

2015 Kentucky Annual Megavoltage Radiation Services Report

January 1 through December 31, 2015

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Commonwealth Of Kentucky
Cabinet for Health and Family Services
Office of Health Policy

Kentucky 
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2015 KENTUCKY MEGAVOLTAGE RADIATION SERVICES REPORT

INTRODUCTION

The Office of Health Policy of the Cabinet for Health and Family Services announces the release of the 2015 Kentucky Megavoltage Radiation Services Report. The collection and reporting of these data are required by 902 KAR 20:008 and 900 KAR 6:125. The time period covered by this report is January 1, 2015 through December 31, 2015.

The report includes linear accelerator and other megavoltage radiation procedure utilization for all megavoltage programs licensed in Kentucky pursuant to KRS Chapter 216B. Megavoltage programs are hospital-based or located in freestanding facilities, though some freestanding programs are owned by hospitals. Note that megavoltage therapy services provided in the private office of a physician are exempt from Certificate of Need and licensure requirements, and thus are not included in this report.

The 2015 report contains a table showing linear accelerator and other megavoltage radiation utilization by Area Development District, county, and facility. There were 32 licensed megavoltage radiation therapy programs across Kentucky in 2015, located in 22 counties. Sixteen programs, with a total of 34 units, were hospital-based. Sixteen programs, with a total of 22 units, were freestanding. There were over 195,000 radiation procedures performed with these units. Additionally, there were over 23,000 simulations performed by CT machines, linear accelerators, or other devices. Due to changes in technology, linear accelerator simulations have been declining statewide in favor of CT and other devices.

This report covers megavoltage radiation and other x-ray technology used for both simulations and treatment. Megavoltage means more than one million volts, with two or more megavolts commonly used to generate radiation in the treatment of cancer. The high voltage is used to accelerate electrons in the linear accelerator, producing photons that are used in a high energy x-ray beam for radiotherapy. A procedure, as counted in this report, refers to the radiation treatment of a single anatomical site. An anatomical site is different from recording the number of fields involved and/or the number of patients.

In planning for radiation treatment, several technologies may be used to simulate, or determine, the exact location, shape, and size of the tumor to be treated. Linear accelerators, as well as Computed Tomography (CT), are used for simulations. For linear accelerator simulations, we only count those simulations that are performed in the gate of the machine. A CT is a scan of computer-processed

combinations of many x-ray images, taken from different angles to produce cross-sectional (tomographic) images of specific areas of the body.

This report becomes the most recent official data on Megavoltage Radiation Services utilization published by the Cabinet for Health and Family Services. Questions or comments should be directed to Beth Tutt Morris at (502) 564-9592 ext: 3156 or e-mail:

BethA.Morris@ky.gov. For additional copies of this report, see the following web site

<http://chfs.ky.gov/ohp/dhppd/dataresgal.htm> or request copies by submitting a check in the amount of \$20.00 per copy. Checks should be made payable to the Kentucky State Treasurer and submitted to:

Cabinet for Health and Family Services
Office of Health Policy
275 East Main Street 4 W-E
Frankfort, KY 40621



County and Area Development District Reference

ADD	ADD NAME	COUNTY	ADD	ADD NAME	COUNTY				
1	PURCHASE	BALLARD	4	BARREN RIVER	SIMPSON				
		CALLOWAY			WARREN				
		CARLISLE			METCALFE				
		FULTON			MONROE				
		2	PENNYRILE	GRAVES	5	LINCOLN TRAIL	BRECKINRIDGE		
				HICKMAN			GRAYSON		
				MARSHALL			HARDIN		
				MCCRACKEN			LARUE		
				3	GREEN RIVER	CALDWELL	6	KIPDA	MARION
						CHRISTIAN			MEADE
						CRITTENDEN			NELSON
						HOPKINS			WASHINGTON
LIVINGSTON	BULLITT								
LYON	HENRY								
MUHLENBERG	JEFFERSON								
TODD	OLDHAM								
TRIGG	SHELBY								
4	BARREN RIVER	DAVIESS	7			NORTHERN KY			SPENCER
		HANCOCK							TRIMBLE
		HENDERSON							BOONE
		MCLEAN		CAMPBELL					
		5	BARREN RIVER	OHIO	8	BUFFALO TRACE	CARROLL		
				UNION			GALLATIN		
				WEBSTER			GRANT		
				ALLEN			KENTON		
				BARREN			OWEN		
				BUTLER			PENDLETON		
				EDMONSON			BRACKEN		
				HART			FLEMING		
LOGAN	LEWIS								



County and Area Development District Reference

ADD	ADD NAME	COUNTY	ADD	ADD NAME	COUNTY
8	BUFFALO TRACE	MASON ROBERTSON	13	CUMBERLAND VALLEY	LAUREL ROCKCASTLE
9	GATEWAY	BATH MENIFEE MONTGOMERY MORGAN ROWAN	14	LAKE CUMBERLAND	WHITLEY ADAIR CASEY CLINTON CUMBERLAND
10	FIVCO	BOYD CARTER ELLIOTT GREENUP LAWRENCE			GREEN MCCREARY PULASKI RUSSELL TAYLOR WAYNE
11	BIG SANDY	FLOYD JOHNSON MAGOFFIN MARTIN PIKE	15	BLUEGRASS	ANDERSON BOURBON BOYLE CLARK ESTILL FAYETTE FRANKLIN GARRARD HARRISON JESSAMINE LINCOLN MADISON MERCER NICHOLAS POWELL SCOTT WOODFORD
12	KY RIVER	BREATHITT KNOTT LEE LESLIE LETCHER OWSLEY PERRY WOLFE			
13	CUMBERLAND VALLEY	BELL CLAY HARLAN JACKSON KNOX			

Table 1
Megavoltage Radiation



By ADD and Facility

2015 KENTUCKY ANNUAL MEGAVOLTAGE RADIATION SERVICES REPORT

Table 1 - Megavoltage Radiation Therapy by ADD and County

ADD	County	Service Type	Facility	Linear Acc Units	Linear Acc Procedures	Linear Acc Simulations	CT Simulations	Other Device Simulations	Total Simulations
1 PURCHASE									
CALLOWAY									
	Hospital		Murray Calloway County Hospital	1	4,466	0	0	415	415
				1	4,466	0	0	415	415
MCCRACKEN									
	Hospital		Baptist Health Paducah	2	11,688	205	576	0	781
				2	11,688	205	576	0	781
			ADD 1 Totals:	3	16,154	205	576	415	1,196
2 PENNYRILE									
CHRISTIAN									
	Hospital		Jennie Stuart Medical Center	1	4,720	34	201	40	275
				1	4,720	34	201	40	275
HOPKINS									
	Freestanding		Merle M Mahr Cancer Center	2	5,318	400	219	72	691
				2	5,318	400	219	72	691
			ADD 2 Totals:	3	10,038	434	420	112	966
3 GREEN RIVER									
DAVIESS									
	Freestanding		Owensboro Health Radiation Therapy-Parrish	2	10,322	434	458	0	892
				2	10,322	434	458	0	892
			ADD 3 Totals:	2	10,322	434	458	0	892
4 BARREN RIVER									
BARREN									
	Freestanding		The Barren River Regional Cancer Center	1	3,467	193	226	137	556
				1	3,467	193	226	137	556
WARREN									
	Hospital		The Medical Center At Bowling Green	2	8,227	200	500	207	907
				2	8,227	200	500	207	907
			ADD 4 Totals:	3	11,694	393	726	344	1,463

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ADD	County	Service Type	Facility	Linear Acc Units	Linear Acc Procedures	Linear Acc Simulations	CT Simulations	Other Device Simulations	Total Simulations
5 LINCOLN TRAIL									
HARDIN									
		Hospital	Hardin Memorial Hospital	2	6,395	331	390	80	801
				2	6,395	331	390	80	801
NELSON									
		Freestanding	Flaget Cancer Center	1	1,957	102	99	0	201
				1	1,957	102	99	0	201
		ADD 5 Totals:		3	8,352	433	489	80	1,002
6 KIPDA									
JEFFERSON									
		Freestanding	Baptist Eastpoint Radiation Oncology	1	2,486	146	107	0	253
		Hospital	Baptist Health Louisville	3	11,033	649	625	0	1,274
		Freestanding	Cyberknife Radiosurgery Center	1	229	4	229	0	233
		Freestanding	Louisville Radiation Oncology	2	5,040	0	550	0	550
		Freestanding	Norton Cancer Institute Radiation Center Northeast	1	3,085	0	83	0	83
		Hospital	Norton Hsp/Kosair Chdrn Hsp/Norton Healthcare Pav	2	10,618	0	809	0	809
		Hospital	Norton Women's and Kosair Children's Hospital	2	11,509	0	752	0	752
		Hospital	University Of Louisville Hospital	5	1,223	26	750	0	776
				17	45,223	825	3,905	0	4,730
		ADD 6 Totals:		17	45,223	825	3,905	0	4,730
7 NORTHERN KY									
CAMPBELL									
		Hospital	St Elizabeth Ft Thomas	1	2,235	220	0	0	220
				1	2,235	220	0	0	220
KENTON									
		Hospital	St Elizabeth Edgewood	3	7,007	506	595	0	1,101
				3	7,007	506	595	0	1,101
		ADD 7 Totals:		4	9,242	726	595	0	1,321

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ADD	County	Service Type	Facility	Linear Acc Units	Linear Acc Procedures	Linear Acc Simulations	CT Simulations	Other Device Simulations	Total Simulations
8 BUFFALO TRACE									
MASON									
		Freestanding	Meadowview Cancer Treatment Center	2	2,691	0	0	150	150
				2	2,691	0	0	150	150
ADD 8 Totals:				2	2,691	0	0	150	150
9 GATEWAY									
ROWAN									
		Freestanding	UK Clinic Morehead Cancer Treatment Center	2	3,877	147	127	0	274
				2	3,877	147	127	0	274
ADD 9 Totals:				2	3,877	147	127	0	274
10 FIVCO									
BOYD									
		Freestanding	Tri State Regional Cancer Center	2	7,955	18	467	0	485
				2	7,955	18	467	0	485
GREENUP									
		Freestanding	Ashland Bellefonte Cancer Center	1	3,363	0	160	0	160
				1	3,363	0	160	0	160
ADD 10 Totals:				3	11,318	18	627	0	645
11 BIG SANDY									
PIKE									
		Hospital	Pikeville Medical Center	2	6,372	0	371	0	371
				2	6,372	0	371	0	371
ADD 11 Totals:				2	6,372	0	371	0	371
12 KY RIVER									
PERRY									
		Hospital	Hazard ARH Regional Medical Center	1	4,812	496	228	268	992
				1	4,812	496	228	268	992
ADD 12 Totals:				1	4,812	496	228	268	992

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ADD	County	Service Type	Facility	Linear Acc Units	Linear Acc Procedures	Linear Acc Simulations	CT Simulations	Other Device Simulations	Total Simulations
14 LAKE CUMBERLAND									
PULASKI									
	Hospital		Lake Cumberland Regional Hospital	1	7,570	598	270	0	868
				1	7,570	598	270	0	868
			ADD 14 Totals:	1	7,570	598	270	0	868
15 BLUEGRASS									
BOYLE									
	Freestanding		Danville Radiation Therapy Center	1	4,970	0	414	0	414
				1	4,970	0	414	0	414
FAYETTE									
	Hospital		Baptist Health Lexington	2	6,791	2,208	838	55	3,101
	Freestanding		St Joseph Radiation Oncology Blazer Parkway	1	3,533	218	0	0	218
	Freestanding		St Joseph Radiation Oncology Bob O Link	1	2,571	182	0	311	493
	Hospital		University of Kentucky Hospital	4	25,929	2,189	1,629	0	3,818
				8	38,824	4,797	2,467	366	7,630
FRANKLIN									
	Freestanding		Bluegrass Radiation Oncology Center	1	3,603	0	279	0	279
				1	3,603	0	279	0	279
			ADD 15 Totals:	10	47,397	4,797	3,160	366	8,323
			State Total:	56	195,062	9,506	11,952	1,735	23,193

Megavoltage Radiation



Comments Page

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Comments Section

Facility	Comments
Flaget Cancer Center	CT, MR and PET scans for simulation and fusion are performed at our affiliate hospital; the department does not own the scanners. There is, however, a vacant CT vault in the department for a planned CT simulator.
Jennie Stuart Medical Center	Simulations on other devices include: Ultrasound simulations, MRI simulations for fusion with CT, PET/CT simulations.
Murray Calloway County Hospital	Conventional Sim
St Joseph Radiation Oncology Bob O Link	Conventional Simulator
UK Clinic Morehead Cancer Treatment Center	1 Linear Accelerator 1 CT Sim



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