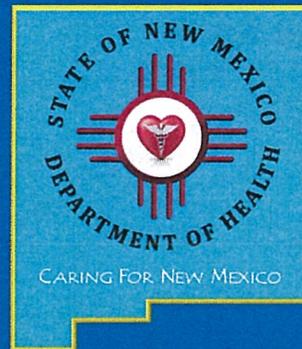


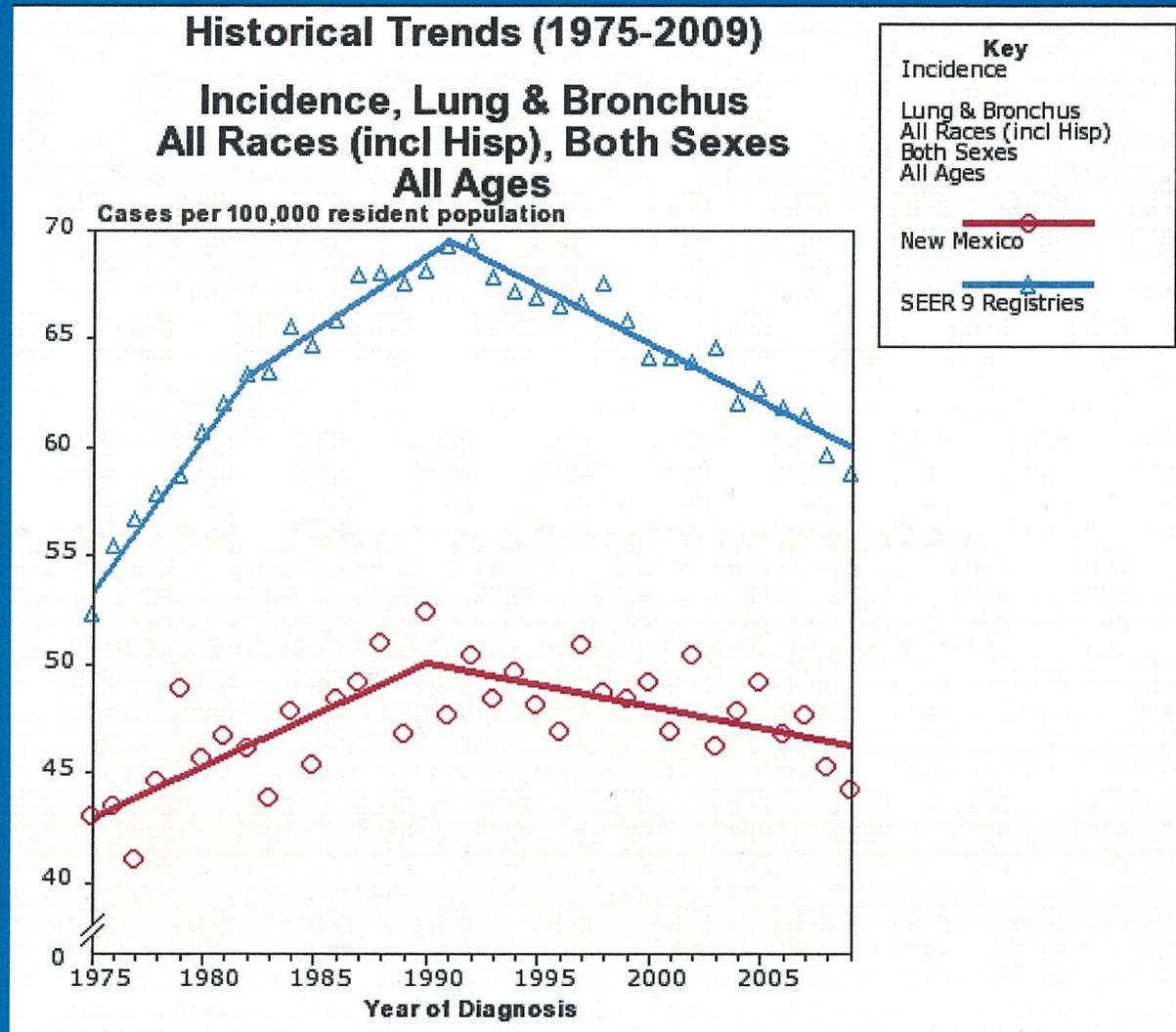
Update on NM Cancer Statistics and Oncology Workforce



Michael Landen, MD, MPH
Acting State Epidemiologist

August 3, 2012

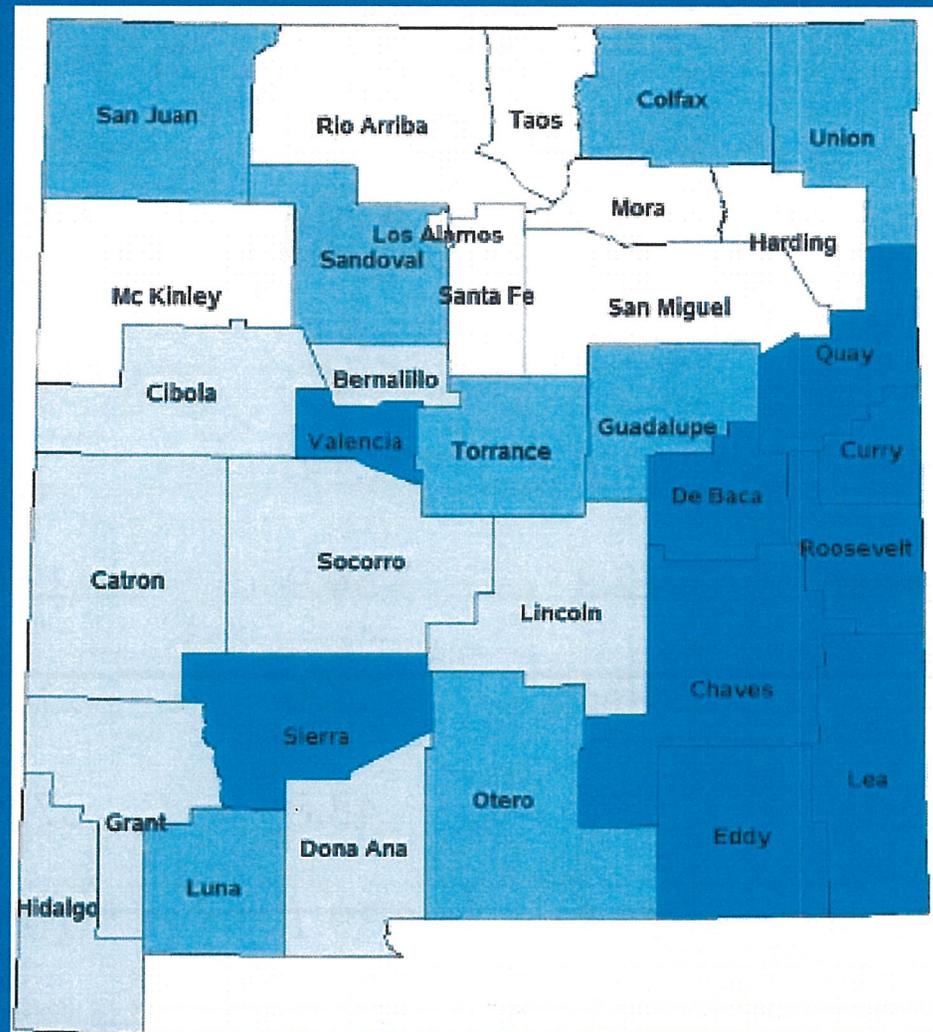
Rates of New Cases of Lung Cancer Over Time: US vs. NM



Lung Cancer in NM: New Cases (2005-2009)

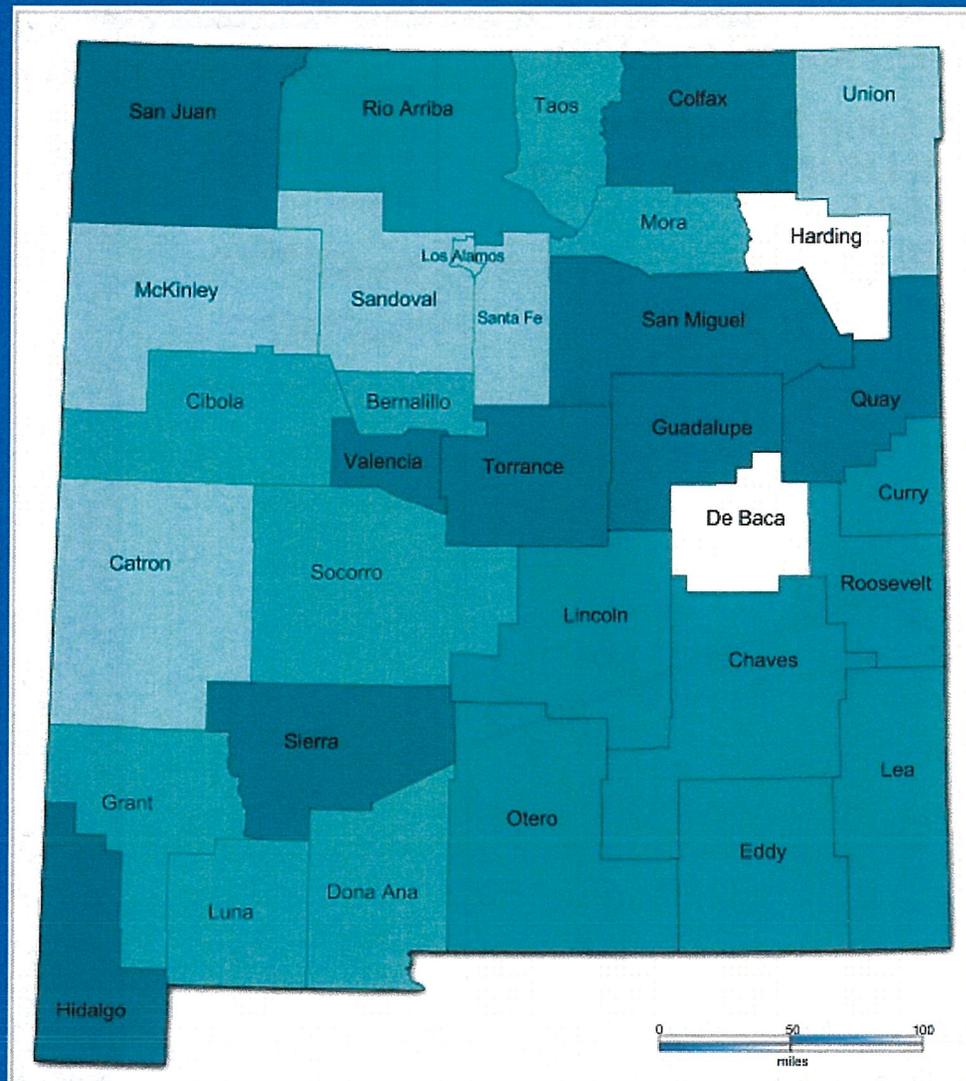
Race/Ethnicity	Age-adjusted rate		Average annual number	
	Men	Women	Men	Women
American Indian/Alaska Native	18.3	8.8	9	6
Asian/Pacific Islander	35.6	31.0	3	4
Black/African American	72.2	34.9	13	7
Hispanic	40.1	27.6	114	97
White	67.1	48.8	372	323
All races combined	55.3	39.1	510	436

Rates of New Lung Cancer Cases in NM by County (2000-2009)



Quartiles 20.2-40.4 40.5-45.2 45.3-57.5 57.5-76.8

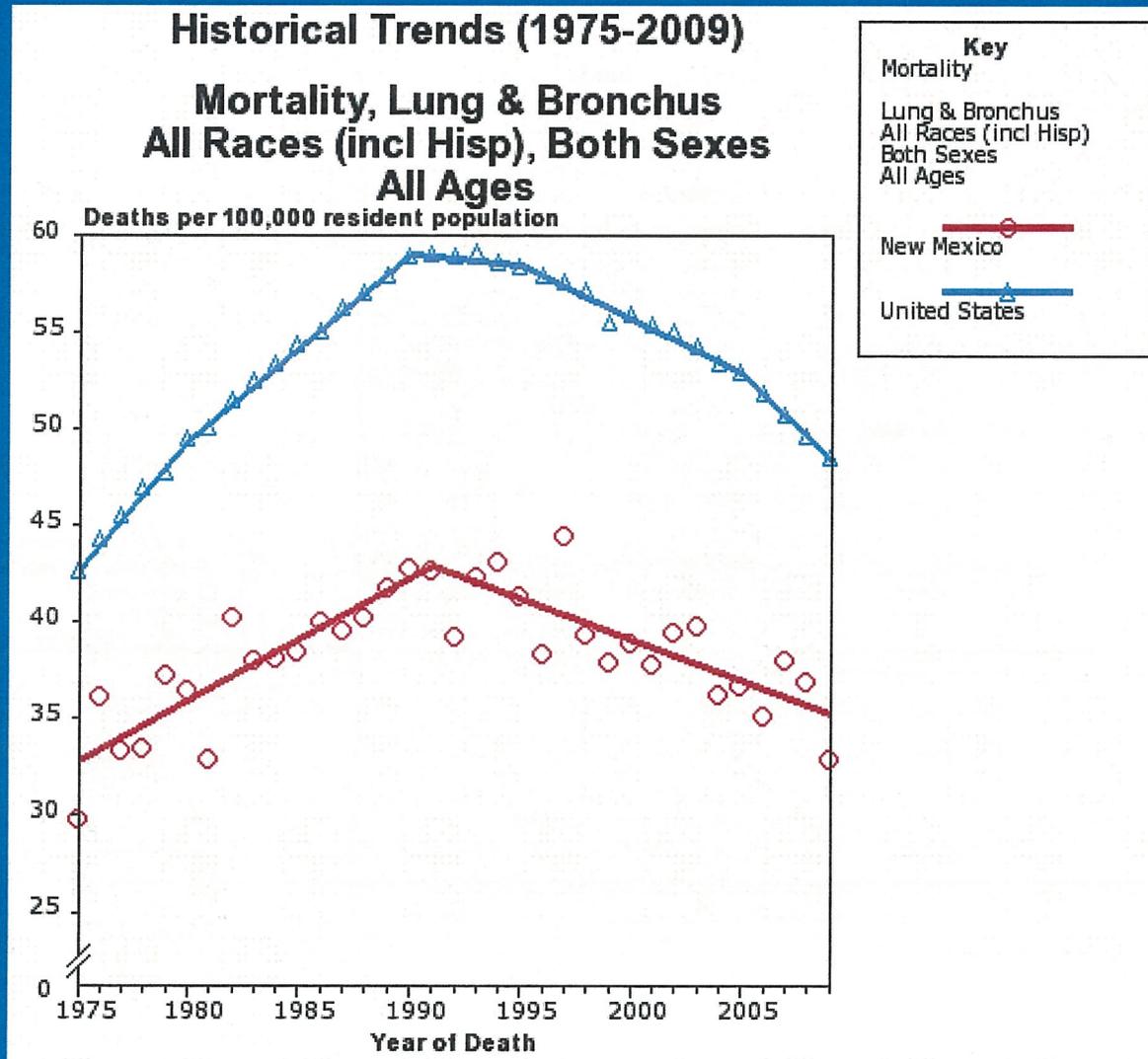
Adult Smoking Rates by County, NM 2008-2010



Map Legend

- ** Insuff. Data (sample size < 50)
- 0- 25% Quartile (counties with the lowest percentages)
- 25- 50% Quartile
- 50- 75% Quartile
- 75-100% Quartile (counties with the highest percentages)

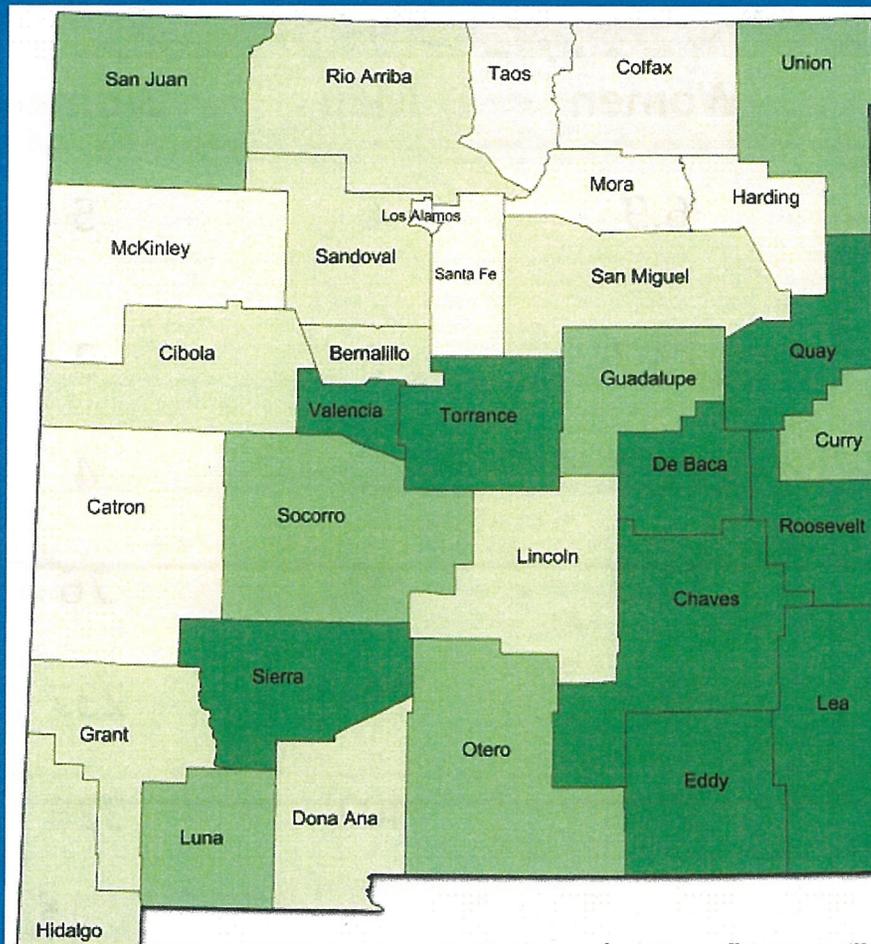
Rates of Lung Cancer Deaths Over Time: US vs. NM



Lung Cancer in NM: Deaths (2007-2011)

Race/Ethnicity	Age-adjusted rate		Average annual number	
	Men	Women	Men	Women
American Indian/Alaska Native	9.2	6.9	6	5
Asian/Pacific Islander	28.0	23.7	3	3
Black/African American	77.7	22.7	12	4
Hispanic	34.0	21.3	99	76
White	47.8	33.4	281	237
All races combined	41.5	27.6	402	326

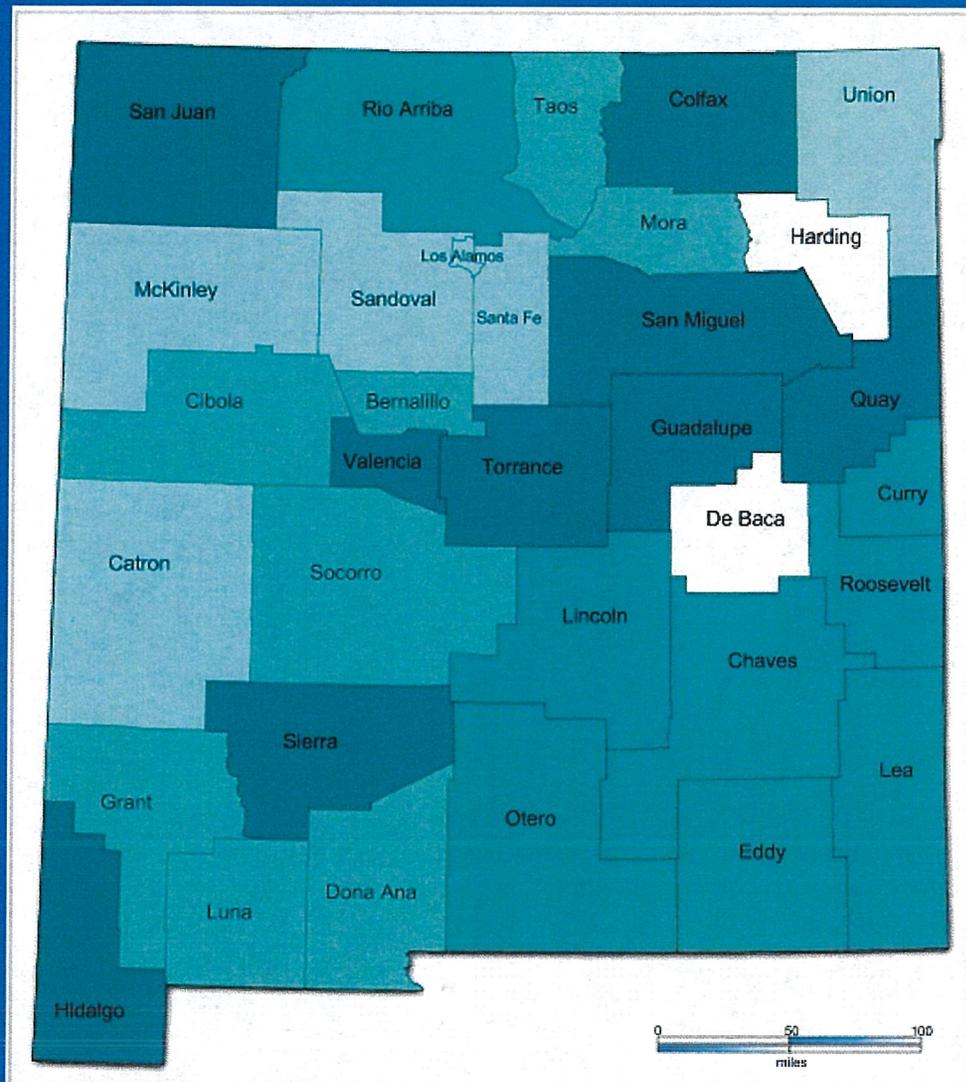
Rates of Lung Cancer Deaths in NM by County (2002-2011)



Map Legend

-  ** Insuff. Data (count=0, or count=1-3 and population <20)
-  0- 25% Quartile (areas with the lowest rates)
-  25- 50% Quartile
-  50- 75% Quartile
-  75-100% Quartile (areas with the highest rates)

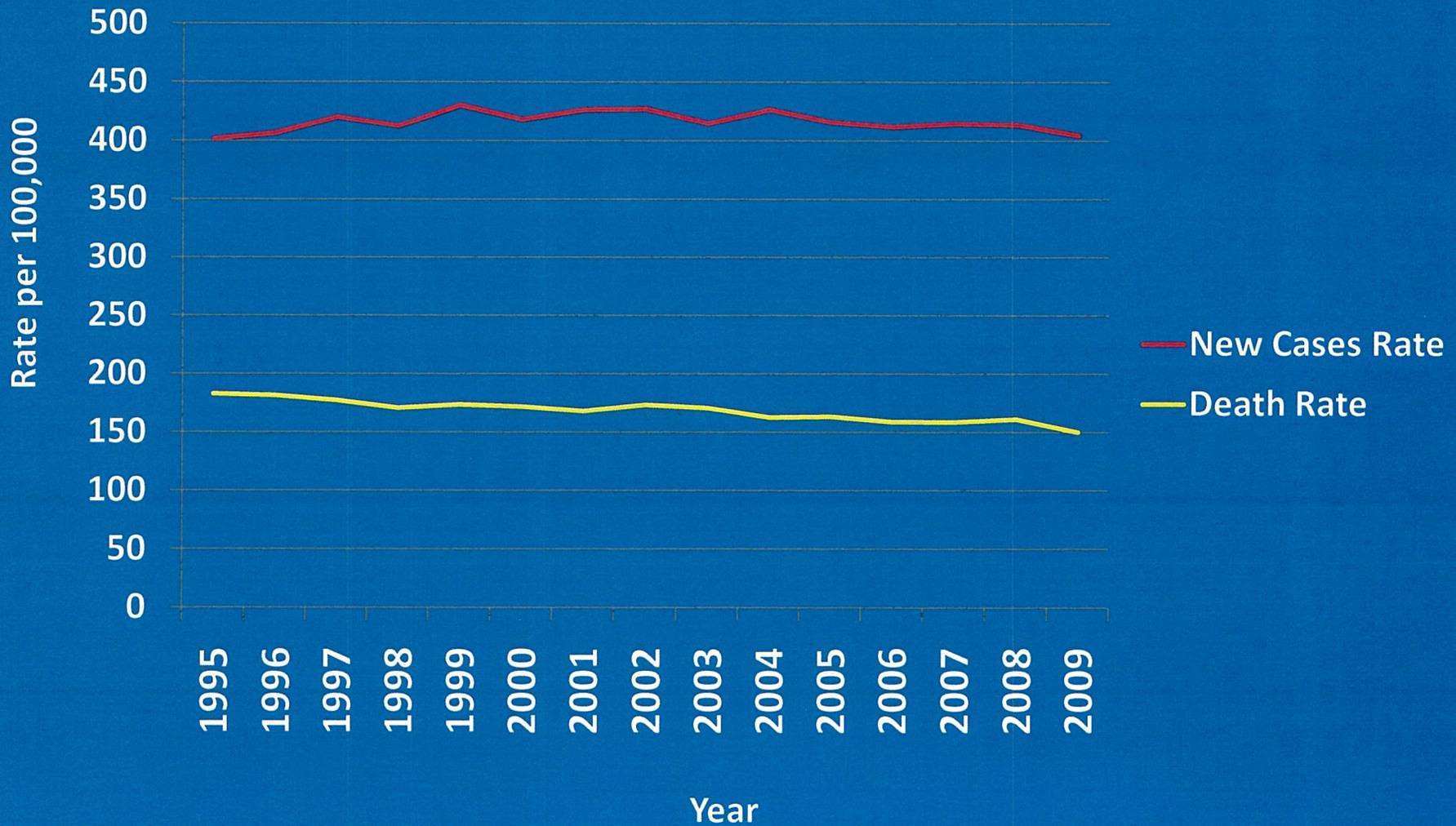
Adult Smoking Rates by County, NM 2008-2010



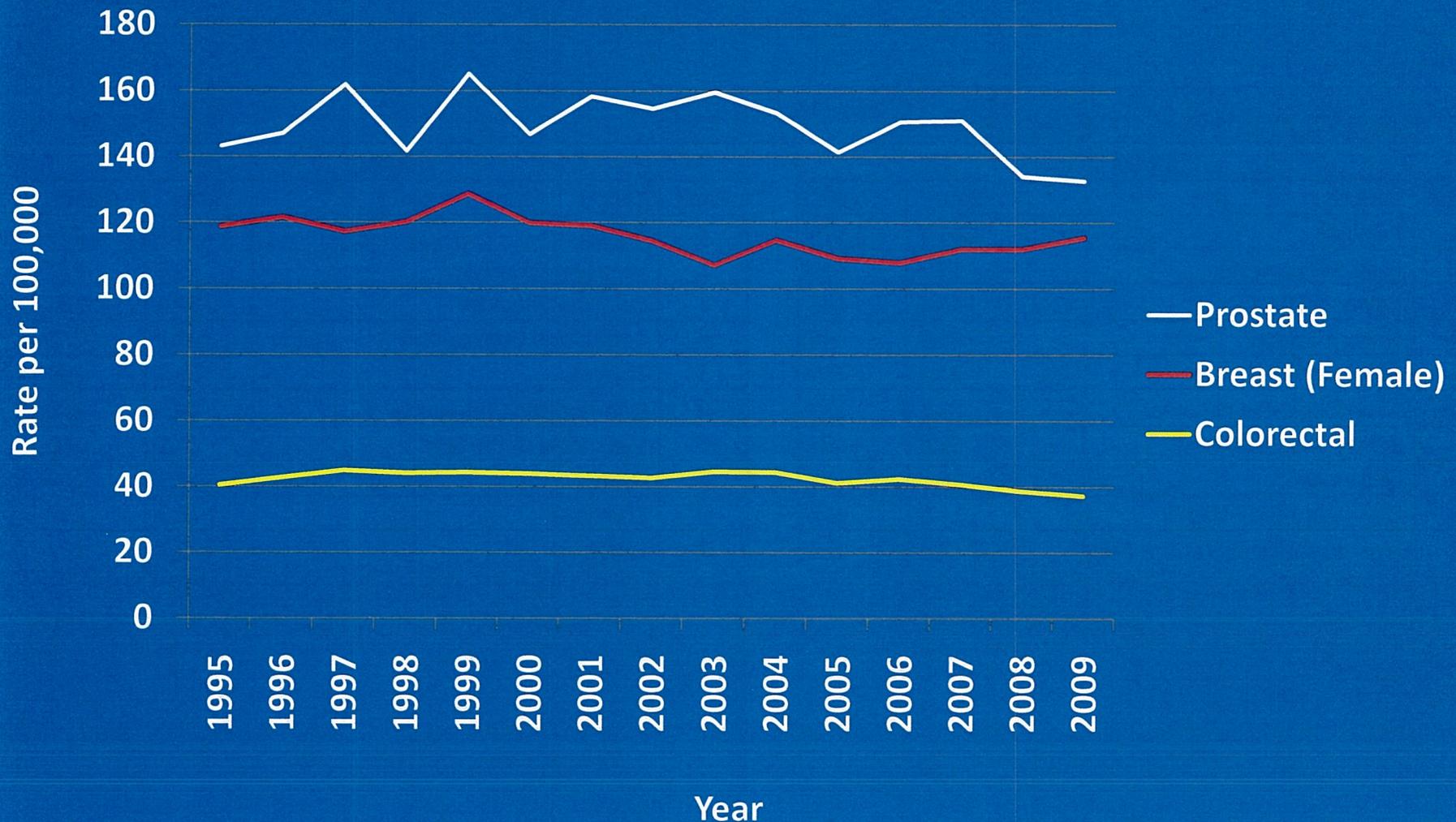
Map Legend

- ** Insuff. Data (sample size < 50)
- 0- 25% Quartile (counties with the lowest percentages)
- 25- 50% Quartile
- 50- 75% Quartile
- 75-100% Quartile (counties with the highest percentages)

Rates of all new cancer cases and cancer deaths in NM (1995-2009)



Trends in Rates of New Cancer Cases, NM (1995-2009)



Top 10 Cancers in NM: New Cases (2005-2009)

New Mexico Residents							
<i>Males</i>				<i>Females</i>			
Rank	Cancer	Rate	Count	Rank	Cancer	Rate	Count
1	Prostate	141.6	1,376	1	Breast	111.4	1,209
2	Lung and Bronchus	55.7	513	2	Lung and Bronchus	39.3	439
3	Colon and Rectum	46.4	436	3	Colon and Rectum	34.6	384
4	Urinary Bladder	26.9	245	4	Corpus and Uterus, NOS	21.0	232
5	Melanoma of the Skin	24.4	232	5	Thyroid	19.8	199
6	Non-Hodgkin Lymphoma	19.1	179	6	Non-Hodgkin Lymphoma	14.5	158
7	Kidney and Renal Pelvis	17.4	167	7	Melanoma of the Skin	14.1	150
8	Leukemia	16.2	151	8	Ovary	11.9	130
9	Oral Cavity and Pharynx	14.5	142	9	Leukemia	10.3	112
10	Liver and Intrahepatic Bile Duct	13.0	129	10	Pancreas	9.8	109

Top 10 Cancers in NM: New Cases by Race/Ethnicity (2005-2009)

American Indian							
<i>Males</i>				<i>Females</i>			
Rank	Cancer	Rate	Count	Rank	Cancer	Rate	Count
1	Prostate	86.3	44	1	Breast	60.7	49
2	Colon and Rectum	33.9	22	2	Colon and Rectum	26.1	20
3	Kidney and Renal Pelvis	30.2	19	3	Corpus and Uterus, NOS	21.0	18
4	Lung and Bronchus	18.3	9	4	Kidney and Renal Pelvis	16.1	13
5	Stomach	15.9	8	5	Ovary	12.4	10
6	Liver and Intrahepatic Bile Duct	14.3	8	6	Thyroid	12.1	11
7	Pancreas	13.9	7	7	Pancreas	12.1	8
8	Non-Hodgkin Lymphoma	9.9	6	8	Liver and Intrahepatic Bile Duct	10.8	8
9	Urinary Bladder	8.7	4	9	Non-Hodgkin Lymphoma	9.8	7
10	Leukemia	6.7	5	10	Gallbladder and Other Biliary	9.8	7

Top 10 Cancers in NM: New Cases by Race/Ethnicity (2005-2009)

Black							
Males				Females			
Rank	Cancer	Rate	Count	Rank	Cancer	Rate	Count
1	Prostate	108.1	23	1	Breast	70.3	15
2	Lung and Bronchus	72.2	13	2	Lung and Bronchus	34.9	7
3	Colon and Rectum	21.1	5	3	Colon and Rectum	31.4	6
4	Kidney and Renal Pelvis	16.1	3	4	Non-Hodgkin Lymphoma	11.3	2
5	Non-Hodgkin Lymphoma	13.5	3	5	Pancreas	10.7	2
6	Leukemia	11.0	2	6	Thyroid	10.4	2
7	Stomach	9.6	2	7	Corpus and Uterus, NOS	9.3	2
8	Pancreas	9.2	2	8	Ovary	7.5	1
9	Urinary Bladder	8.3	2	9	Myeloma	6.5	1
10	Liver and Intrahepatic Bile Duct	7.9	2	10	Stomach	5.3	1

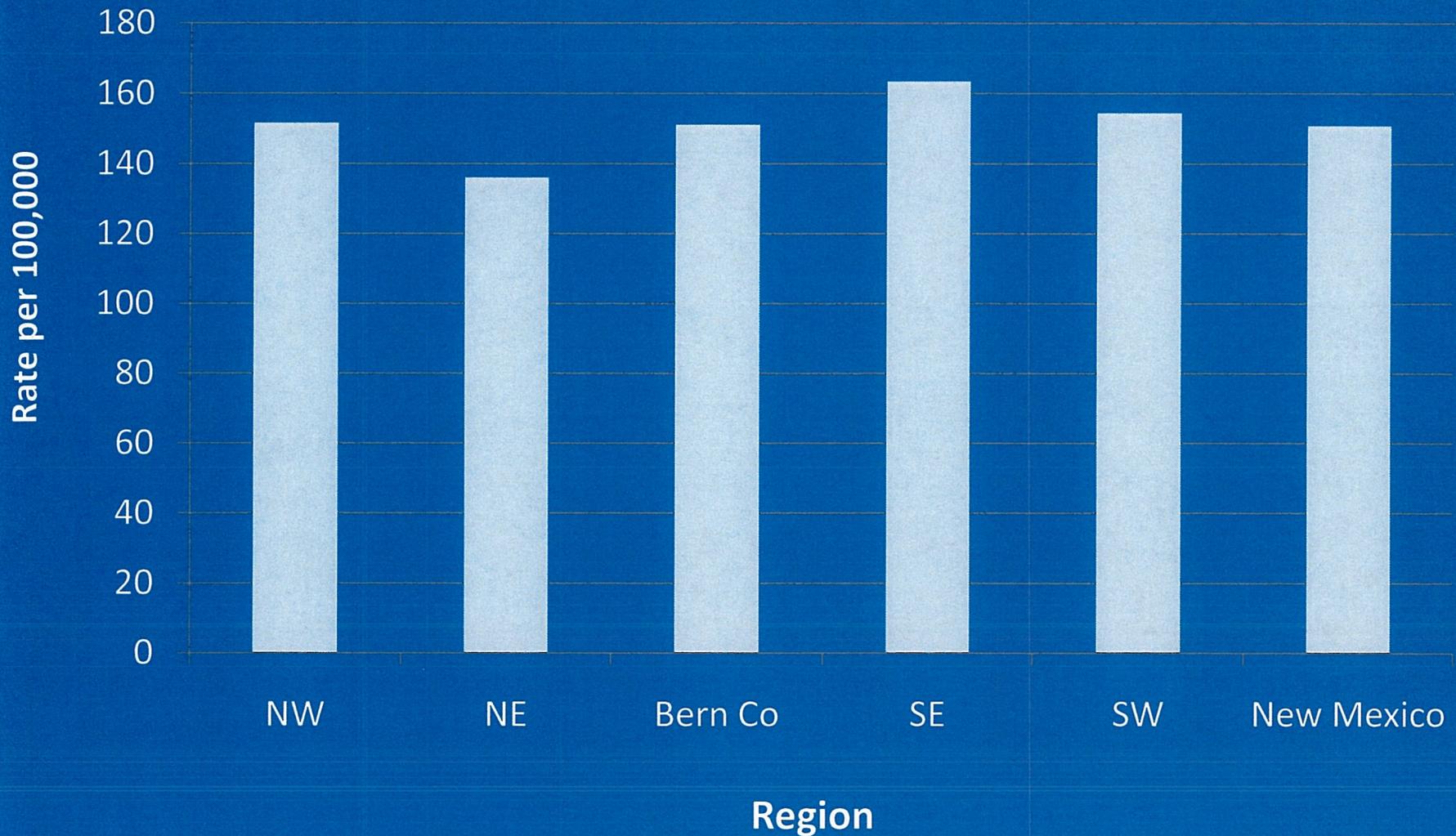
Top 10 Cancers in NM: New Cases by Race/Ethnicity (2005-2009)

Hispanic							
<i>Males</i>				<i>Females</i>			
Rank	Cancer	Rate	Count	Rank	Cancer	Rate	Count
1	Prostate	124.8	379	1	Breast	93.1	340
2	Colon and Rectum	47.4	145	2	Colon and Rectum	35.5	126
3	Lung and Bronchus	40.1	114	3	Lung and Bronchus	27.6	97
4	Liver and Intrahepatic Bile Duct	20.1	66	4	Thyroid	18.9	72
5	Kidney and Renal Pelvis	19.3	62	5	Corpus and Uterus, NOS	17.7	65
6	Urinary Bladder	15.7	46	6	Non-Hodgkin Lymphoma	12.8	46
7	Non-Hodgkin Lymphoma	15.0	47	7	Kidney and Renal Pelvis	10.8	40
8	Stomach	15.0	44	8	Pancreas	10.4	36
9	Pancreas	12.6	37	9	Ovary	10.1	37
10	Leukemia	11.6	40	10	Cervix Uteri	9.5	35

Top 10 Cancers in NM: New Cases by Race/Ethnicity (2005-2009)

Non-Hispanic White							
<i>Males</i>				<i>Females</i>			
Rank	Cancer	Rate	Count	Rank	Cancer	Rate	Count
1	Prostate	155.0	903	1	Breast	129.5	784
2	Lung and Bronchus	67.1	372	2	Lung and Bronchus	48.8	323
3	Colon and Rectum	47.0	256	3	Colon and Rectum	34.6	225
4	Melanoma of the Skin	38.0	205	4	Corpus and Uterus, NOS	22.7	141
5	Urinary Bladder	34.7	189	5	Thyroid	22.5	109
6	Non-Hodgkin Lymphoma	22.7	118	6	Melanoma of the Skin	22.1	124
7	Leukemia	18.7	96	7	Non-Hodgkin Lymphoma	15.8	97
8	Oral Cavity and Pharynx	18.0	101	8	Ovary	13.0	78
9	Kidney and Renal Pelvis	14.5	80	9	Leukemia	11.6	68
10	Pancreas	12.2	67	10	Pancreas	9.3	61

NM Cancer Death Rates by Health Region (2007-2011)



Summary of NM Cancer Data

- Predictably, lung cancer cases and deaths in NM are generally highest in areas of the state with higher smoking rates
- Rates of overall new cancer cases in NM are about the same as 15 years ago while rates of overall cancer deaths have been declining
- Risks for different cancers vary by race, ethnicity and sex in our state

Cancer Care (Oncology) and Workforce Issues Are Complex

- Wide range of treatment options
- Number of medical specialists involved in treating each cancer patient
- Ongoing medical monitoring required after acute treatment is complete
- Psycho-social effects of cancer must be addressed
- Important role of family caregivers
- Clinical trials and experimental treatments

National Estimates of Oncology Physician Supply Through 2020



AMERICAN SOCIETY OF CLINICAL ONCOLOGY

Oncology Physician Supply Forecasts 2005-2020

	2005	2010	2015	2020	% Change
Total Physicians	10,422	11,225	11,905	12,547	20%
U.S. Pop	295,507,134	308,935,581	322,365,787	335,804,546	14%
# / 100K Pop	3.53	3.63	3.69	3.74	6%

Estimated Distribution of Oncologists by NM Health Region +/- Bordering Cities

NM Health Region	Number in the NM Population (2011)	Number of oncologists*		Number of oncologists per 100,000 NM pop	
		NM Only	NM plus border cities	NM Only	NM plus border cities
Northwest	438,470	10	14	2.28	3.19
Northeast	292,928	14	N/A	4.78	N/A
Bernalillo Cnty	665,483	38	N/A	5.71	N/A
Southeast	264,547	7	11	2.65	4.16
Southwest	403,743	25	26	6.19	6.44
NM Total	2,065,171	74	83	3.58	4.02

*Medical Oncologists, Hematologists & Radiation Oncologists currently listed as participating with NMBCBS in NM, El Paso, Odessa, Lubbock and Durango

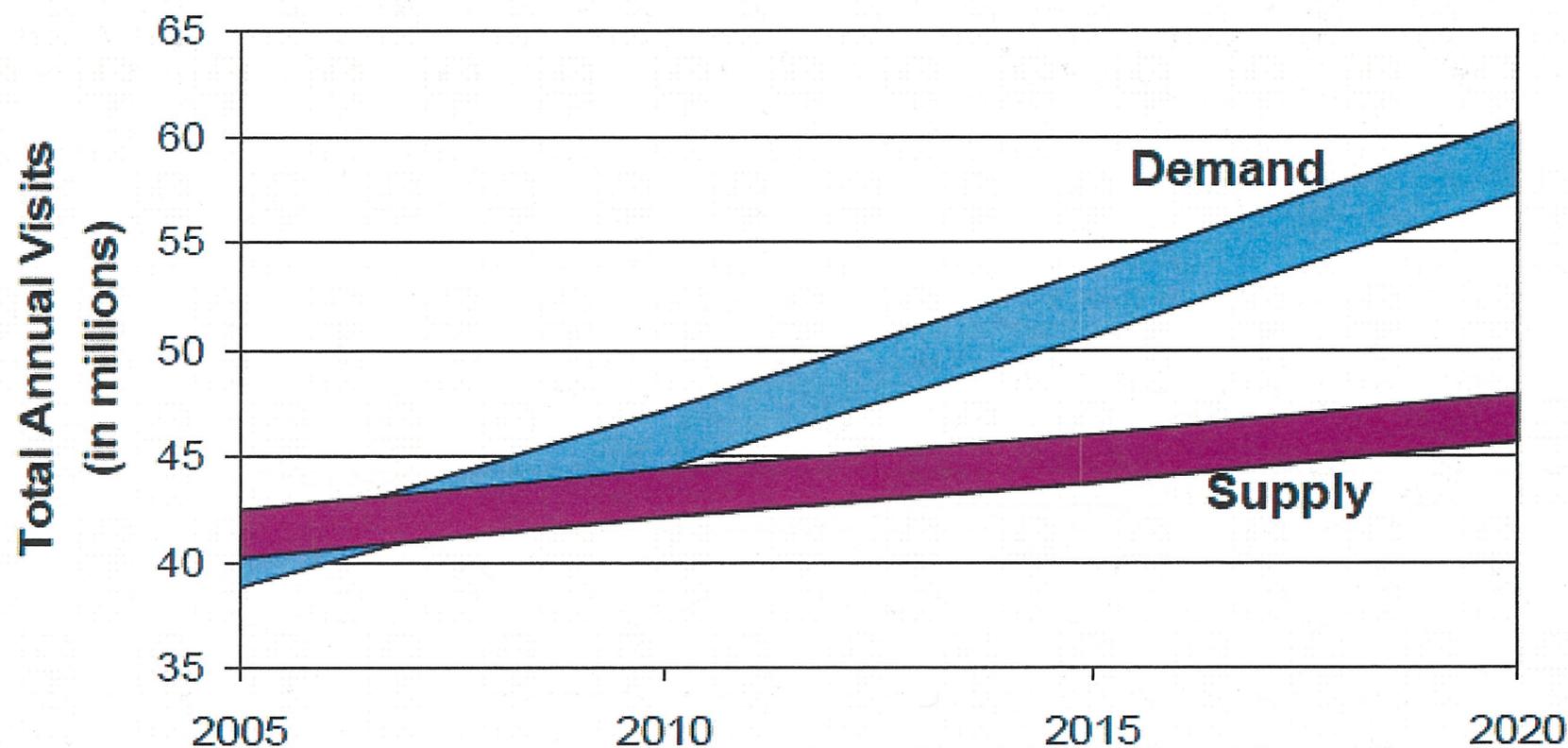
NM Oncology Workforce Data Caveats

- Very challenging to find a complete and up-to-date source of practicing oncologists for state and regions
- Current online listing for all NMBCBS plans was used assuming that most physicians would participate with at least one NMBCBS plan
- Physicians who practiced in more than one health region were counted in each of those regions
- Total number of oncologists in the state is lower than the sum in the five regions since physicians practicing in more than one region were only counted once at the state level

American Soc. Clinical Oncology (ASCO) Statement to US Senate HELP Committee

- Many workforce studies focus on the overall physician to population ratio, but this only tells part of the story for a specialty like oncology that primarily provides care to one segment of the population, the growing population of people aged 65 or older.
- Additionally, the increasing number of cancer survivors will contribute to an increase in need and demand for oncologists.

ASCO Projected National Shortage of Oncologists for Cancer Patient Visits



ASCO: Potential options for addressing shortage

- Increase # of practicing oncology physicians
 - Increase oncology fellowship training positions
 - Delay retirement of existing oncologists
- Increase use of other practitioners
 - Primary care physicians
 - NPs and PAs
 - Hospice care providers
- Productivity gains
 - Electronic Medical Records
 - Reducing paperwork requirements

A Conclusion from the ASCO Workforce Study (2008)

The challenge of the workforce shortage requires a multi-faceted approach because no single effort will come close to addressing the significant imbalance between expected demand and projected capacity to deliver oncology care.

Summary: NM Oncology Workforce

- Based on limited data sources, the range of estimated oncology physicians per NM's total population (3.58 to 4.02) is essentially the same as the national estimate (3.65)
- The estimated number of oncology physicians per NM health region population ranges from 2.28 to 6.44
- There are fewer oncology physicians per population in the two most rural health regions (NW and SE)
- There are multiple factors contributing to a projected nationwide shortfall of oncologists that will require prompt and broad action at national and state levels

Acknowledgement

- This presentation was developed by:
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