	0.0	0	0.59	0.0	0	2.18	0.0
Ovary, fallopian tubes	7	4.63	1.5	13	9.20	1.4	5	6.04	0.8	5	7.65	0.7	30	27.51	1.1
Kidney, renal pelvis, ureter	2	2.24	0.9	4	4.47	0.9	2	3.09	0.6	2	4.30	0.5	10	14.09	0.7
Bladder, other urinary	5	2.40	2.1	4	4.82	0.8	2	3.42	0.6	6	5.01	1.2	17	15.65	1.1
Melanoma of the skin	0	1.01	0.0	4	2.04	2.0	0	1.38	0.0	2	1.87	1.1	6	6.30	1.0
Eye	1	0.24	4.3	2	0.46	4.3	0	0.30	0.0	0	0.38	0.0	3	1.38	2.2
Brain, central nervous system	1	1.50	0.7	1	3.00	0.3	0	1.96	0.0	2	2.45	0.8	4	8.90	0.4
Thyroid gland	0	0.59	0.0	0	1.16	0.0	0	0.81	0.0	0	1.12	0.0	0	3.68	0.0*
Bone	0	0.15	0.0	0	0.28	0.0	0	0.18	0.0	0	0.23	0.0	0	0.83	0.0
Connective tissue	0	0.28	0.0	1	0.53	1.9	0	0.34	0.0	0	0.42	0.0	1	1.57	0.6
Lymphatic, hematopoietic system	1	4.50	0.2	9	9.01	1.0	3	6.32	0.5	10	9.00	1.1	23	28.82	0.8
Non-Hodgkin's lymphoma	1	1.33	0.8	2	2.67	0.8	1	1.88	0.5	3	2.72	1.1	7	8.60	0.8
Hodgkin's disease	0	0.30	0.0	1	0.61	1.7	0	0.40	0.0	0	0.51	0.0	1	1.82	0.5
Multiple myeloma	0	0.91	0.0	1	1.84	0.5	1	1.31	0.8	2	1.88	1.1	4	5.92	0.7
Leukemias	0	1.92	0.0	5	3.82	1.3	1	2.67	0.4	5	3.83	1.3	11	12.24	0.9
Chronic lymphocytic	0	0.88	0.0	3	1.73	1.7	0	1.22	0.0	2	1.81	1.1	5	5.63	0.9
Acute nonlymphocytic	0	0.51	0.0	1	1.07	0.9	1	0.77	1.3	3	1.16	2.6	5	3.51	1.4

+ ICD-7 code = 154.

* P<.05.