

Profile of Myeloma Cases in Arizona



Data from the Arizona Cancer Registry

The Arizona Cancer Registry collects, manages, and analyzes information on the incidence, survival and mortality of persons diagnosed with cancer. Arizona's hospitals, clinics, and doctors submit reports of the more than 27,000 new cancer cases annually. The central cancer registry merges these case reports to accurately count each case and generate the trends and demographic profiles about the various types of cancer.

*Myeloma*¹ is one of the many types of cancer tracked by the central registry. This data sheet characterizes Arizona residents diagnosed with multiple myeloma (comprising 91% of myeloma) and two other less common forms of this plasma cell malignancy. Data are based upon the case reports submitted to the central cancer registry as of February 2016.

Data highlights for myeloma

- The count of newly diagnosed myeloma cases in 2013 totaled 361 (Table 1).

Gender

- For every 4 cases among males there are 3 cases among females.
- The rate of new cases has averaged 5.7 cases per 100,000 males, and 3.7 cases per 100,000 females during the past 19 years (Figure 1). The state's incidence rates of newly diagnosed cases are relatively stable across time.

Age

- Incidence of myeloma increases with age: 66% of Arizona cases are diagnosed in persons age 65 or older (Figure 2). However, adults of younger ages also are diagnosed with myeloma.

Table 1. Count of newly diagnosed cases of myeloma in Arizona residents

Diagnosis Year	Male	Female	Total
1995	95	83	178
1996	93	93	186
1997	121	92	213
1998	120	95	215
1999	112	97	209
2000	87	74	161
2001	148	96	244
2002	139	92	231
2003	139	81	220
2004	153	126	279
2005	154	118	272
2006	138	140	278
2007	173	141	314
2008	184	108	292
2009	196	132	328
2010	223	161	384
2011	220	182	402
2012	216	175	391
2013	201	160	361
Total	2,912	2,246	5,158

Figure 1. AZ Myeloma, age-adjusted Incidence rate (per 100,000 population)

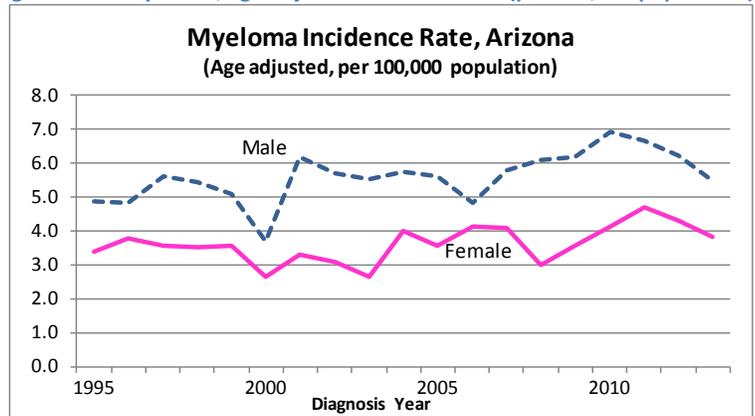
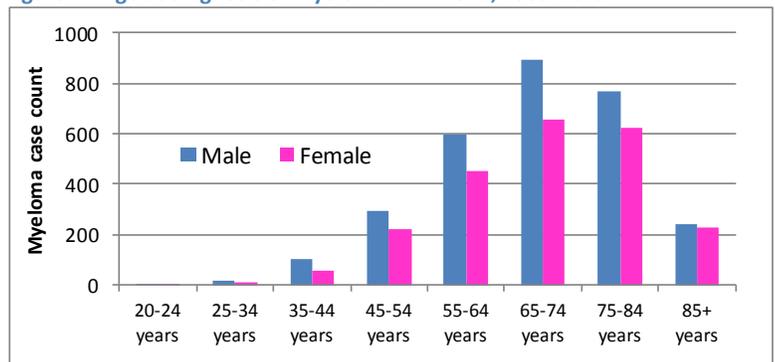


Figure 2. Age at diagnosis of myeloma in Arizona, 1995-2013



¹ ICD-O-3 histology code 9731 (plasmacytoma), 9732 (multiple myeloma), or 9734 (extramedullary plasmacytoma).

Race and ethnic groups

- Myeloma occurs among all race and ethnic groups (Table 2). The state's race composition is mostly White, and most of the diagnosed cases also occur among this population.

- But, the incidence rate of myeloma is highest among Arizona's African American and American Indian population (Figure 3).

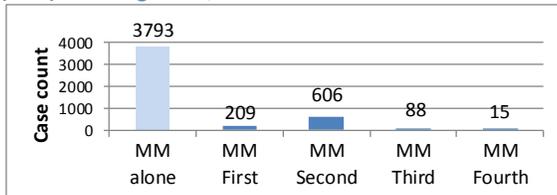
Geographic distribution

- Myeloma cases are reported from all 15 of Arizona's counties (Figure 4). The highest count each year is reported from Maricopa County (where most of the population lives).

Other cancers

- One in seven persons with Multiple Myeloma (ICD-O 9732) were diagnosed with another cancer (Figure 5). The other cancer may occur before or after a diagnosis of multiple myeloma.

Figure 5. Sequence (order) in which multiple myeloma (MM) was diagnosed, 1995-2013



Mortality

- In the year 2014 there were 224 Arizonans who died of multiple myeloma (Table 3).

Table 3. Count of Arizonan residents with multiple myeloma (C90.0) listed as the underlying cause of death

Year	Count of Deaths
2010	196
2011	205
2012	206
2013	233
2014	224

Survival

- Adjusted for age, the 3-year relative survival rate was 52% for multiple myeloma cases diagnosed between 2007-2012.

More cancer data

- <http://www.azdhs.gov/phs/phstats/acr/index.htm>
- <http://seer.cancer.gov/canques/incidence.html>
- <http://statecancerprofiles.cancer.gov>
- <http://faststats.naaccr.org>

Table 2. Sum of diagnosed cases by race and ethnic group, 1995-2013

Race	Male	Female	Total
White, Non Hispanic	2,238	1,697	3,935
White, Hispanic	341	295	636
Black	159	103	262
American Indian	120	125	245
Asian/Pacific Islander	24	18	42
Other	30	8	38
Total	2,912	2,246	5,158

Figure 3. Rate of myeloma by race and ethnic group, Arizona, 1995-2013

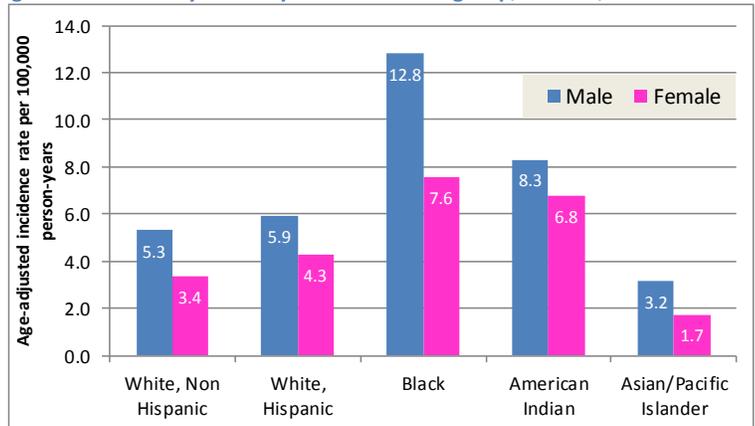
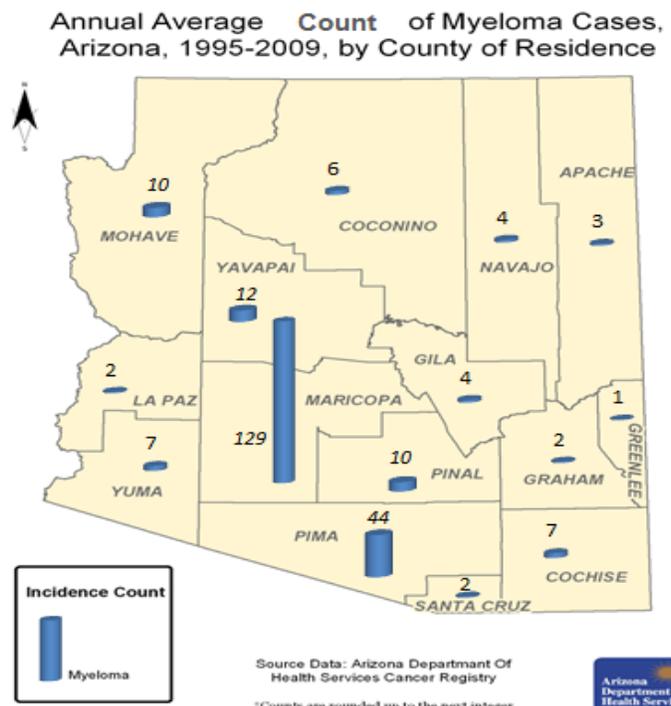


Figure 4. Yearly count of newly diagnosed myeloma cases



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