

2022 Lung Cancer Screening Registry Report from the American College of Radiology

We are pleased to release the 2022 annual State Aggregate report for Lung Cancer Screening Registry. The PDF report contains the following:

1. Measures definition

2. Pre-exam measures aggregated by states

3. During-exam measures aggregated by states

4. Post-exam measures aggregated by states

Currently the Post-exam (outcome) measures provided within this report are limited to the Abnormal Interpretation Rate. Other measures such as Cancer Detection Rate or Positive Predictive Value are not available at the state aggregate level at this time. Some sites may have limited ability to fully capture outcome (tissue diagnoses) data and state performance may be misconstrued.

Aggregate measure data only reported for states where there are 5 or more sites. Less than 5 are indicated as NR (Not reported).

Measure Definitions

Appropriateness of screening by USPSTF criteria

Percent of screening population who are adults aged 55 to 80 years, have a 30 pack-year smoking history, and currently smoke or have quit within the past 15 years.

Smoking cessation offered

Percent of patients who are offered smoking cessation guidance.

Smoking cessation offered among current smokers

Percent of current smokers who are offered smoking cessation guidance.

Radiation exposure Mean CTDIvol - overall, and by BMI category

Mean Volumetrics CT Dose Index (CTDIvol) across all screening exams performed, across all screening exams performed on underweight patients (BMI<18.5), across all screening exams performed on normal weight patients (BMI of 18.5-24.9), across all screening exams performed on overweight patients (BMI of 25-29.9), and across all screening exams performed on obese patients (BMI of 30 or more).

Radiation exposure (DLP) - overall, and by BMI category

Mean Dose Length Product (DLP) across all screening exams performed, across all screening exams performed on underweight patients (BMI<18.5), across all screening exams performed on normal weight patients (BMI of 18.5-24.9), across all screening exams performed on overweight patients (BMI of 25-29.9), and across all screening exams performed on obese patients (BMI of 30 or more).

Abnormal Interpretation Rate, all exams

Percent of screening exams that have a Lung-RADS assessment of 3, 4a, 4b, or 4x (and lead to additional imaging or biopsy).

Abnormal Interpretation Rate, at baseline exam

Percent of baseline screening exams that have a Lung-RADS assessment of 3, 4a, 4b, or 4x (and lead to additional imaging or biopsy).

Abnormal Interpretation Rate, at annual exam

Percent of annual screening exams that have a Lung-RADS assessment of 3, 4a, 4b, or 4x (and lead to additional imaging or biopsy).

Lung Cancer Screening Statistics, Pre-Exam Measures – Screening Exams performed in 2022

				Appropriateness of screening by USPSTF criteria		Smoking cessation offered		Smoking cessation offered among current smokers	
Aggregation Level	Year	# Facilities	# Screening Exams	Rate	Num/Den	Rate	Num/Den	Rate	Num/Den
Alabama	2022	68	15600	81.48%	(12711/15600)	75.85%	(11832/15600)	80.08%	(8123/10143)
Alaska	2022	18	1832	72.65%	(1331/1832)	60.97%	(1117/1832)	65.33%	(716/1096)
Arizona	2022	40	5804	75.67%	(4392/5804)	69.68%	(4044/5804)	75.52%	(2496/3305)
Arkansas	2022	33	8799	80.55%	(7088/8799)	65.77%	(5787/8799)	70.32%	(4184/5950)
California	2022	126	15022	65.73%	(9874/15022)	62.12%	(9331/15022)	69.65%	(5042/7239)
Colorado	2022	52	8768	70.11%	(6147/8768)	56.56%	(4959/8768)	61.81%	(2776/4491)
Connecticut	2022	40	14024	69.81%	(9790/14024)	51.01%	(7153/14024)	55.88%	(4502/8056)
Delaware	2022	18	3975	83.19%	(3307/3975)	85.28%	(3390/3975)	84.39%	(2005/2376)
District of Columbia	2022	5	448	74.33%	(333/448)	59.82%	(268/448)	63.08%	(164/260)
Florida	2022	218	42809	68.94%	(29511/42809)	51.75%	(22152/42809)	55.9%	(12940/23148)
Georgia	2022	116	24332	75.58%	(18390/24332)	74.22%	(18058/24332)	87.65%	(13008/14841)
Hawaii	2022	11	2034	78.86%	(1604/2034)	41.84%	(851/2034)	59.23%	(741/1251)
Idaho	2022	21	2736	89.25%	(2442/2736)	90.06%	(2464/2736)	93.7%	(1280/1366)
Illinois	2022	147	39467	80.19%	(31650/39467)	68.83%	(27167/39467)	72.6%	(16688/22986)
Indiana	2022	118	27663	68.7%	(19004/27663)	58.14%	(16082/27663)	64.88%	(10246/15793)
Iowa	2022	78	13957	79.65%	(11117/13957)	70.4%	(9826/13957)	75.34%	(6569/8719)
Kansas	2022	58	11749	82.99%	(9750/11749)	71.1%	(8354/11749)	74.87%	(5136/6860)
Kentucky	2022	110	43819	67.36%	(29516/43819)	83.75%	(36697/43819)	83.14%	(19865/23892)
Louisiana	2022	37	8805	76.07%	(6698/8805)	72.15%	(6353/8805)	77.62%	(4461/5747)
Maine	2022	29	10347	78.42%	(8114/10347)	78.41%	(8113/10347)	80.6%	(4999/6202)
Maryland	2022	45	8700	83.25%	(7243/8700)	54%	(4698/8700)	62.98%	(3139/4984)
Massachusetts	2022	67	45949	81.73%	(37553/45949)	81.07%	(37249/45949)	85.11%	(22417/26340)
Michigan	2022	121	52063	78.59%	(40916/52063)	76.55%	(39856/52063)	78.77%	(24445/31035)
Minnesota	2022	104	19619	72.55%	(14234/19619)	57.66%	(11313/19619)	72.96%	(8113/11120)
Mississippi	2022	40	8421	83.37%	(7021/8421)	72.73%	(6125/8421)	85.82%	(4498/5241)

Lung Cancer Screening Statistics, Pre-Exam Measures – Screening Exams performed in 2022

				Appropriateness of screening by USPSTF criteria		Smoking cessation offered		Smoking cessation offered among current smokers	
Aggregation Level	Year	# Facilities	# Screening Exams	Rate	Num/Den	Rate	Num/Den	Rate	Num/Den
Missouri	2022	73	25595	80.51%	(20606/25595)	70.99%	(18171/25595)	74.49%	(11710/15720)
Montana	2022	17	4241	75.6%	(3206/4241)	85.26%	(3616/4241)	85.07%	(1881/2211)
Nebraska	2022	25	4244	74.93%	(3180/4244)	89.02%	(3778/4244)	91.48%	(1998/2184)
Nevada	2022	16	3449	73.76%	(2544/3449)	94.87%	(3272/3449)	95.6%	(2040/2134)
New Hampshire	2022	26	7168	75.35%	(5401/7168)	51.14%	(3666/7168)	58.95%	(2430/4122)
New Jersey	2022	101	15918	67.47%	(10740/15918)	61.91%	(9855/15918)	69.93%	(5929/8478)
New Mexico	2022	12	2750	71.42%	(1964/2750)	87.35%	(2402/2750)	90.68%	(1391/1534)
New York	2022	199	62461	68.5%	(42783/62461)	66.93%	(41806/62461)	72.08%	(25417/35262)
North Carolina	2022	131	49829	77.84%	(38785/49829)	81.03%	(40374/49829)	85.8%	(25948/30242)
North Dakota	2022	13	4363	80.08%	(3494/4363)	48.82%	(2130/4363)	72.07%	(1610/2234)
Ohio	2022	178	62720	72.57%	(45518/62720)	76.09%	(47724/62720)	81.76%	(30571/37389)
Oklahoma	2022	25	4783	76.17%	(3643/4783)	62.95%	(3011/4783)	77.35%	(2117/2737)
Oregon	2022	48	11757	79.51%	(9348/11757)	66.06%	(7767/11757)	69.26%	(4239/6120)
Pennsylvania	2022	186	72583	76.06%	(55204/72583)	66.34%	(48155/72583)	73.69%	(32168/43652)
Rhode Island	2022	18	6394	75.35%	(4818/6394)	61.2%	(3913/6394)	62.44%	(2336/3741)
South Carolina	2022	62	24036	75.68%	(18191/24036)	66.98%	(16100/24036)	70.71%	(9966/14094)
South Dakota	2022	27	3867	87.92%	(3400/3867)	71.99%	(2784/3867)	84.9%	(1911/2251)
Tennessee	2022	85	23308	79.96%	(18636/23308)	62.66%	(14604/23308)	66.67%	(9899/14848)
Texas	2022	149	20271	70.56%	(14304/20271)	67.9%	(13765/20271)	74.33%	(8928/12011)
Utah	2022	8	1755	64.96%	(1140/1755)	51.51%	(904/1755)	70.5%	(619/878)
Vermont	2022	10	4168	85.96%	(3583/4168)	80.97%	(3375/4168)	98.46%	(2436/2474)
Virginia	2022	101	36270	77.23%	(28012/36270)	75.43%	(27357/36270)	80.37%	(17246/21459)
Washington	2022	74	21931	76.53%	(16784/21931)	67.43%	(14787/21931)	73.56%	(8417/11442)
West Virginia	2022	22	8228	74.93%	(6165/8228)	72.57%	(5971/8228)	75.23%	(4128/5487)

Lung Cancer Screening Statistics, Pre-Exam Measures – Screening Exams performed in 2022

				Appropriateness of screening by USPSTF criteria		Smoking cessation offered		Smoking cessation offered among current smokers	
Aggregation Level	Year	# Facilities	# Screening Exams	Rate	Num/Den	Rate	Num/Den	Rate	Num/Den
Wisconsin	2022	130	29193	77.29%	(22563/29193)	70.19%	(20492/29193)	76.26%	(11764/15427)
Wyoming	2022	6	637	46.31%	(295/637)	73.47%	(468/637)	79.6%	(160/201)

Lung Cancer Screening Statistics, During Exam Measures – Screening Exams performed in 2022

			CTDIvol - Mean (mGy)					DLP - Mean (mGy-cm)				
Aggregation Level	# Facilities	# Screening Exams	Overall	underweight (BMI<18.5)	normal (BMI 18.5-24.9)	overweight (BMI 25.0-29.9)	obese (BMI 30 or greater)	Overall	underweight (BMI<18.5)	normal (BMI 18.5-24.9)	overweight (BMI 25.0-29.9)	obese (BMI 30 or greater)
Alabama	68	15600	2.85	1.95	2.27	2.86	3.36	98	73.91	84.46	96.2	110.99
Alaska	18	1832	2.66	1.87	1.92	3.02	2.89	86.25	70.97	72.28	79.65	106.14
Arizona	40	5804	2.67	1.91	2.31	2.67	3.09	83.86	62.65	70.69	80.61	96.14
Arkansas	33	8799	3.01	2.61	2.72	2.82	3.57	103.43	88.52	90.83	101.45	120.47
California	126	15022	3.33	2.21	2.47	3.09	4.22	104.85	71.27	84.19	100.44	130.6
Colorado	52	8768	3.33	3.02	2.56	3.28	4.15	92.14	58.96	73.94	90.43	114.18
Connecticut	40	14024	2.63	1.55	2.07	2.41	3.24	80.42	54.36	63.15	73.33	99.31
Delaware	18	3975	2.75	1.89	2.4	2.65	3.08	96.74	70.11	82.29	94.09	108.5
District of Columbia	5	448	2.37	1.44	1.77	2.7	2.6	67.48	49.78	53.61	65.67	82.05
Florida	218	42809	3.06	2.17	2.65	2.96	3.63	89.6	64.91	75.9	88.94	104.07
Georgia	116	24332	4.51	2.96	3.82	4.5	5.23	92.07	70.64	79.38	88.51	105.65
Hawaii	11	2034	3.19	3.53	2.28	3.52	3.9	92.19	61.96	70.13	87.12	126.77
Idaho	21	2736	3.1	1.7	2.09	2.56	4.14	107.97	63.37	74.98	91.34	141.2
Illinois	147	39467	3.29	3.41	2.69	3.04	3.89	92.94	69.11	79.1	88.92	106.94
Indiana	118	27663	3.57	2.11	2.62	3.29	4.42	97.04	61.39	75.61	88.14	116.24
Iowa	78	13957	2.87	1.61	2.25	2.55	3.47	88.99	57.54	65.61	80.48	107.94
Kansas	58	11749	3.01	1.89	2.11	2.82	3.44	91.04	79.46	61.72	78.22	104.18
Kentucky	110	43819	5	2.69	4.33	5.15	5.39	83.87	60.89	66.32	77.39	99.63
Louisiana	37	8805	3.03	3.42	2.58	2.84	3.54	92.53	59.49	74.81	85.4	113.39
Maine	29	10347	2.75	2.98	2.28	2.45	3.26	86.81	83.23	76.82	80.04	98.61
Maryland	45	8700	3.07	2.55	2.3	3.01	3.64	88.67	67.71	75.84	85.13	99.97
Massachusetts	67	45949	3.28	2.25	2.41	3.02	4.1	90.83	65.1	72.28	84.75	108.58
Michigan	121	52063	2.95	1.81	2.33	2.82	3.48	95.94	62.11	74.98	89.6	114.45
Minnesota	104	19619	2.66	1.59	1.95	2.44	3.14	85.11	53.47	64.36	77.12	102.94
Mississippi	40	8421	4.96	5.58	4.14	5.02	5.42	83.54	65.33	72.78	79.39	95.38
Missouri	73	25595	2.62	1.73	2.1	2.44	3.16	80.83	57.55	63.73	76.5	96.49

Lung Cancer Screening Statistics, During Exam Measures – Screening Exams performed in 2022

			CTDIvol - Mean (mGy)					DLP - Mean (mGy-cm)				
Aggregation Level	# Facilities	# Screening Exams	Overall	underweight (BMI<18.5)	normal (BMI 18.5-24.9)	overweight (BMI 25.0-29.9)	obese (BMI 30 or greater)	Overall	underweight (BMI<18.5)	normal (BMI 18.5-24.9)	overweight (BMI 25.0-29.9)	obese (BMI 30 or greater)
Montana	17	4241	2.36	1.76	1.91	2.64	2.64	76.97	68.39	66.13	77.54	86.93
Nebraska	25	4244	2.49	3.59	1.81	2.66	2.74	87.69	65.77	66.32	85.02	99.33
Nevada	16	3449	1.81	1.53	1.6	1.68	2.17	63.09	59.35	58.22	61.47	69.62
New Hampshire	26	7168	4.33	3.73	3.86	3.45	5.35	96.48	70.69	76.58	90.19	114.23
New Jersey	101	15918	2.91	2.12	2.4	2.81	3.21	92.08	68.16	77.7	88.44	105.75
New Mexico	12	2750	2.67	1.68	1.81	2.62	3.68	90.67	61.69	64.09	87.73	123.71
New York	199	62461	2.73	2.28	2.09	2.5	3.28	92.16	73.52	71.85	84.01	106.83
North Carolina	131	49829	3.68	6.3	2.62	3.17	4.51	99.86	71.35	79.09	91.66	121.52
North Dakota	13	4363	2.83	1.95	1.64	2.71	3.47	92.29	48.11	61.62	78.11	116.88
Ohio	178	62720	3.32	2.13	2.77	3.23	3.82	91.42	68.28	76.94	87.81	104.45
Oklahoma	25	4783	2.87	1.99	2.29	2.92	3.31	98.11	73.25	82.56	93.03	115.18
Oregon	48	11757	4.33	3.12	2.95	3.73	5.89	98.97	57.26	71.74	89.16	128.65
Pennsylvania	186	72583	3.18	2.35	2.51	3.01	3.75	92.91	66.69	74.88	87.85	109.02
Rhode Island	18	6394	2.76	1.68	2.1	2.37	3.21	80.49	62.68	71.36	74.91	85.8
South Carolina	62	24036	2.87	1.92	2.22	2.83	3.39	92.36	65.45	71.66	86.36	104.28
South Dakota	27	3867	3.16	1.64	1.94	2.76	4.15	107.34	60.6	80.65	87.46	137.19
Tennessee	85	23308	2.59	1.81	2.18	2.49	3.01	87.47	63.42	72.32	86.01	101.33
Texas	149	20271	3.14	2.71	2.56	3.02	3.73	100.13	74.01	82.92	98.25	116.35
Utah	8	1755	4.38	2.74	4.7	4.35	4.39	118.81	72.14	103.94	120.49	135.43
Vermont	10	4168	3.46	1.97	2.81	3.07	4.24	116.28	79.73	89.39	106.23	142.84
Virginia	101	36270	2.51	1.7	2.17	2.51	3.06	77.59	57.78	68.57	75.8	93.61
Washington	74	21931	2.4	1.55	1.96	2.25	2.89	75.6	49.38	57.64	70.49	92.37
West Virginia	22	8228	3	2.95	2.17	2.89	3.6	103.27	70.17	77.94	94.31	126.75
Wisconsin	130	29193	3.11	2.43	2.18	2.76	4	98.44	62.64	69.3	89.36	126.63
Wyoming	6	637	2.53	1.41	1.91	1.83	3.83	73.98	54.21	59.98	66.15	94.9

Lung Cancer Screening Statistics, Post-Exam Measures – Screening Exams performed in 2022

			Abnormal Interpretation Rate, baseline, annual, not indicated (%)		Abnormal Interpretation Rate, at baseline exam (%)		Abnormal Interpretation Rate, at annual exam (%)	
Aggregation Level	# Facilities	# Screening Exams	Rate	Num/Den	Rate	Num/Den	Rate	Num/Den
Alabama	68	15600	14.29%	(2230/15600)	16.35%	(1316/8050)	11.99%	(895/7465)
Alaska	18	1832	12.99%	(238/1832)	16.9%	(145/858)	9.24%	(89/963)
Arizona	40	5804	14.13%	(820/5804)	16.67%	(610/3660)	9.81%	(204/2080)
Arkansas	33	8799	16.04%	(1411/8799)	18.36%	(1095/5964)	11.14%	(311/2792)
California	126	15022	11.4%	(1712/15022)	12.72%	(900/7078)	10.19%	(783/7681)
Colorado	52	8768	14.67%	(1286/8768)	17.31%	(853/4927)	10.78%	(395/3664)
Connecticut	40	14024	13.23%	(1856/14024)	16.41%	(1046/6375)	10.48%	(798/7615)
Delaware	18	3975	13.48%	(536/3975)	15.52%	(319/2055)	11.18%	(214/1914)
District of Columbia	5	448	13.17%	(59/448)	14.39%	(38/264)	11.54%	(21/182)
Florida	218	42809	14%	(5994/42809)	16.61%	(3447/20747)	11.39%	(2388/20958)
Georgia	116	24332	12.4%	(3017/24332)	14.43%	(1782/12349)	10.29%	(1225/11905)
Hawaii	11	2034	10.47%	(213/2034)	11.61%	(150/1292)	7.33%	(45/614)
Idaho	21	2736	12.94%	(354/2736)	16.55%	(189/1142)	10.25%	(163/1591)
Illinois	147	39467	14.33%	(5655/39467)	17.29%	(2848/16469)	11.14%	(2323/20847)
Indiana	118	27663	12.65%	(3498/27663)	13.7%	(2131/15550)	11.06%	(1267/11456)
Iowa	78	13957	13.79%	(1924/13957)	18.46%	(838/4539)	11.28%	(819/7263)
Kansas	58	11749	13.08%	(1537/11749)	15.85%	(863/5444)	10.46%	(651/6224)
Kentucky	110	43819	13.69%	(5999/43819)	16.08%	(3767/23431)	10.94%	(2216/20264)
Louisiana	37	8805	12.5%	(1101/8805)	14.31%	(718/5017)	9.46%	(341/3604)
Maine	29	10347	12.58%	(1302/10347)	15.13%	(807/5334)	9.77%	(486/4975)
Maryland	45	8700	13.48%	(1173/8700)	17.25%	(714/4140)	10.03%	(454/4526)
Massachusetts	67	45949	11.46%	(5265/45949)	14.09%	(2075/14730)	9.99%	(2844/28459)
Michigan	121	52063	11.84%	(6165/52063)	14.18%	(3402/23999)	9.62%	(2504/26018)
Minnesota	104	19619	10.3%	(2020/19619)	12.67%	(1065/8406)	8.4%	(910/10832)

Lung Cancer Screening Statistics, Post-Exam Measures – Screening Exams performed in 2022

			Abnormal Interpretation Rate, baseline, annual, not indicated (%)		Abnormal Interpretation Rate, at baseline exam (%)		Abnormal Interpretation Rate, at annual exam (%)	
Aggregation Level	# Facilities	# Screening Exams	Rate	Num/Den	Rate	Num/Den	Rate	Num/Den
Mississippi	40	8421	13.5%	(1137/8421)	17.31%	(603/3484)	10.75%	(523/4867)
Missouri	73	25595	14.37%	(3678/25595)	15.59%	(1488/9545)	11.27%	(1080/9580)
Montana	17	4241	14.41%	(611/4241)	15.75%	(330/2095)	13.08%	(278/2126)
Nebraska	25	4244	12.3%	(522/4244)	17.73%	(261/1472)	9.37%	(259/2764)
Nevada	16	3449	13.95%	(481/3449)	15.96%	(297/1861)	11.58%	(151/1304)
New Hampshire	26	7168	12.97%	(930/7168)	15.74%	(472/2999)	11.02%	(457/4147)
New Jersey	101	15918	13.26%	(2111/15918)	15.5%	(1401/9039)	10.19%	(686/6733)
New Mexico	12	2750	12%	(330/2750)	16.38%	(87/531)	10.95%	(241/2200)
New York	199	62461	12.69%	(7929/62461)	15.39%	(3765/24461)	11.45%	(3627/31677)
North Carolina	131	49829	13.88%	(6918/49829)	16.16%	(3818/23621)	11.69%	(3002/25676)
North Dakota	13	4363	14.14%	(617/4363)	21.53%	(316/1468)	10.3%	(296/2874)
Ohio	178	62720	13.54%	(8495/62720)	15.53%	(3931/25320)	12%	(4375/36465)
Oklahoma	25	4783	10.35%	(495/4783)	13.08%	(321/2454)	7.22%	(167/2312)
Oregon	48	11757	12.31%	(1447/11757)	14.58%	(739/5069)	10.55%	(667/6324)
Pennsylvania	186	72583	14.06%	(10207/72583)	17.3%	(5862/33880)	10.8%	(3978/36848)
Rhode Island	18	6394	13.81%	(883/6394)	13.4%	(299/2231)	14.04%	(584/4159)
South Carolina	62	24036	14.37%	(3453/24036)	16.09%	(1887/11728)	12.49%	(1492/11942)
South Dakota	27	3867	9.39%	(363/3867)	11.51%	(207/1798)	7.52%	(155/2060)
Tennessee	85	23308	13.6%	(3169/23308)	16.69%	(1896/11362)	10.55%	(1241/11766)
Texas	149	20271	15%	(3040/20271)	16.64%	(1806/10854)	12.52%	(910/7268)
Utah	8	1755	13.5%	(237/1755)	10.79%	(63/584)	12.04%	(49/407)
Vermont	10	4168	14.18%	(591/4168)	18.29%	(286/1564)	11.72%	(304/2594)
Virginia	101	36270	13.5%	(4895/36270)	16.14%	(2819/17469)	10.95%	(2014/18399)
Washington	74	21931	12.95%	(2841/21931)	15.79%	(1582/10018)	10.56%	(1156/10943)

Lung Cancer Screening Statistics, Post-Exam Measures – Screening Exams performed in 2022

			Abnormal Interpretation Rate, baseline, annual, not indicated (%)		Abnormal Interpretation Rate, at baseline exam (%)		Abnormal Interpretation Rate, at annual exam (%)	
Aggregation Level	# Facilities	# Screening Exams	Rate	Num/Den	Rate	Num/Den	Rate	Num/Den
West Virginia	22	8228	14.28%	(1175/8228)	16.11%	(839/5208)	11.02%	(329/2986)
Wisconsin	130	29193	12.77%	(3728/29193)	14.64%	(1994/13623)	11.09%	(1688/15217)
Wyoming	6	637	17.27%	(110/637)	17.44%	(75/430)	16.92%	(34/201)