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2012 Aerospace Medical Certification Statistical Handbook

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Final Report



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16. Abstract <p>Introduction. The annual Aerospace Medical Certification Statistical Handbook reports descriptive characteristics of all active U.S. civil aviation airmen and the aviation medical examiners (AMEs) that perform the required medical examinations. The 2012 annual handbook documents the most recent and most widely relevant data on active civil aviation airmen and AMEs.</p> <p>Methods. Medical certification records from 2007-2012 were selected from the Document Imaging Workflow System (DIWS), which is the FAA medical certification database. All medical data were abstracted from the most recent medical examinations, with the exception of medical conditions, which were historical and current. Only those with a non-expired medical certificate remained in the dataset. AME records were selected from the Aviation Medical Examiner Information System (AMEIS). The current status of each AME was determined for each year of the study period from 2010-2012, retaining only those with an active status.</p> <p>Airman variables include age, issued and effective medical classes, height, weight, BMI, gender, select medical conditions, special issuances, and FAA region of residence. AME variables include AME type, age, gender, medical specialty, pilot license status, senior examiner status, and region.</p> <p>Results. <i>Airmen:</i> As of December 31, 2012, there were 581,850 medically certified airmen age 16 and older, and 32.7%, 21.6%, and 45.7% were issued a Class 1, Class 2, and Class 3 medical certificate, respectively. Across all medical classes, the average age was 42.9 years, and 93.5% of the airmen were male. The mean BMI for both females and males was 24.1 and 27.2, respectively. Seven percent of issued certificates required a special issuance. The most commonly reported medical condition was hypertension with medication, at 11.3%.</p> <p><i>Aviation medical examiners:</i> Of the 3,427 active AMEs, 93.8% were civilian, 2.0% federal, and 4.2% military. Nearly 50% reported their medical specialty as family practice. Their average age was 60.2 years; the majority (52.6%) did not hold a pilot license, and 88.7% were male.</p> <p>Summary. This report contains widely requested data on the active U.S. civil airman population. This report is updated annually and is used by the aerospace community, including FAA leadership, aerospace researchers, advocacy groups, legislative staff, and the general public.</p>					
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2012 Aerospace Medical Certification Statistical Handbook

INTRODUCTION

The annual Aerospace Medical Certification Statistical Handbook reports descriptive characteristics of all active U.S. civil aviation airmen and the aviation medical examiners (AMEs) that perform the required medical examinations. The 2012 annual handbook documents the most recent and most widely relevant data on active civil aviation airmen and AMEs.

METHODS

Medical certification records from 2007-2012 were selected from the Document Imaging Workflow System (DIWS), which is the FAA medical certification database. All medical data were abstracted from the most recent medical examinations, with the exception of medical conditions, which were historical and current. Only those with a non-expired medical certificate remained in the dataset.

AME records were selected from the Aviation Medical Examiner Information System (AMEIS). The current status of each AME was determined for each year of the study period from 2010-2012, retaining only those with an active status.

Airman variables include age, issued and effective medical classes, height, weight, body mass index (BMI), gender, select medical conditions, special issuances, and FAA region of residence. AME variables include AME type, age, gender, medical specialty, pilot license status, senior examiner status, and region.

RESULTS

Airmen: As of December 31, 2012, there were 581,850 medically certified airmen age 16 and older, and 32.7%, 21.6%, and 45.7% were issued a Class 1, Class 2, and Class 3 medical certificate, respectively. Across all medical classes, the average age was 42.9 years, and 93.5% of the airmen were male. The mean BMI for both females and males was 24.1 and 27.2, respectively. Seven percent of issued certificates required a special issuance. The most commonly reported medical condition was hypertension with medication, at 11.3%.

Aviation medical examiners: Of the 3,427 active AMEs, 93.8% were civilian, 2.0% federal, and 4.2% military. Nearly 50% reported their medical specialty as family practice. Their average age was 60.2 years; the majority (52.6%) did not hold a pilot license, and 88.7% were male.

SUMMARY

This report contains widely requested data on the active U.S. civil airman population. This report is updated annually and is used by the aerospace community, including FAA leadership, aerospace researchers, advocacy groups, legislative staff, and the general public.

SECTION I. AVIATION MEDICAL EXAMINERS

This section characterizes the aviation medical examiners during 2012, with some comparative data from 2010 and 2011. All analyses represent data through December 31, 2012 unless otherwise noted. Data may slightly fluctuate annually from systematic changes and corrections to the records.

An aviation medical examiner (AME) is a physician authorized by the Federal Aviation Administration (FAA) to perform airmen physical examinations for issuance of

FAA medical certificates. These physicians are designated according to the geographical distribution of airmen. There are also military facilities (installations) designated to perform FAA airmen examinations of military personnel for issuance of second- and third-class certificates.

AME seminars are held in each region and at Oklahoma City's Civil Aerospace Medical Institute to acquaint these physicians with the regulations and procedures governing the issuance of FAA medical certificates.

Table 1. FAA Aviation Medical Examiners by Year and Type

AME Type	2010 Number (Percent of Total)	2011 Number (Percent of Total)	2012 Number (Percent of Total)
Civilian	3,399 (93.1)	3,272 (94.2)	3,215 (93.8)
Federal	85 (2.3)	76 (2.2)	68 (2.0)
Military	166 (4.6)	124 (3.6)	144 (4.2)
Total	3,650	3,472	3,427

Table 2. Designated FAA Aviation Medical Examiners by Year and Region

Region	Newly Appointed Number (Percent of Total by Year)			All Active Number (Percent of Total by Year)		
	2010	2011	2012	2010	2011	2012
Alaskan	3 (2.0)	1 (0.8)	1 (0.6)	68 (1.9)	65 (1.9)	63 (1.8)
Central	10 (6.8)	2 (1.7)	8 (5.1)	184 (5.0)	174 (5.0)	177 (5.2)
Eastern	8 (5.4)	2 (1.7)	10 (6.4)	390 (10.7)	378 (10.9)	371 (10.8)
Federal/Official	4 (2.7)	2 (1.7)	4 (2.6)	110 (3.0)	97 (2.8)	95 (2.8)
Great Lakes	13 (8.8)	13 (10.7)	15 (9.6)	514 (14.1)	491 (14.1)	475 (13.9)
International	21 (14.3)	25 (20.7)	16 (10.3)	314 (8.6)	319 (9.2)	322 (9.4)
Military	27 (18.4)	26 (21.5)	44 (28.2)	158 (4.3)	115 (3.3)	134 (3.9)
New England	7 (4.8)	2 (1.7)	8 (5.1)	118 (3.2)	117 (3.4)	116 (3.4)
Northwest Mountain	11 (7.5)	12 (9.9)	11 (7.1)	359 (9.8)	345 (9.9)	334 (9.8)
Southern	17 (11.6)	14 (11.6)	17 (10.9)	713 (19.5)	679 (19.6)	667 (19.5)
Southwest	16 (10.9)	20 (16.5)	14 (9.0)	422 (11.6)	412 (11.9)	396 (11.6)
Western-Pacific	10 (6.8)	2 (1.7)	8 (5.1)	300 (8.2)	280 (8.1)	277 (8.1)
Total	147	121	156	3,650	3,472	3,427

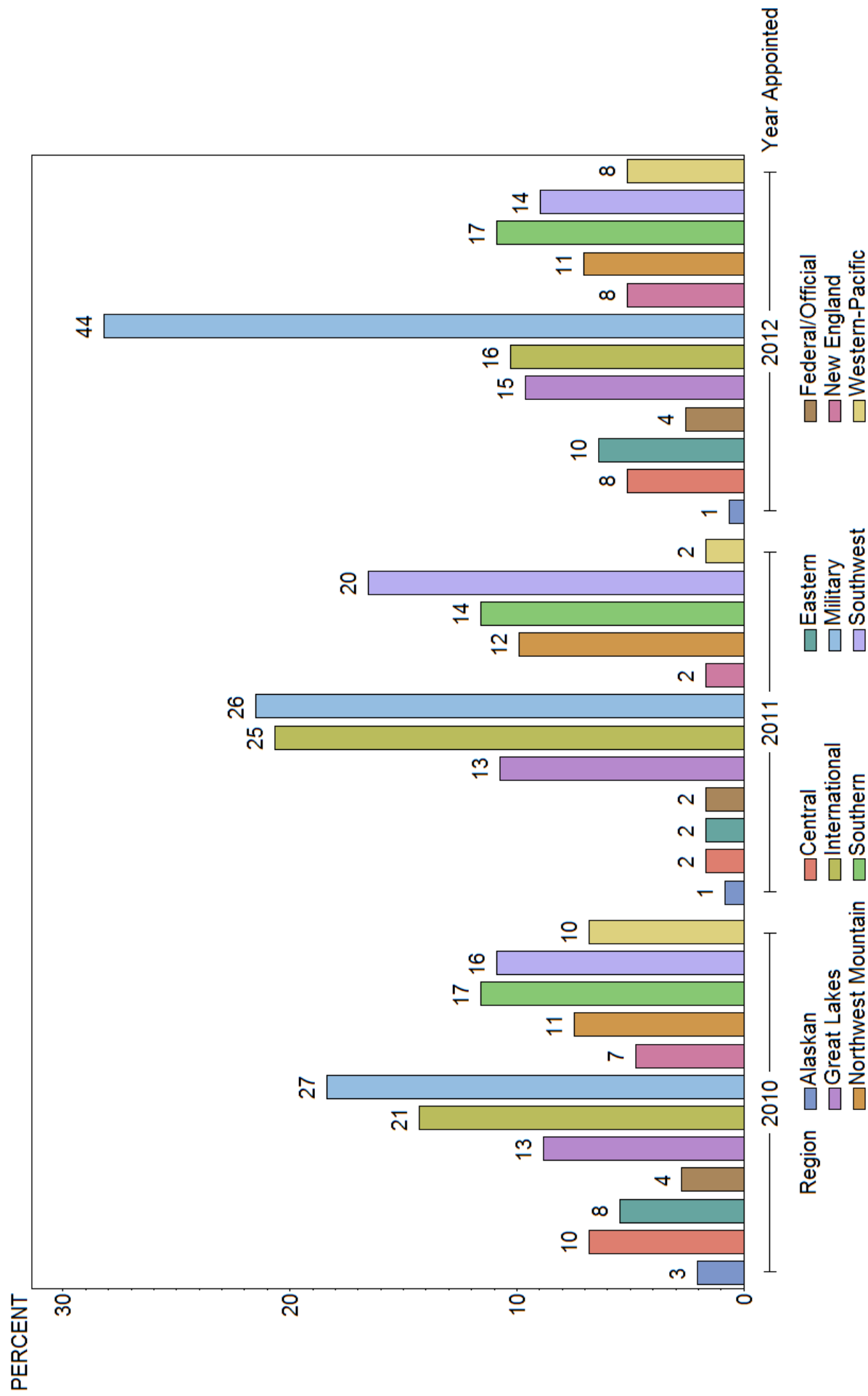


Figure 1. Distribution of Newly Appointed FAA Aviation Medical Examiners by Region and Year

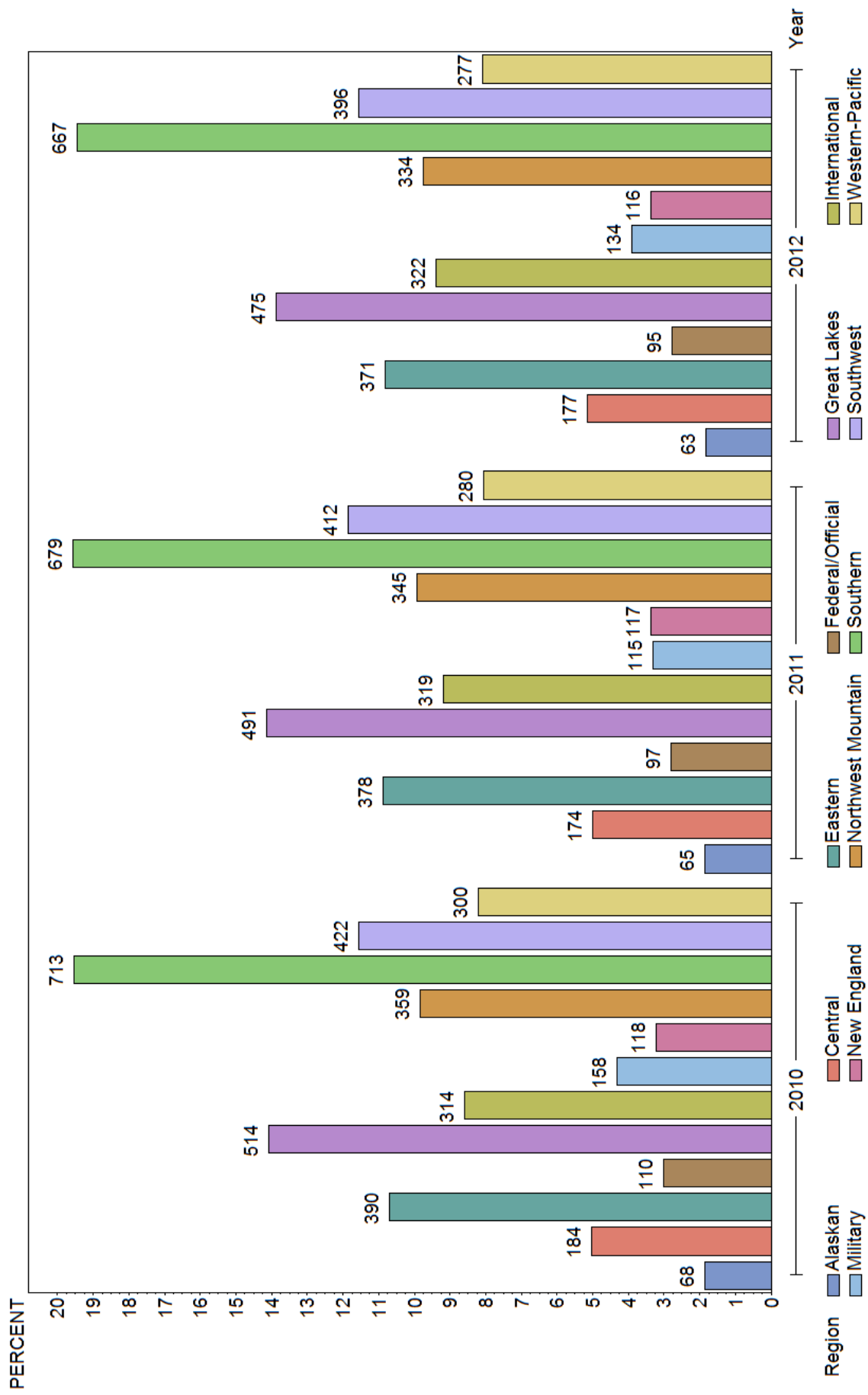


Figure 2. Distribution of Active FAA Aviation Medical Examiners by Region and Year

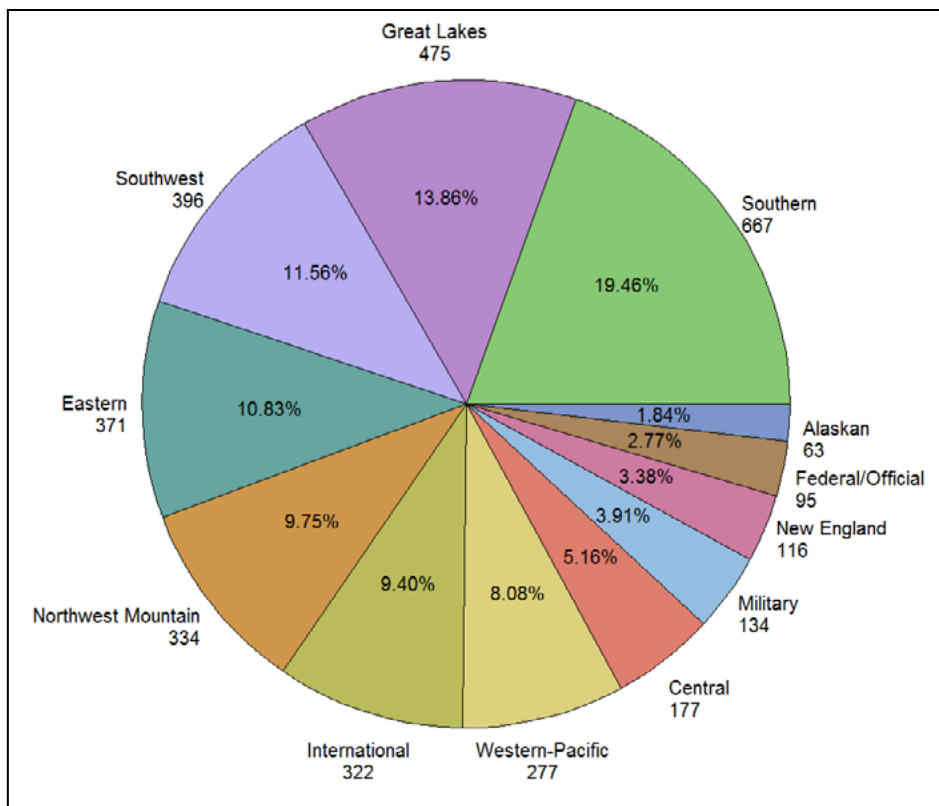


Figure 3. Distribution of Active FAA Aviation Medical Examiners by Region

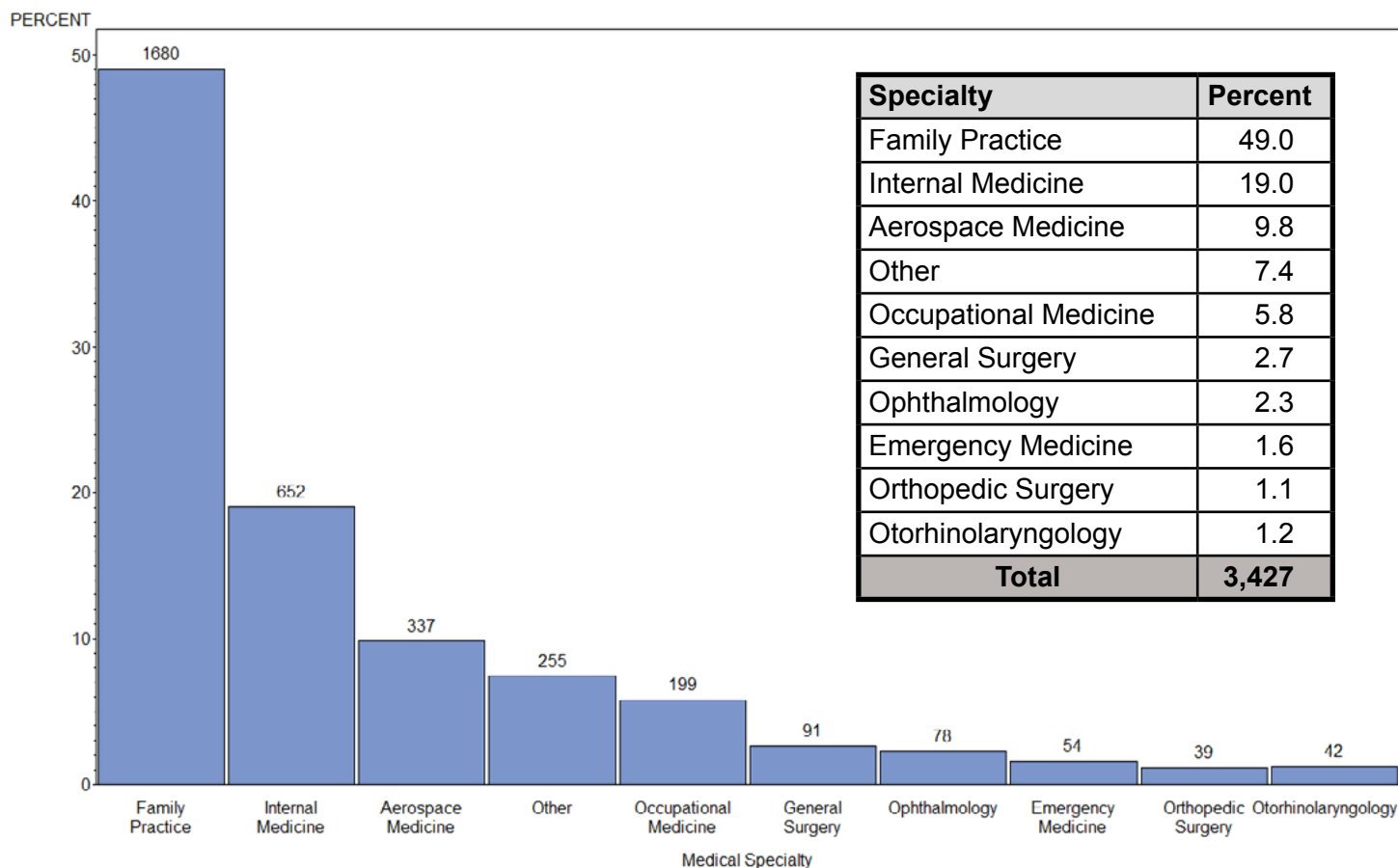


Figure 4. Medical Practice Specialty of Active FAA Aviation Medical Examiners

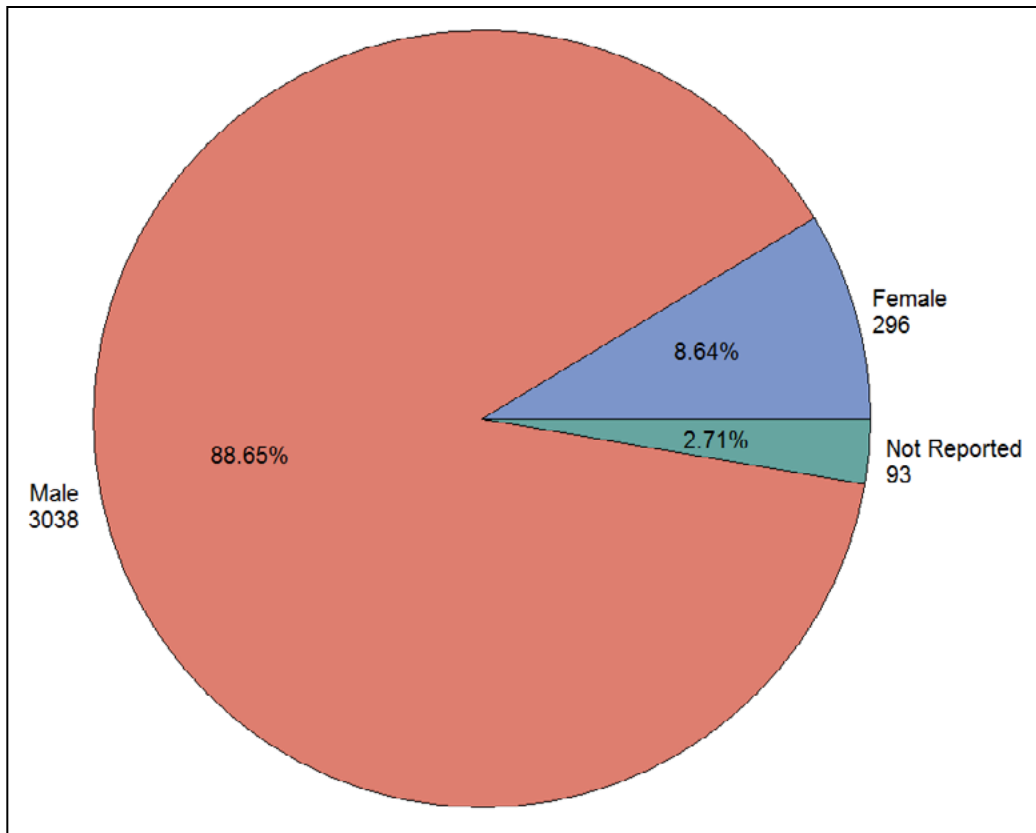


Figure 5. Gender Distribution of Active FAA Aviation Medical Examiners

Table 3. Pilot License Type of Active FAA Aviation Medical Examiners

Pilot License Type	Number (Percent)
Commercial – Instrument Flight Rules	152 (4.4)
Commercial	87 (2.5)
Private – Instrument Flight Rules	128 (3.7)
Private	1,086 (31.7)
Student	132 (3.9)
Other	39 (1.1)
None	1,803 (52.6)
Total	3,427

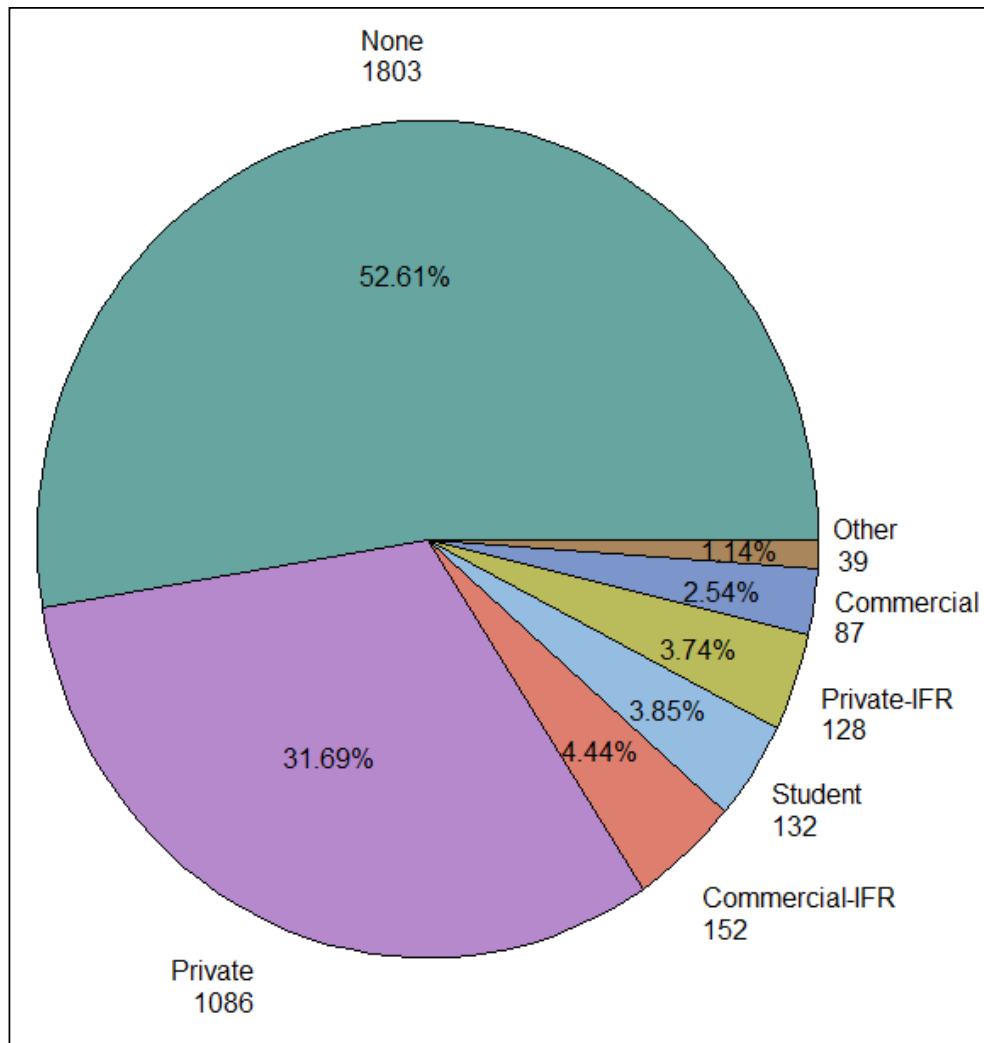


Figure 6. Pilot License Type of Active FAA Aviation Medical Examiners

Table 4. Senior Examiner Status of Active FAA Aviation Medical Examiners

Senior Examiner	Number (Percent)
Yes	2,101 (61.3)
No	1,326 (38.7)
Total	3,427

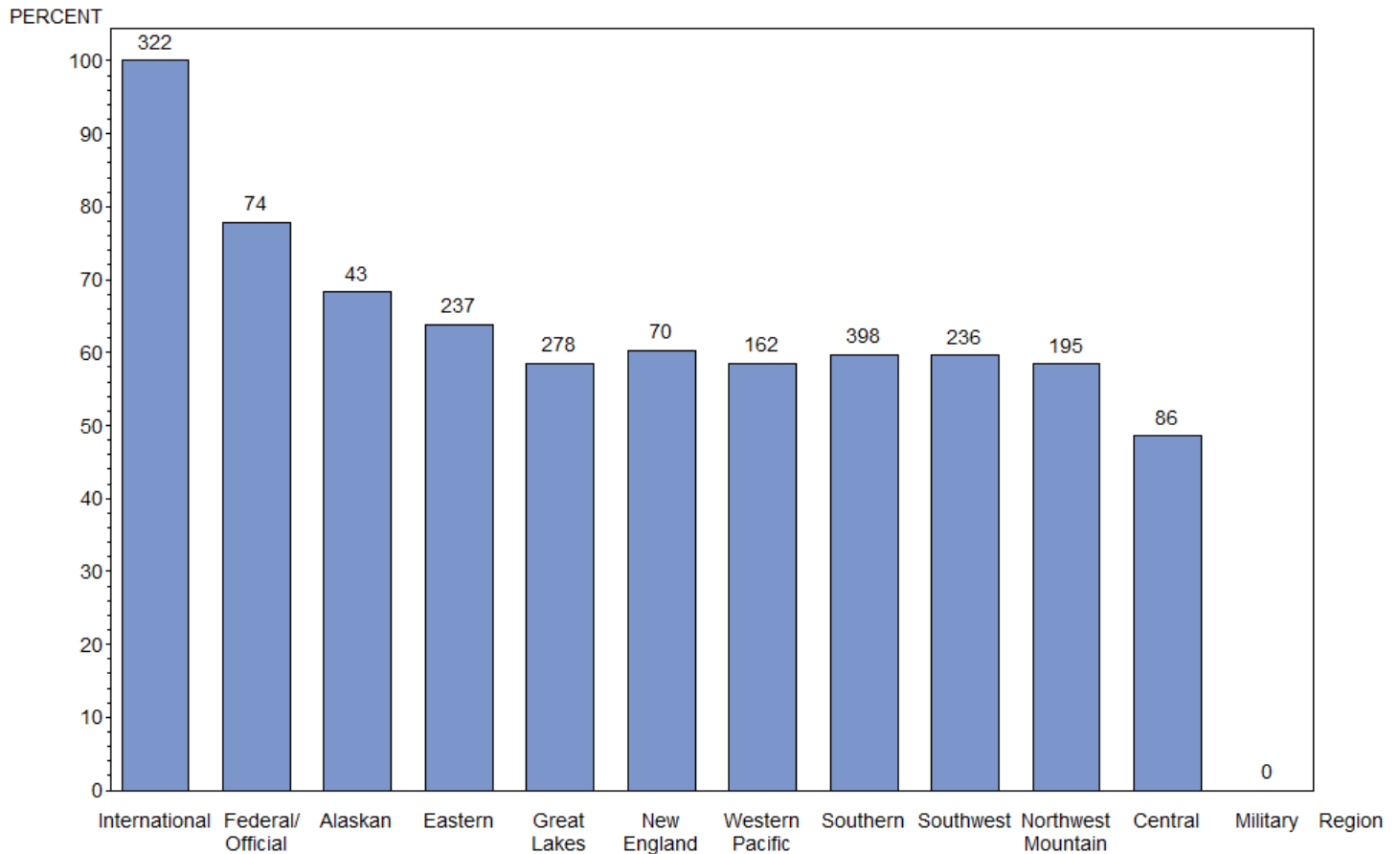


Figure 7. Senior Examiner Status of Active FAA Aviation Medical Examiners by Region

Table 5. Age by Gender of Active FAA Aviation Medical Examiners

		Number	Mean	Median	Standard Deviation	Minimum	Maximum
Overall*		3,425	60.2	60.1	11.2	28.0	94.4
Gender	Female	296	52.5	53.3	9.2	31.9	78.3
	Male	3,036	60.8	60.5	11.1	28.0	94.4
	Not Reported	93	64.9	64.7	9.2	39.8	89.8

*2 AME's missing age

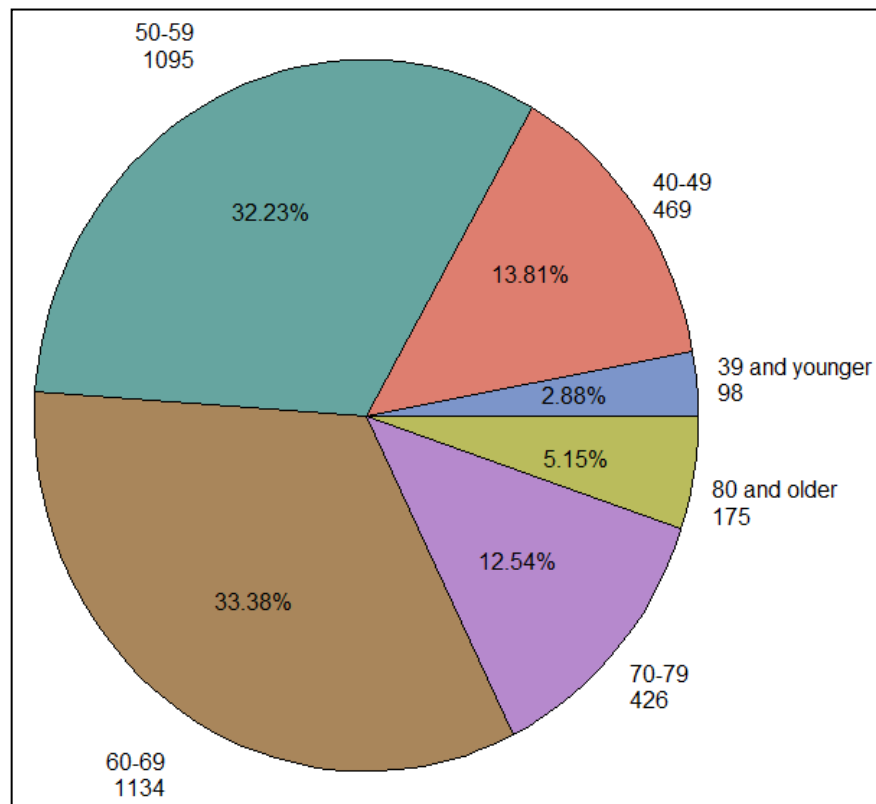


Figure 8. Age Group of Active FAA Aviation Medical Examiners

SECTION II. AIRMAN MEDICAL CERTIFICATION

The Aerospace Medical Certification Division is the central screening facility and repository within the Federal Aviation Administration for the collection, investigation, adjudication, and analysis of medical data.

Activities of the Aerospace Medical Certification Division are presented in this section. Data are presented by calendar year and represent the most recent medical examination data for all active civil aviation airmen in the United States and its territories as of December 31, 2012. Data may slightly fluctuate annually from systematic changes and corrections to the records.

Class issued represents the medical class certificate that was issued at the time of the examination. As of July 24, 2008, if the airman is under 40, first- and second-class certificates are valid for 1 year and third-class certificates are valid for 5 years. If the airman is 40 and older, first-class certificates are valid for 6 months,

second-class for 1 year, and third-class for 2 years. The length of certificate validity varies for those requiring a special issuance.

Effective medical class is determined by class issued, the age of the airman, time since exam, and whether the airman had a time limited certificate. A certificate can be issued as a higher class (i.e., first-class) and become valid as a lower class certificate (i.e., third-class) as the validity period expires for each higher class.

All medical data were abstracted from the most recent medical examinations with the exception of medical conditions. Medical conditions are determined by whether the airman has ever reported the condition on any past or current medical examination. Body mass index (BMI) classifications are as follows: *Underweight* (less than 18.5), *Normal* (18.5 to 24.9), *Overweight* (25 to 29.9), and *Obese* (greater than or equal to 30).

Table 6. Number of Medical Applications Processed by Year

Year	Number of Applications	Percent Change From Previous Year
2002	444,214	N/A
2003	444,732	0.1
2004	444,250	-0.1
2005	438,415	-1.3
2006	440,270	0.4
2007	452,592	2.8
2008	425,272	-6.0
2009	397,169	-6.6
2010	394,715	-0.6
2011	400,116	1.4
2012	396,263	-1.0

*Policy change July 24, 2008, lengthened the time of certificate validity for those under 40 years of age.

Table 7. Issued and Effective Medical Class by Region

Region *	First				Second			Third		Total Active Airmen				
		Effective Class				Effective Class			Effective Class		Effective Class			
	1st Class Certified	1	2	3	2nd Class Certified	2	3	3rd Class Certified	3	Total Airmen Certified	Percent of Total Airmen	1	2	3
Alaskan	1,894	1,495	140	259	2,172	1,464	708	3,869	3,869	7,935	1.4	1,495	1,604	4,836
Central	4,736	3,296	412	1,028	5,620	3,579	2,041	13,084	13,084	23,440	4.0	3,296	3,991	16,153
Eastern	18,698	13,175	1,117	4,406	13,089	7,509	5,580	31,329	31,329	63,116	10.9	13,175	8,626	41,315
Great Lakes	26,316	18,290	1,544	6,482	14,869	8,885	5,984	38,127	38,127	79,312	13.6	18,290	10,429	50,593
New England	6,037	4,364	333	1,340	3,880	2,336	1,544	10,660	10,660	20,577	3.5	4,364	2,669	13,544
Northwest-Mountain	18,633	13,217	1,294	4,122	14,662	8,510	6,152	26,608	26,608	59,903	10.3	13,217	9,804	36,882
Southern	42,820	31,038	3,073	8,709	25,668	16,055	9,613	50,109	50,109	118,597	20.4	31,038	19,128	68,431
Southwest	21,040	14,824	1,473	4,743	16,504	10,164	6,340	31,777	31,777	69,321	11.9	14,824	11,637	42,860
Western-Pacific	23,618	16,120	1,712	5,786	18,997	11,343	7,654	41,113	41,113	83,728	14.4	16,120	13,055	54,553
US Total	163,792	115,819	11,098	36,875	115,461	69,845	45,616	246,676	246,676	525,929	90.4	115,819	80,943	329,167
Military	16	1	1	14	2,021	759	1,262	4,570	4,570	6,607	1.1	1	760	5,846
International	26,318	10,661	1,719	13,938	7,937	3,066	4,871	14,671	14,671	48,926	8.4	10,661	4,785	33,480
Total	190,126	126,481	12,818	50,827	125,419	73,670	51,749	265,917	265,917	581,462	100	126,481	86,488	368,493
Percent of Total Certified Airmen	32.7				21.6			45.7			100.0	21.8	14.9	63.4

* 388 airmen with unknown region

Table 8. Issued Medical Class by State of Residence and Gender

State of Residence *	Issued Medical Class						Total Airmen	
	First		Second		Third			
	Female	Male	Female	Male	Female	Male	Female	Male
Alabama	144	1,750	165	2,007	382	3,487	691	7,244
Alaska	35	1,101	83	2,378	228	3,739	346	7,218
Arizona	376	5,952	260	3,491	549	6,934	1,185	16,377
Arkansas	50	865	37	1,356	149	2,312	236	4,533
California	941	12,578	802	11,896	2,432	27,611	4,175	52,085
Colorado	492	5,918	186	2,744	546	5,853	1,224	14,515
Connecticut	78	1,523	57	845	151	2,495	286	4,863
Delaware	26	368	9	287	41	569	76	1,224
District of Columbia	10	111	7	74	45	275	62	460
Florida	1,160	18,445	626	10,271	1,663	18,327	3,449	47,043
Georgia	349	7,258	194	3,297	451	6,537	994	17,092
Hawaii	136	1,247	77	719	70	631	283	2,597
Idaho	36	750	80	1,265	170	2,195	286	4,210
Illinois	415	5,456	192	2,800	453	6,650	1,060	14,906
Indiana	190	2,973	91	1,569	269	4,248	550	8,790
Iowa	29	636	48	1,085	178	2,863	255	4,584
Kansas	67	1,171	82	1,663	286	3,450	435	6,284
Kentucky	118	2,315	50	894	167	2,150	335	5,359
Louisiana	49	1,157	61	1,610	139	2,405	249	5,172
Maine	28	465	29	504	85	1,181	142	2,150
Maryland	95	1,697	141	1,528	341	3,517	577	6,742
Massachusetts	151	1,855	87	1,259	331	3,914	569	7,028
Michigan	287	4,041	129	2,168	434	6,102	850	12,311
Minnesota	262	4,149	141	2,035	321	5,022	724	11,206
Mississippi	50	951	37	969	125	1,821	212	3,741
Missouri	106	2,117	94	1,888	296	4,034	496	8,039
Montana	49	604	68	1,022	149	1,810	266	3,436
Nebraska	26	584	18	742	114	1,863	158	3,189
Nevada	118	2,076	117	1,482	239	2,397	474	5,955
New Hampshire	72	1,290	52	674	93	1,334	217	3,298
New Jersey	156	2,614	104	1,502	262	3,771	522	7,887
New Mexico	28	560	86	960	143	1,738	257	3,258
New York	272	4,299	192	2,763	557	7,325	1,021	14,387
North Carolina	215	3,967	125	2,456	424	6,147	764	12,570
North Dakota	47	1,251	38	876	66	1,146	151	3,273
Ohio	244	4,496	171	2,418	483	6,850	898	13,764
Oklahoma	71	1,462	114	1,844	312	3,908	497	7,214
Oregon	113	1,439	170	2,377	344	3,920	627	7,736
Pennsylvania	234	4,406	231	2,816	478	6,539	943	13,761
Rhode Island	23	277	10	145	31	441	64	863
South Carolina	90	1,651	68	1,270	195	2,944	353	5,865
South Dakota	21	304	30	610	57	1,043	108	1,957
Tennessee	185	4,049	155	2,349	294	4,215	634	10,613
Texas	721	16,077	624	9,812	1,528	19,143	2,873	45,032
Utah	153	2,885	146	2,094	144	2,262	443	7,241
Vermont	18	257	15	203	43	561	76	1,021
Virginia	253	3,805	178	2,726	538	5,877	969	12,408
Washington	419	5,491	274	3,805	645	7,450	1,338	16,746
West Virginia	13	273	19	388	74	950	106	1,611
Wisconsin	118	2,062	99	1,502	359	4,624	576	8,188
Wyoming	11	273	26	405	94	1,026	131	1,704
US Territories	53	1,054	37	672	65	1,020	155	2,746
Military	0	16	73	1,948	450	4,120	523	6,084
International	1,534	24,784	379	7,558	1,028	13,643	2,941	45,985
Total	10,937	179,155	7,384	118,021	19,511	246,389	37,832	543,565

*453 airmen missing state

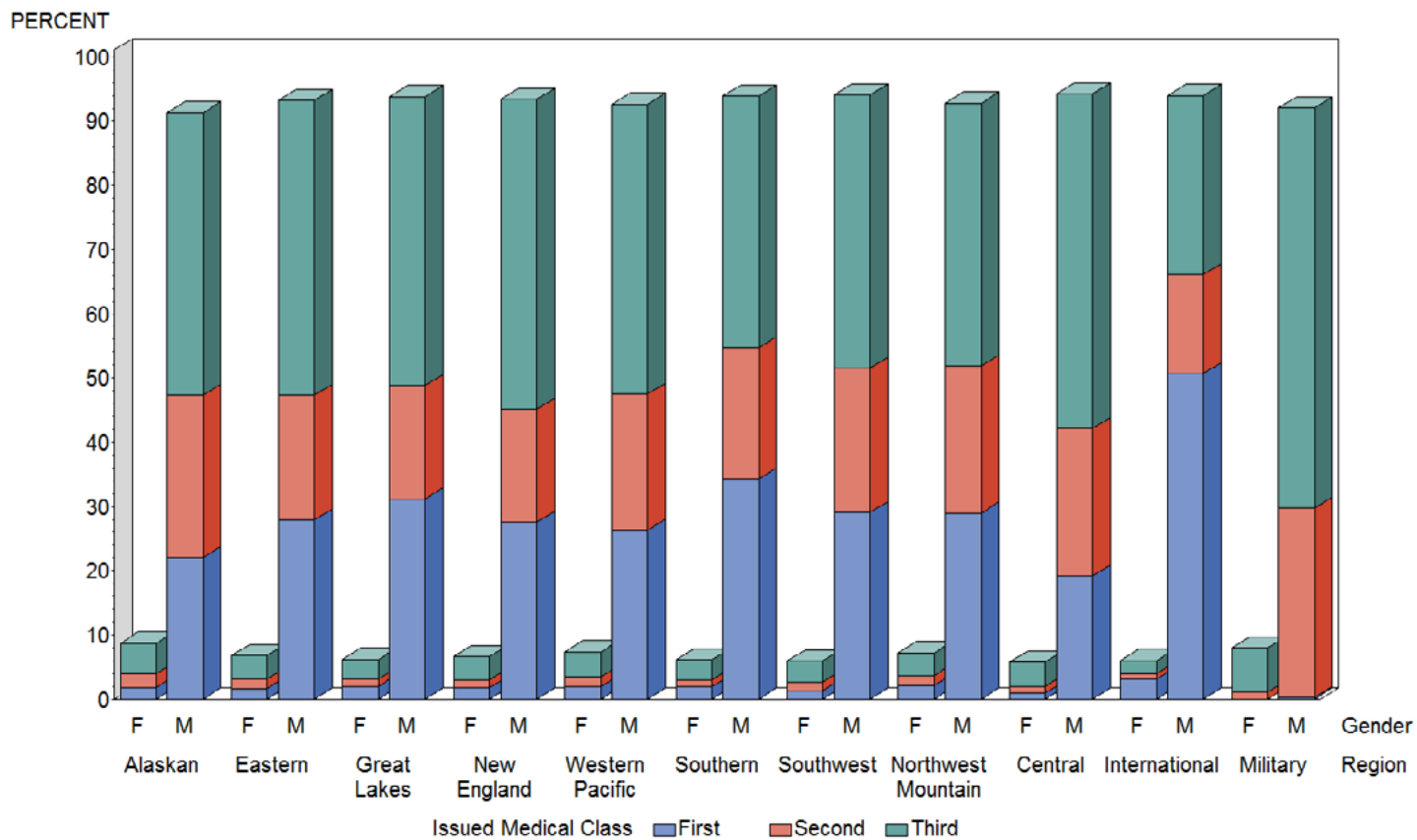


Figure 9. Issued Medical Class by Region and Gender

Table 9. Age as of 12/31/2012 of all Active Airmen by Effective Medical Class

Effective Medical Class	Number of airmen	Mean	Median	Standard Deviation
First	126,507	43.8	44.9	12.3
Second	86,514	49.2	49.9	13.7
Third	368,829	43.2	41.1	16.6
All Classes	581,850	44.2	43.8	15.5

Table 10. Age Groups of all Active Airmen by Effective Medical Class

Age Group (as of 12/31/2012)	Effective Medical Class Number (Percent)		
	First	Second	Third
16-19	2,927 (2.31)	1,483 (1.71)	10,296 (2.79)
20-24	6,723 (5.31)	3,735 (4.32)	47,801 (12.96)
25-29	11,237 (8.88)	4,708 (5.44)	50,720 (13.75)
30-34	13,903 (10.99)	4,707 (5.44)	37,008 (10.03)
35-39	14,040 (11.10)	5,131 (5.93)	31,672 (8.59)
40-44	14,581 (11.53)	10,611 (12.27)	31,776 (8.62)
45-49	17,202 (13.60)	13,208 (15.27)	24,849 (6.74)
50-54	19,351 (15.30)	12,589 (14.55)	30,466 (8.26)
55-59	15,602 (12.33)	10,640 (12.30)	32,023 (8.68)
60-64	8,558 (6.76)	8,431 (9.75)	27,070 (7.34)
65+	2,383 (1.88)	11,271 (13.03)	45,148 (12.24)
Total	126,507 (21.74)	86,514 (14.87)	368,829 (63.39)

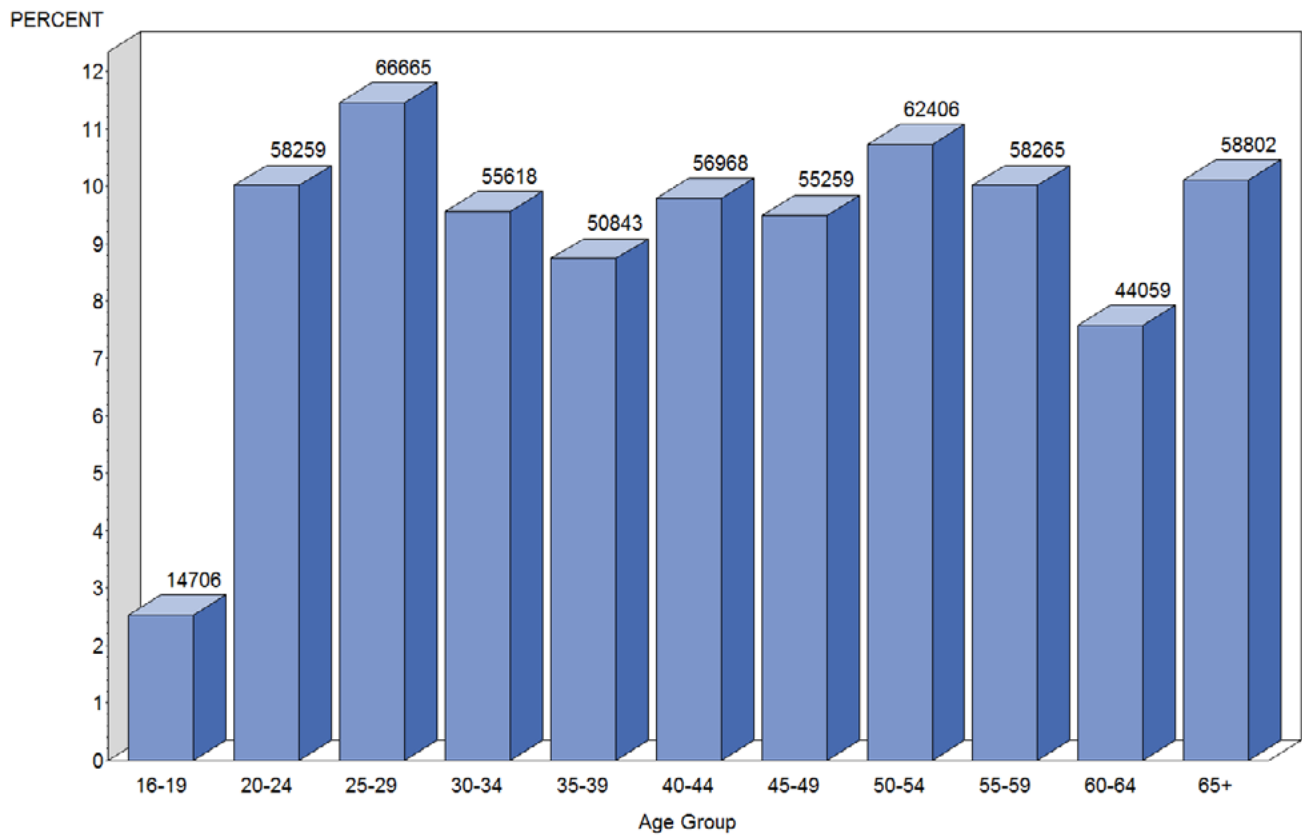


Figure 10. Age Groups as of 12/31/2012 of all Active Airmen

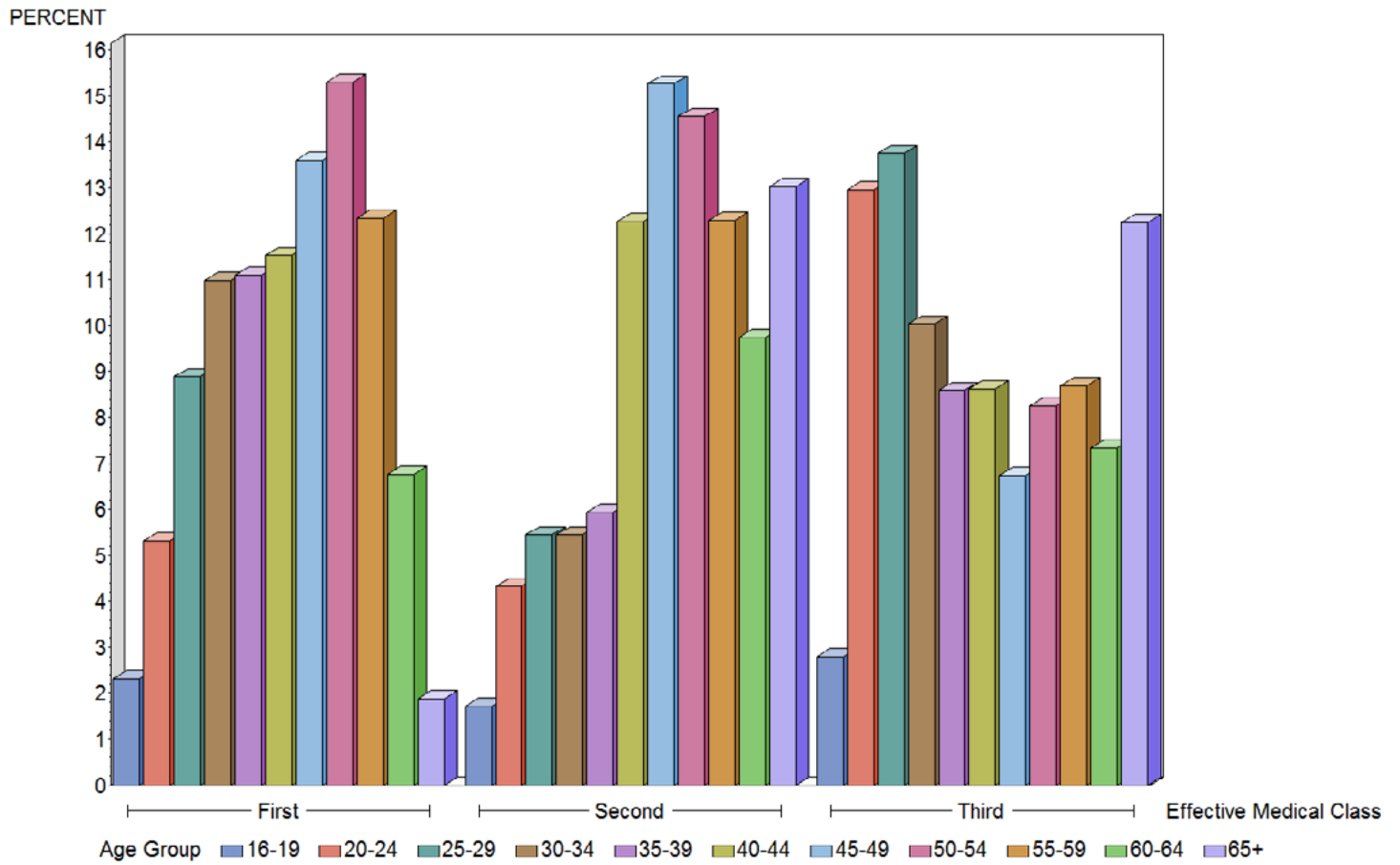


Figure 11. Age Groups as of 12/31/2012 by Effective Medical Class for all Active Airmen

Table 11. Age at Exam Summary Statistics for Active Airmen by Issued Medical Class

Issued Medical Class	Number of Airmen	Mean	Median	Standard Deviation
First	190,268	40.0	39.9	13.7
Second	125,478	43.4	43.6	15.9
Third	266,104	44.6	45.7	17.4
All Classes	581,850	42.9	43.0	16.1

Table 12. Age Groups for all Active Airmen by Issued Medical Class

Age Group (at time of exam)	Issued Medical Class Number (Percent)		
	First	Second	Third
16-19	12,908 (6.78)	7,434 (5.92)	18,445 (6.93)
20-24	21,037 (11.06)	13,078 (10.42)	31,554 (11.86)
25-29	21,690 (11.40)	12,814 (10.21)	23,702 (8.91)
30-34	21,179 (11.13)	10,470 (8.34)	19,753 (7.42)
35-39	18,743 (9.85)	11,873 (9.46)	22,324 (8.39)
40-44	18,737 (9.85)	10,220 (8.14)	14,710 (5.53)
45-49	21,980 (11.55)	12,866 (10.25)	21,777 (8.18)
50-54	22,599 (11.88)	13,107 (10.45)	27,215 (10.23)
55-59	17,734 (9.32)	11,461 (9.13)	27,780 (10.44)
60-64	10,356 (5.44)	9,716 (7.74)	22,900 (8.61)
65+	3,305 (1.74)	12,439 (9.91)	35,944 (13.51)
Total	190,268 (32.70)	125,478 (21.57)	266,104 (45.73)

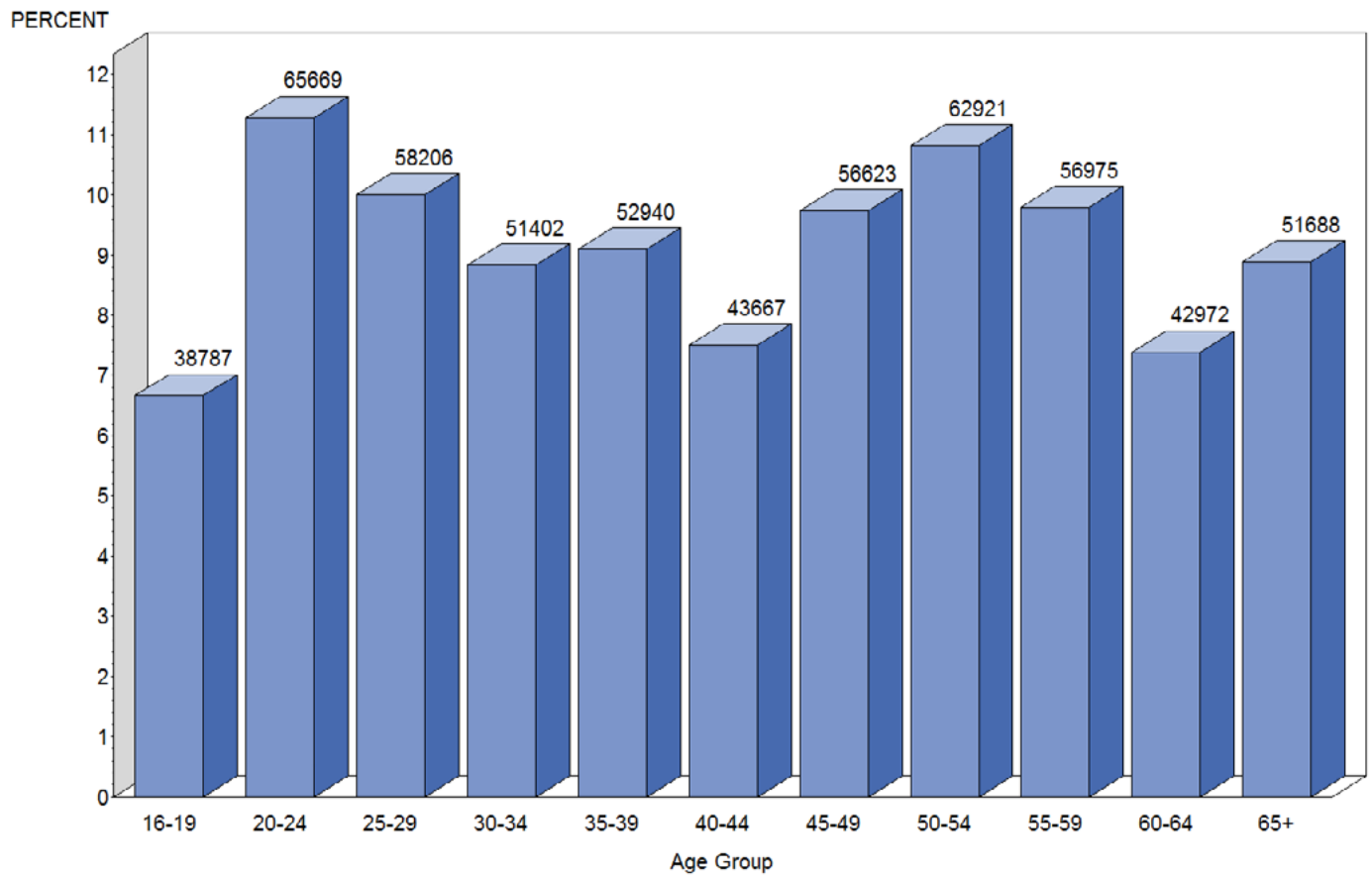


Figure 12. Age Group of all Active Airmen at Time of Exam

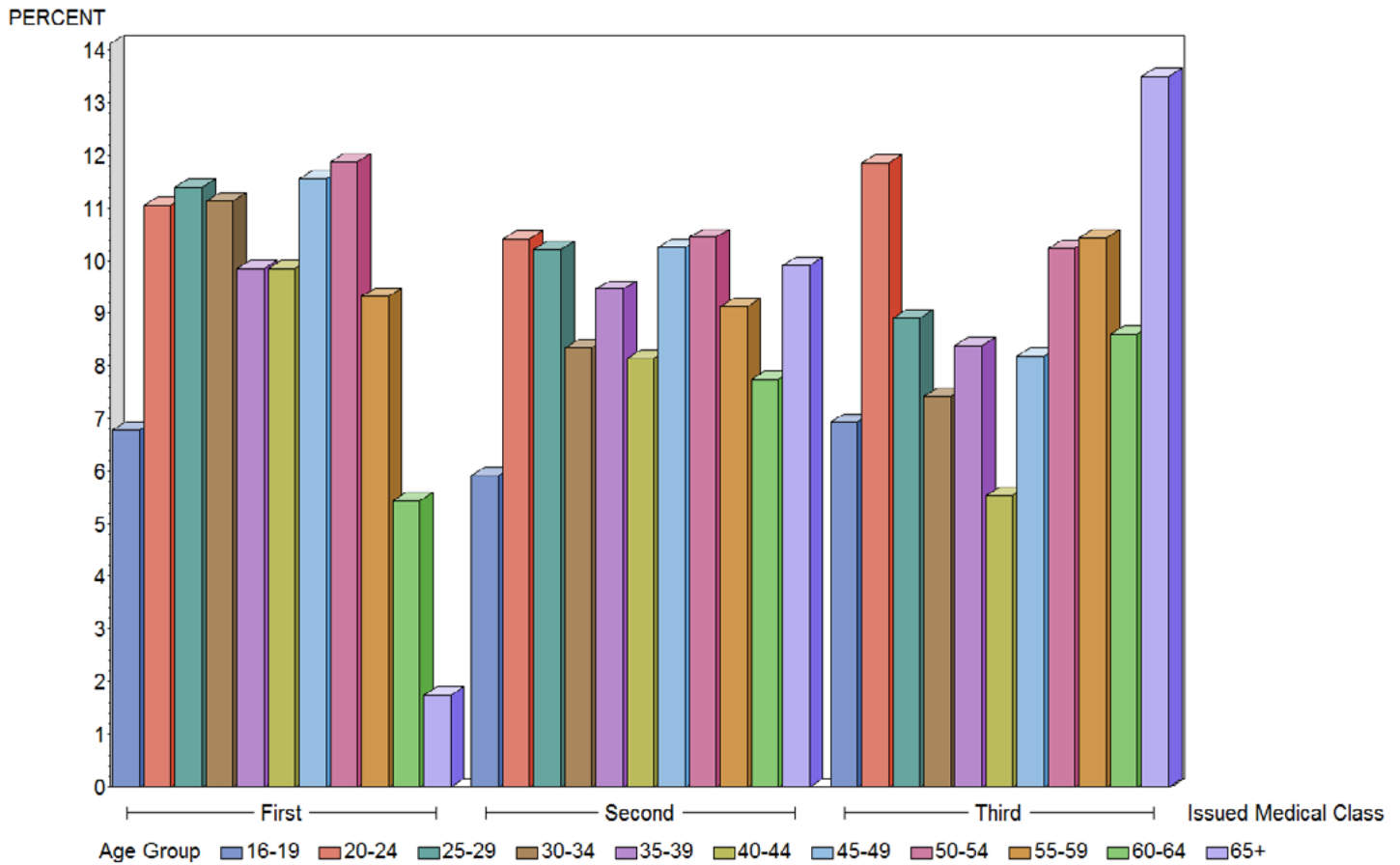


Figure 13. Age Groups by Issued Medical Class for all Active Airmen at Time of Exam

Table 13. Age at Time of Exam by Issued Medical Class and Gender

Age Group	Issued Medical Class							
	First		Second		Third		Total Airmen	
	Female	Male	Female	Male	Female	Male	Female	Male
16-19	1,539	11,369	997	6,437	2,715	15,730	5,251	33,536
20-24	1,845	19,192	1,175	11,903	3,351	28,203	6,371	59,298
25-29	1,622	20,068	1,128	11,686	2,321	21,381	5,071	53,135
30-34	1,535	19,644	835	9,635	1,706	18,047	4,076	47,326
35-39	1,194	17,549	775	11,098	1,763	20,561	3,732	49,208
40-44	947	17,790	519	9,701	979	13,731	2,445	41,222
45-49	910	21,070	575	12,291	1,272	20,505	2,757	53,866
50-54	775	21,824	548	12,559	1,602	25,613	2,925	59,996
55-59	450	17,284	398	11,063	1,531	26,249	2,379	54,596
60-64	118	10,238	244	9,472	1,031	21,869	1,393	41,579
65+	17	3,288	198	12,241	1,264	34,680	1,479	50,209
Total	10,952	179,316	7,392	118,086	19,535	246,569	37,879	543,971

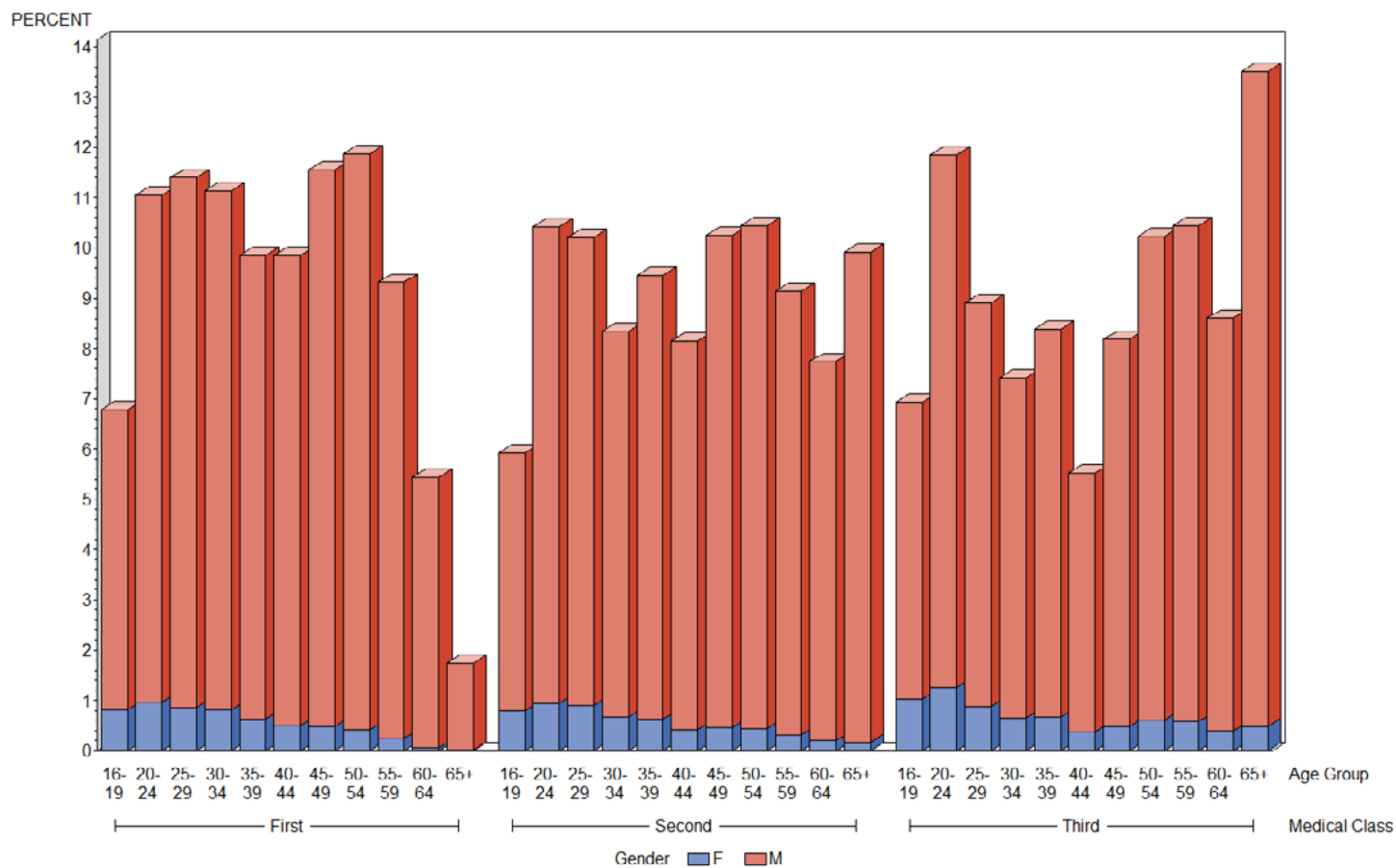


Figure 14. Age Group at Time of Exam by Gender and Issued Medical Class

Table 14. Height (inches) of all Active Airmen by Gender and Issued Medical Class

Issued Medical Class*		Number of Airmen	Mean	Median	Standard Deviation
First	Females	10,951	65.5	65.0	2.7
	Males	179,314	70.6	71.0	2.7
Second	Females	7,392	65.4	65.0	2.8
	Males	118,079	70.5	71.0	2.7
Third	Females	19,533	65.4	65.0	3.0
	Males	246,548	70.5	70.0	2.8
All Classes	Females	37,876	65.4	65.0	2.9
	Males	543,941	70.5	71.0	2.7

*33 airmen missing height

Table 15. Height (inches) by Issued Medical Class and Gender

Height*	Issued Medical Class						Total Airmen	
	First		Second		Third			
	Female	Male	Female	Male	Female	Male	Female	Male
<59	63	158	42	149	146	299	251	606
59	50	41	41	63	104	142	195	246
60	175	108	136	141	424	269	735	518
61	373	109	241	111	711	239	1,325	459
62	738	180	567	141	1,529	397	2,834	718
63	1,072	402	785	279	1,985	796	3,842	1,477
64	1,529	1,214	1,059	811	2,687	2,002	5,275	4,027
65	1,556	2,696	1,037	1,769	2,646	4,089	5,239	8,554
66	1,680	6,172	1,071	4,355	2,740	9,076	5,491	19,603
67	1,344	10,998	860	7,161	2,195	15,366	4,399	33,525
68	999	17,221	616	11,315	1,619	23,904	3,234	52,440
69	597	21,614	383	14,561	1,069	29,439	2,049	65,614
70	386	27,172	248	18,057	708	37,896	1,342	83,125
71	193	24,374	120	16,341	392	34,002	705	74,717
72	116	26,718	103	17,516	282	35,580	501	79,814
73	38	15,872	36	10,107	110	20,893	184	46,872
74	17	12,252	28	7,665	93	15,792	138	35,709
75	9	6,295	8	3,750	48	8,387	65	18,432
76	10	3,644	5	2,375	22	4,922	37	10,941
77	3	1,257	3	833	9	1,722	15	3,812
78+	3	817	3	579	14	1,336	20	2,732
Total	10,951	179,314	7,392	118,079	19,533	246,548	37,876	543,941

*33 airmen missing height

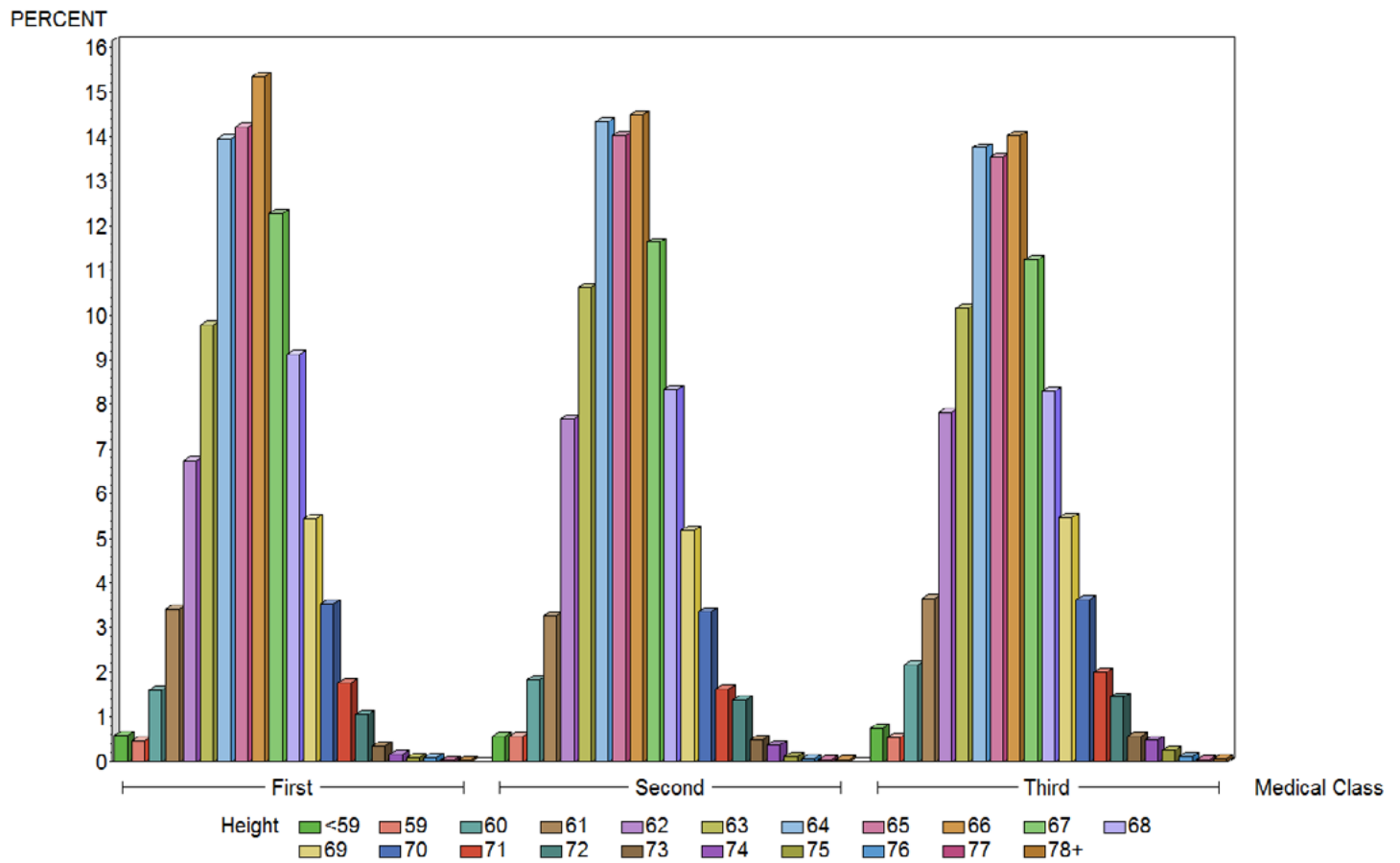


Figure 16. Height (inches) by Issued Medical Class – Females Only

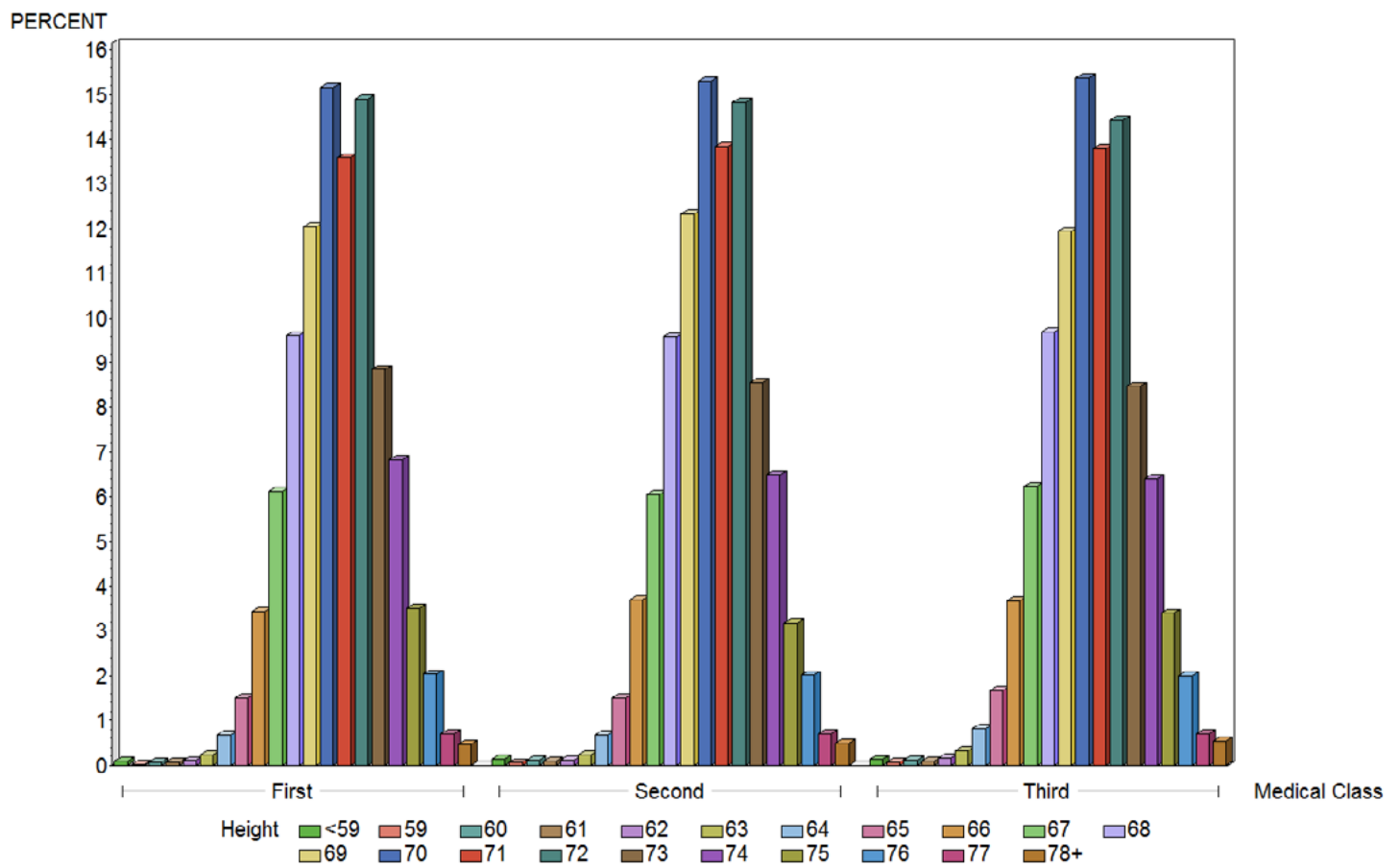


Figure 17. Height (inches) by Issued Medical Class – Males Only

Table 16. Weight (pounds) of all Active Airmen by Gender and Issued Medical Class

Issued Medical Class*		Number of Airmen	Mean	Median	Standard Deviation
First	Females	10,949	144.3	139.0	28.1
	Males	179,304	190.2	187.0	32.9
Second	Females	7,392	149.6	142.0	32.4
	Males	118,077	194.3	190.0	34.1
Third	Females	19,533	148.0	142.0	30.6
	Males	246,546	193.6	190.0	34.5
All Classes	Females	37,874	147.2	140.0	30.3
	Males	543,927	192.6	190.0	33.9

*49 missing weight

Table 17. Weight (pounds) by Issued Medical Class and Gender

Weight*	Issued Medical Class							
	First		Second		Third		Total Airmen	
	Female	Male	Female	Male	Female	Male	Female	Male
<100	109	52	47	31	142	59	298	142
100-109	414	169	248	73	683	165	1,345	407
110-119	1,138	647	682	282	1,788	693	3,608	1,622
120-129	1,791	1,784	1,086	968	2,985	2,253	5,862	5,005
130-139	2,079	4,262	1,224	2,387	3,310	5,061	6,613	11,710
140-149	1,616	7,928	1,100	4,435	2,929	9,826	5,645	22,189
150-159	1,200	13,397	805	7,496	2,245	16,794	4,250	37,687
160-169	852	18,460	605	10,934	1,549	23,879	3,006	53,273
170-179	563	23,097	441	13,967	1,176	29,516	2,180	66,580
180-189	405	24,825	334	15,692	861	32,508	1,600	73,025
190-199	289	22,083	224	14,458	572	29,885	1,085	66,426
200-209	147	17,756	166	12,609	386	25,477	699	55,842
210-219	104	13,825	132	10,202	268	19,741	504	43,768
220-229	86	10,217	79	7,578	204	15,501	369	33,296
230-239	60	7,112	67	5,464	144	11,244	271	23,820
240-249	35	4,656	50	3,830	95	7,718	180	16,204
250-259	14	3,169	35	2,660	62	5,399	111	11,228
260-269	20	2,075	23	1,644	51	3,619	94	7,338
270-279	8	1,334	12	1,118	32	2,489	52	4,941
280+	19	2,456	32	2,249	51	4,719	102	9,424
Total	10,949	179,304	7,392	118,077	19,533	246,546	37,874	543,927

*49 airmen missing weight

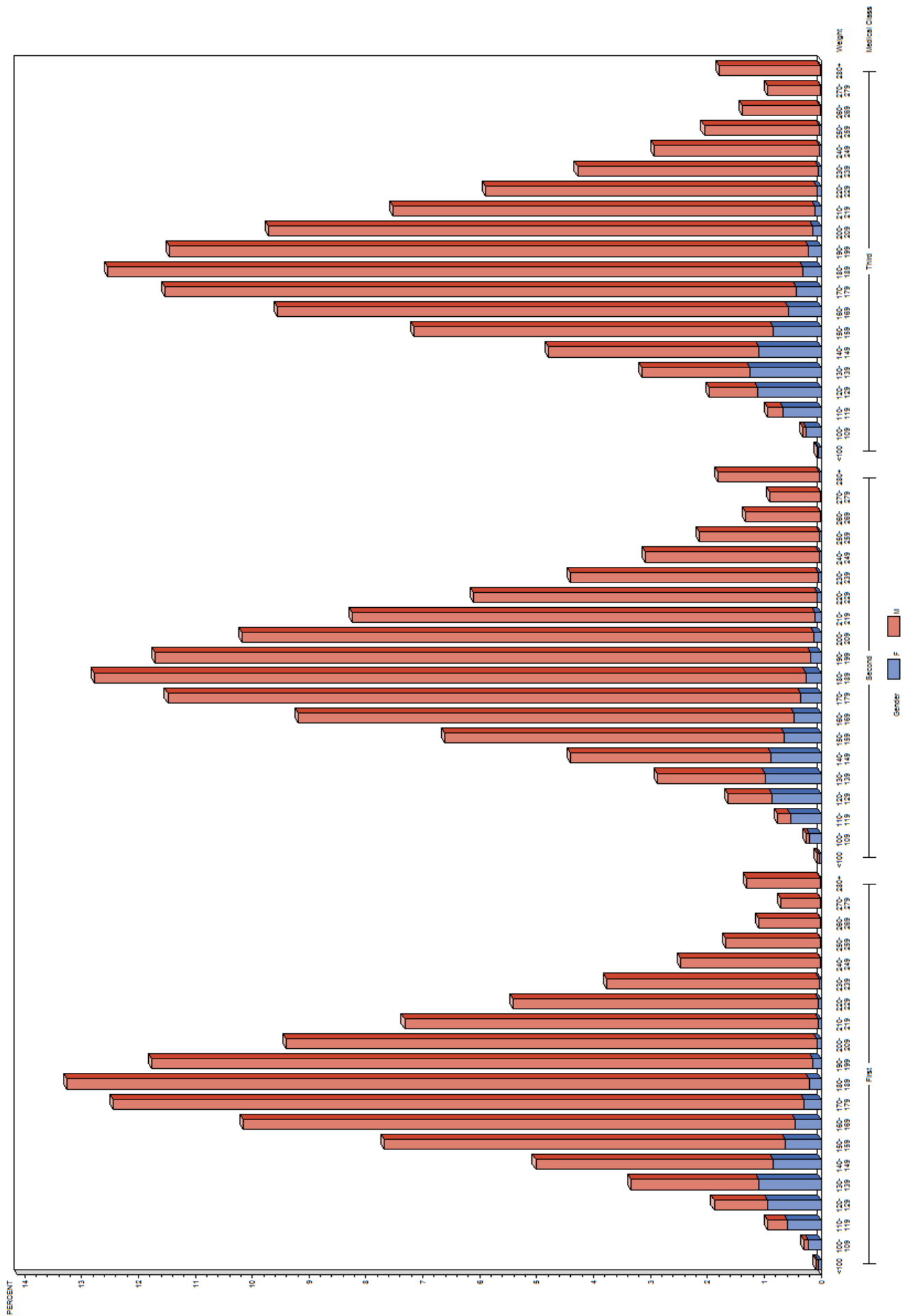


Figure 18. Weight (pounds) by Gender and Issued Medical Class

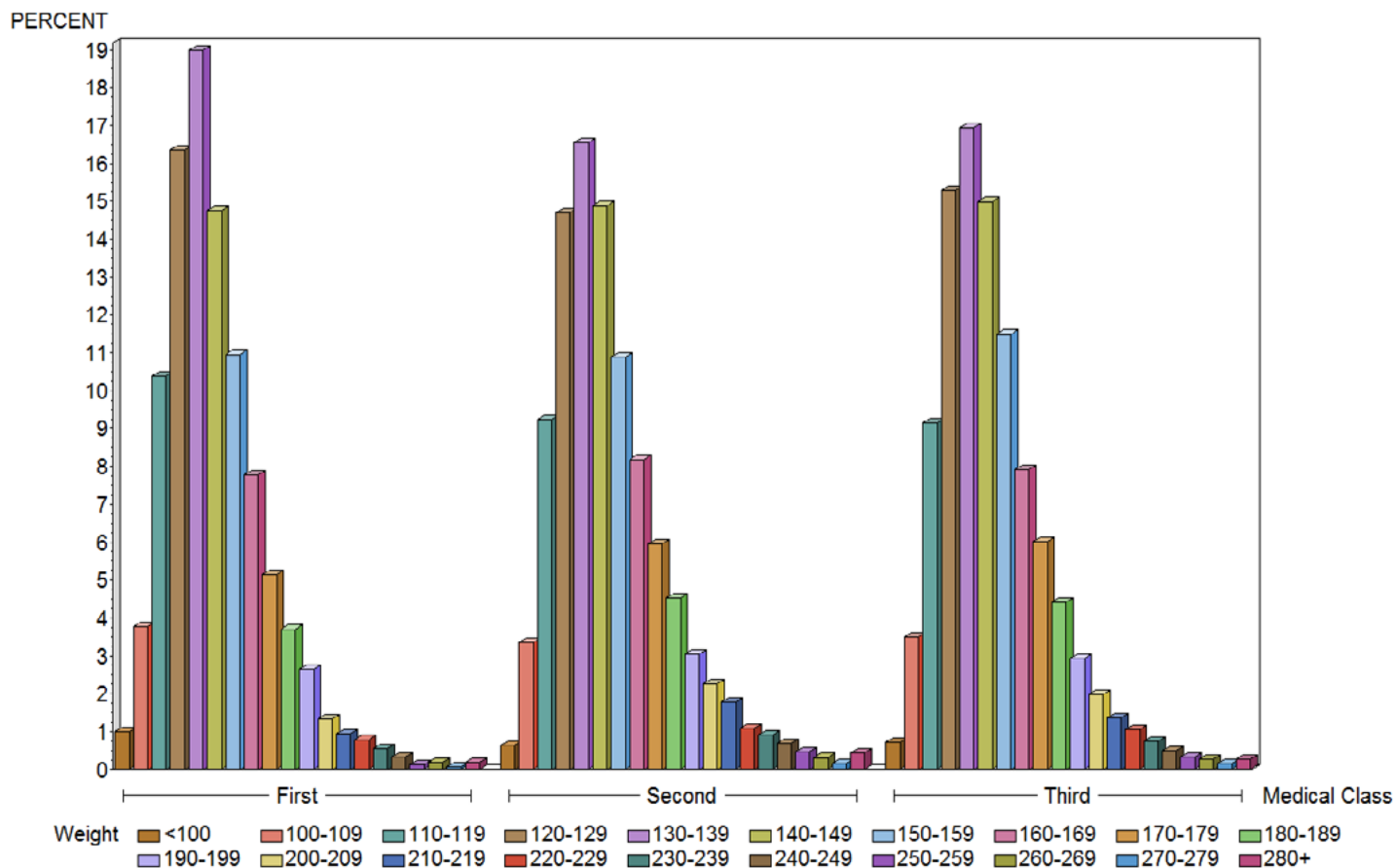


Figure 19. Weight (pounds) by Issued Medical Class – Females Only

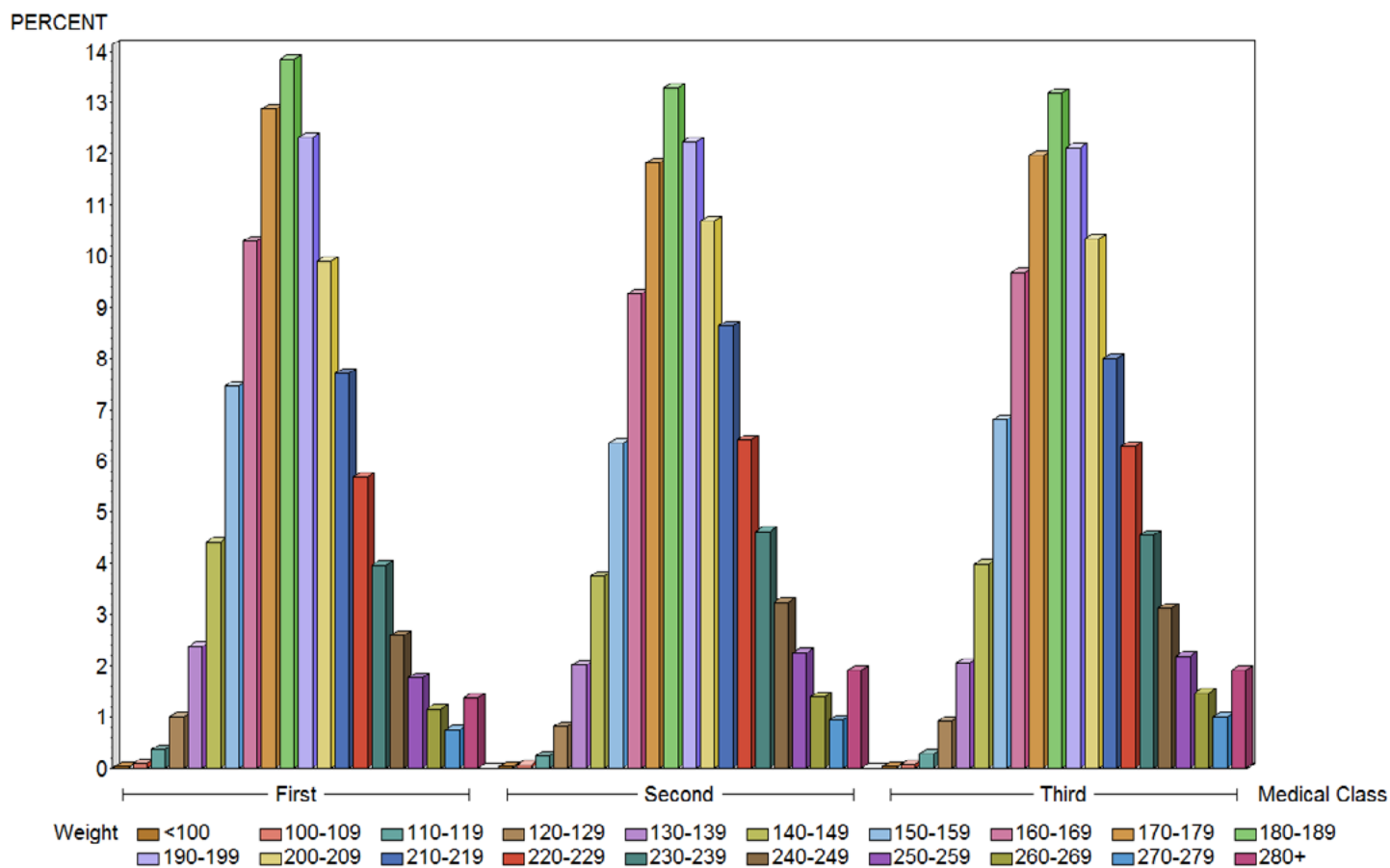


Figure 20. Weight (pounds) by Issued Medical Class – Males Only

Table 18. BMI of all Active Airmen by Gender and Issued Medical Class

Issued Medical Class*		Number of Airmen	Mean	Median	Standard Deviation
First	Females	10,948	23.6	22.7	4.2
	Males	179,302	26.8	26.4	4.2
Second	Females	7,392	24.5	23.4	4.9
	Males	118,070	27.5	27.0	4.4
Third	Females	19,531	24.3	23.3	4.6
	Males	246,525	27.4	26.9	4.5
All Classes	Females	37,871	24.1	23.2	4.6
	Males	543,897	27.2	26.7	4.4

*82 airmen missing BMI

Table 19. BMI Category by Issued Medical Class and Gender

BMI*	Issued Medical Class							
	First		Second		Third		Total Airmen	
	Female	Male	Female	Male	Female	Male	Female	Male
Underweight	495	1,650	278	804	704	1,809	1,477	4,263
Normal	7,337	60,007	4,455	34,104	12,183	74,117	23,975	168,228
Overweight	2,227	83,516	1,727	54,408	4,565	111,860	8,519	249,784
Obese	889	34,129	932	28,754	2,079	58,739	3,900	121,622
Total	10,948	179,302	7,392	118,070	19,531	246,525	37,871	543,897

*82 airmen missing BMI

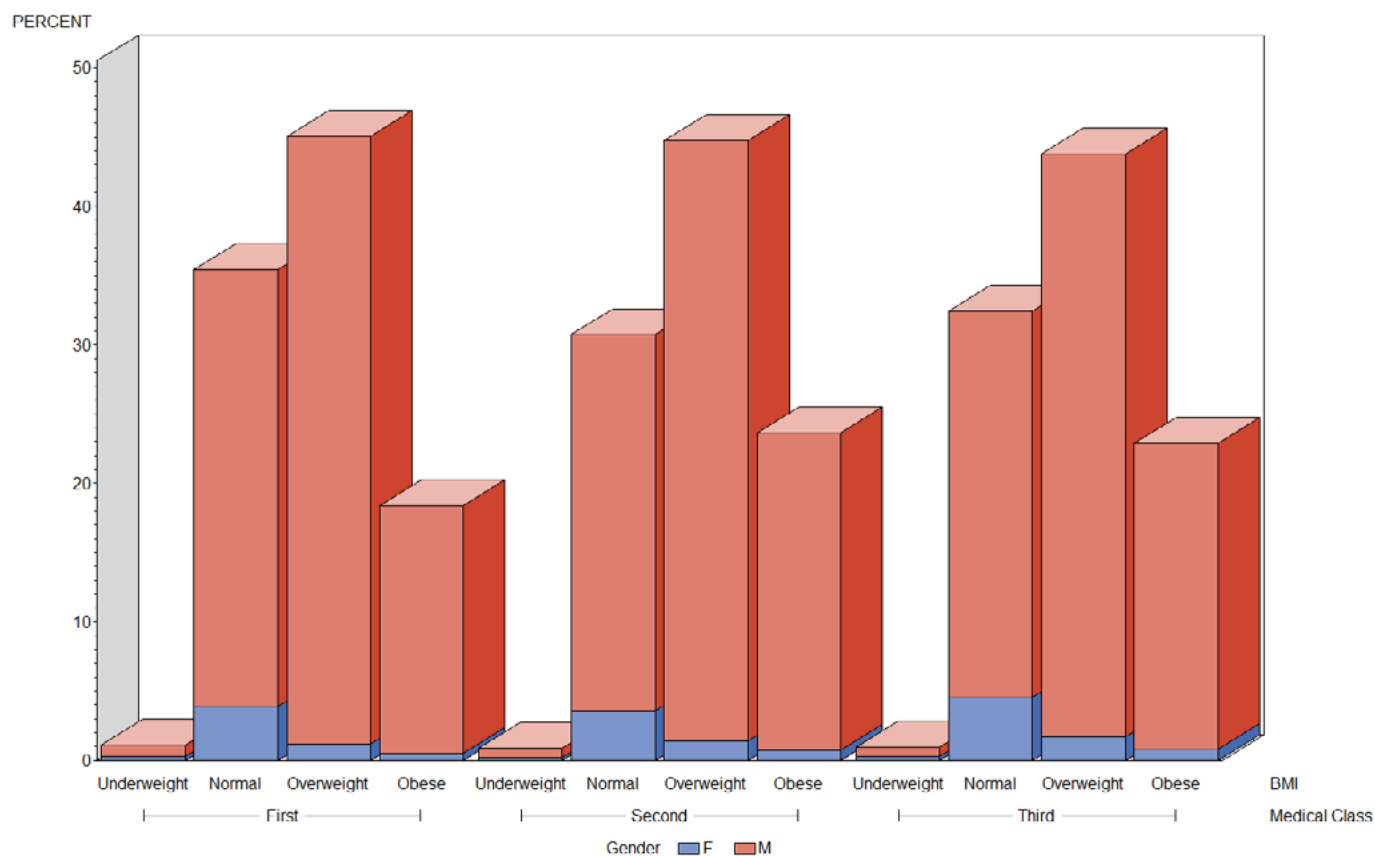


Figure 21. BMI by Gender and Issued Medical Class

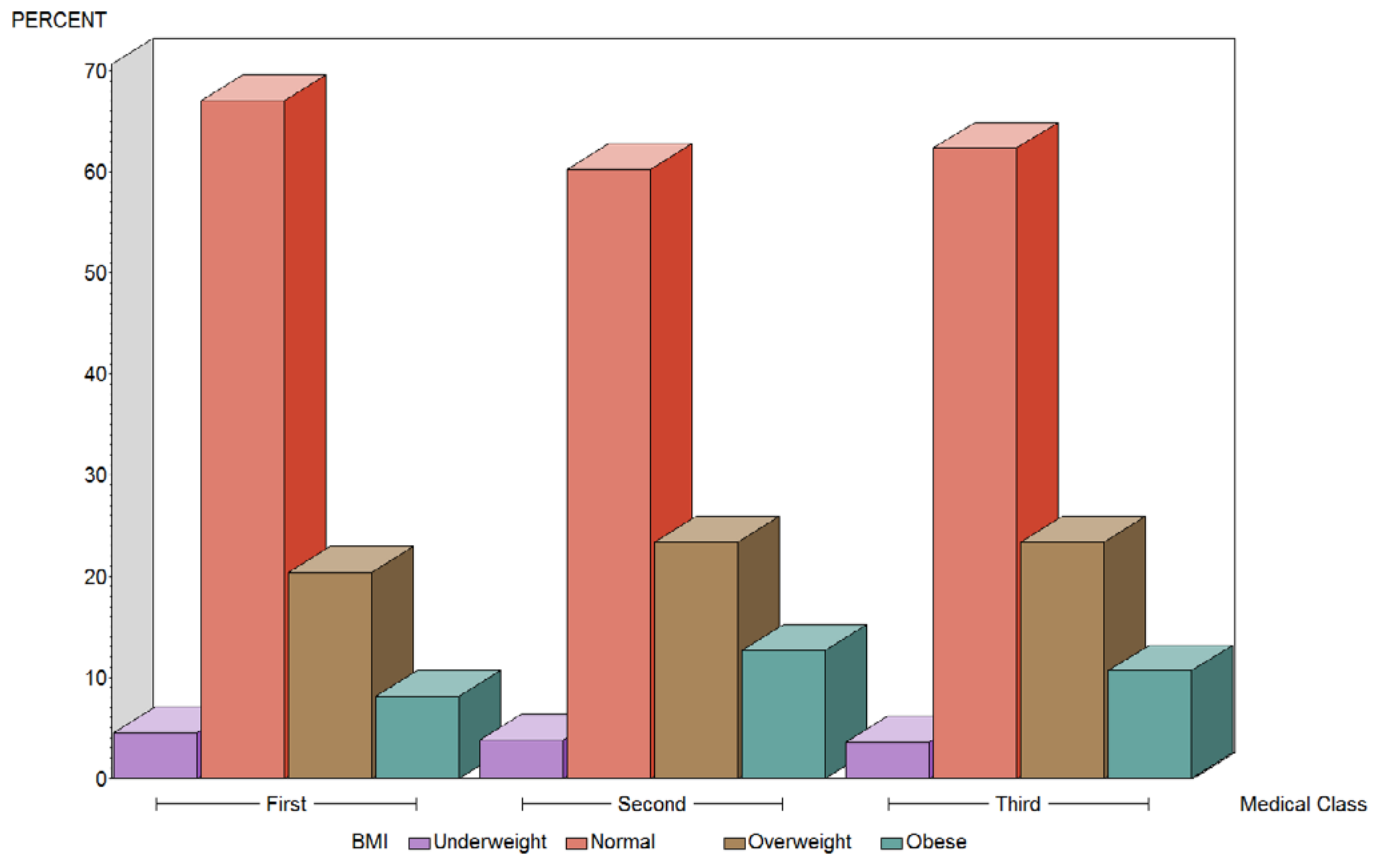


Figure 22. BMI by Issued Medical Class – Females Only

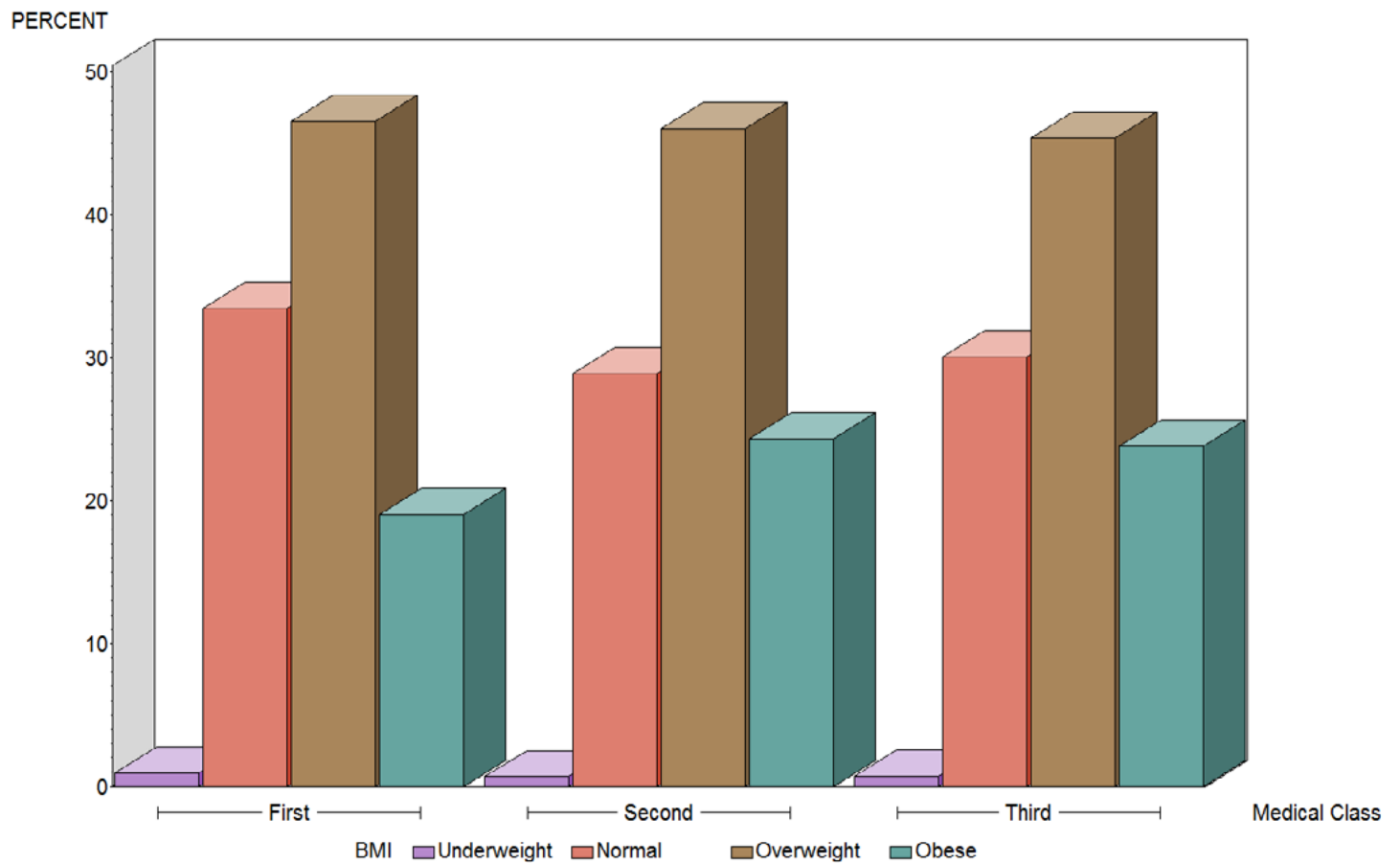


Figure 23. BMI by Issued Medical Class – Males Only

Table 20. Special Issuance by Issued Medical Class,
Gender, Age, and BMI

		Special Issuance	
		Yes (Percent)	No (Percent)
Class Issued	First	10,294 (5.41)	179,974 (94.59)
	Second	7,359 (5.86)	118,119 (94.14)
	Third	22,853 (8.59)	243,251 (91.41)
Gender	Female	1,716 (4.53)	36,163 (95.47)
	Male	38,790 (7.13)	505,181 (92.87)
Age at Exam	16-19	540 (1.39)	38,247 (98.61)
	20-24	659 (1.00)	66,010 (99.00)
	25-29	925 (1.59)	57,281 (98.41)
	30-34	1,089 (2.12)	50,313 (97.88)
	35-39	1,429 (2.70)	51,511 (97.30)
	40-44	2,106 (4.82)	41,561 (95.18)
	45-49	3,467 (6.12)	53,156 (93.88)
	50-54	5,430 (8.63)	57,491 (91.37)
	55-59	6,673 (11.71)	50,302 (88.29)
	60-64	6,620 (15.41)	36,352 (84.59)
	65+	11,568 (22.38)	40,120 (77.62)
BMI*	Underweight	110 (1.92)	5,630 (98.08)
	Normal	8,541 (4.44)	183,662 (95.56)
	Overweight	18,895 (7.32)	239,408 (92.68)
	Obese	12,957 (10.32)	112,565 (89.68)
Total		40,506 (6.96)	541,344 (93.04)

*82 airmen missing BMI

Percent with Special Issuance

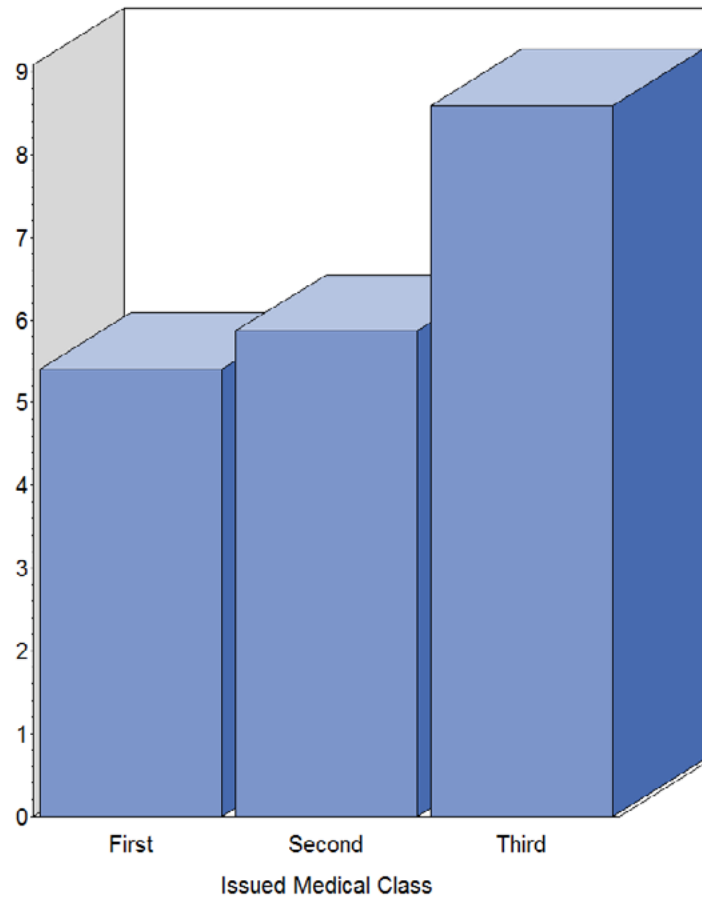


Figure 24. Special Issuance by Issued Medical Class

Percent with Special Issuance

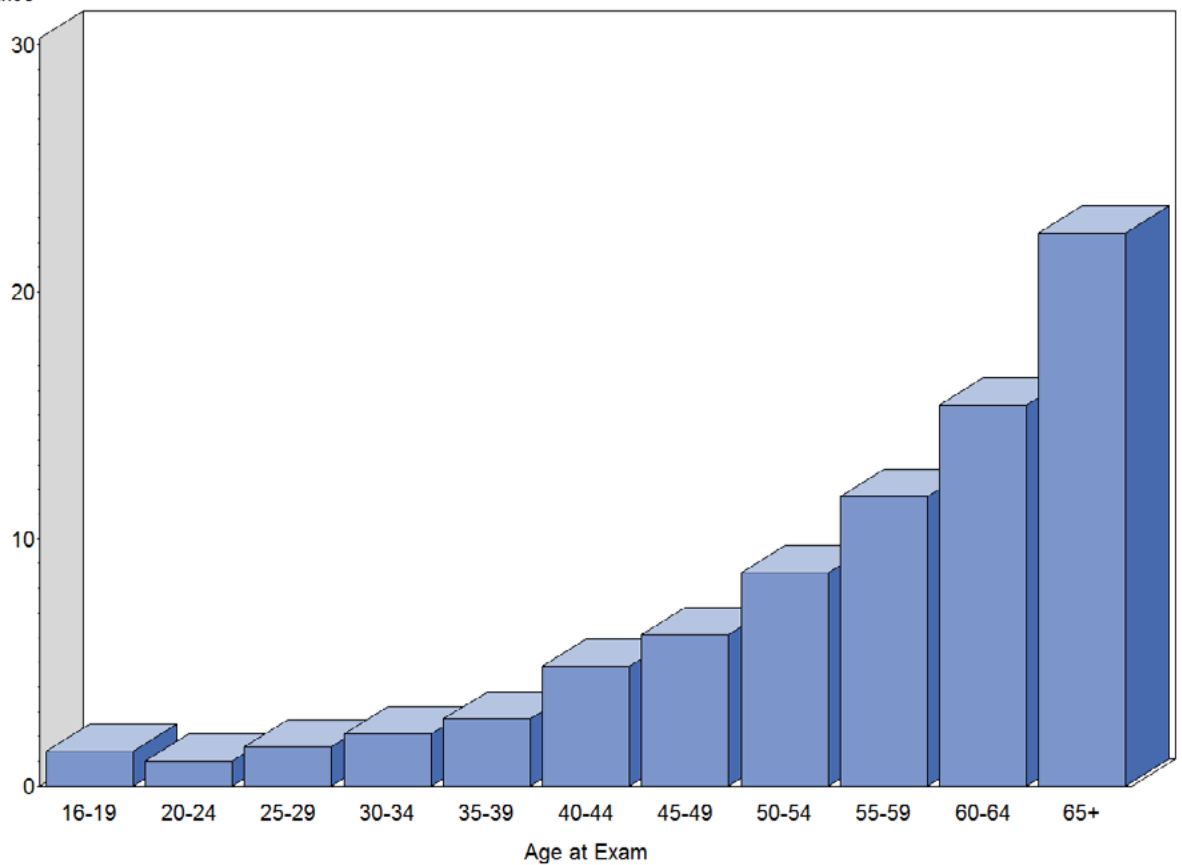


Figure 25. Special Issuance by Age Group at Time of Exam

Percent with Special Issuance

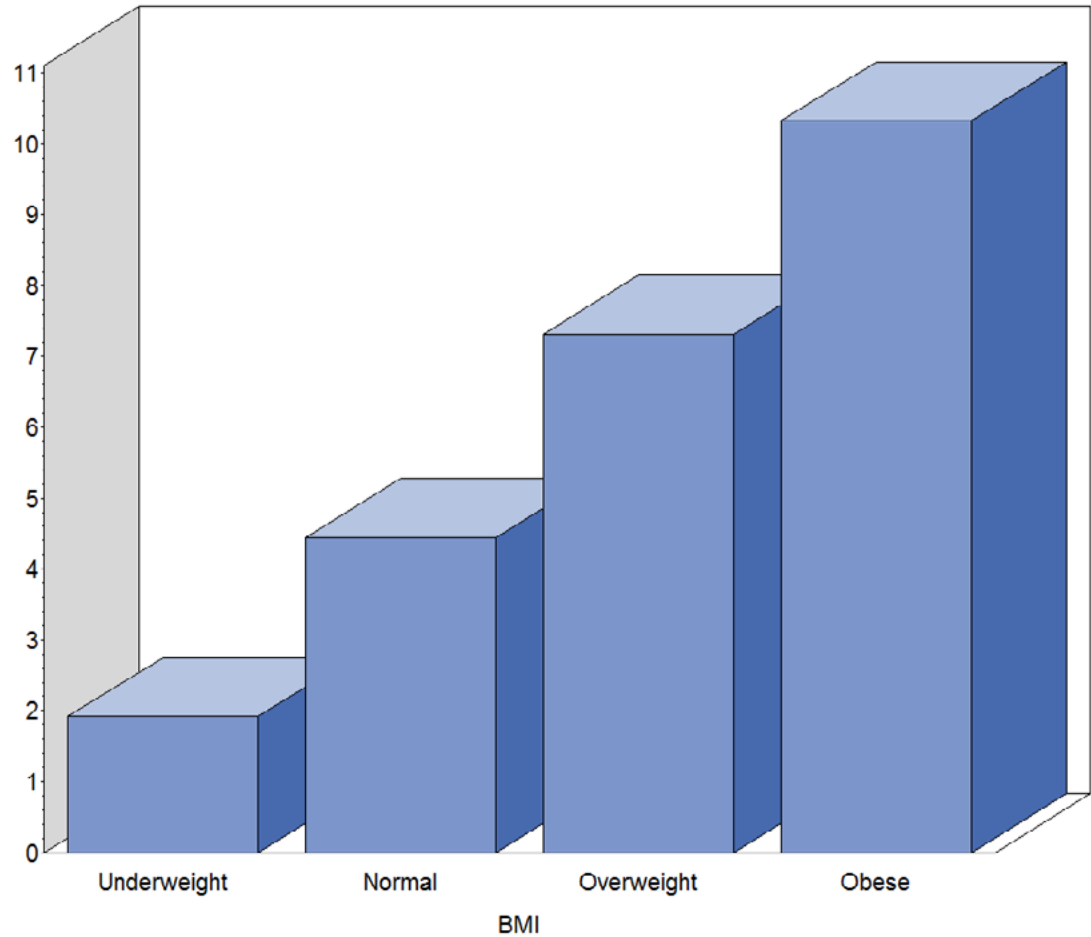


Figure 26. Special Issuance by BMI Category

Table 21. Top 15 Reported Medical Conditions

Pathology Description	Number	Percent
Hypertension with medication	65,593	11.27
Other miscellaneous allergic conditions*	39,351	6.76
Hernias – inguinal, femoral, umbilical, hiatal	30,545	5.25
Urolithiasis – stones or calculus of kidney, ureter, bladder	23,717	4.08
Other esophagus, stomach, and duodenal conditions – severe gastritis, esophageal reflux, achalasia, GERD, gastroplasty, dysphagia, dyspepsia, thrombus abdomen aorta [#]	22,185	3.81
Male genital system – prostatic, varicocele, hydrocele, transurethral resection of prostate (TURP), spermatocele, benign prostatic hypertrophy (BPH)	22,023	3.78
Other skin conditions – includes acne, abnormal pigmentation, vitiligo, psoriasis, keratosis, neurofibroma, (basal cell carcinoma), adenoma, ganglio neuroma, fibroma, fibroadenoma, neuroma, Morton's neuroma, hemangioma [‡]	15,590	2.68
Other lower extremities conditions – operations, fractures, dislocation, knee replacement, knee reconstruction, ACL reconstruction [§]	15,295	2.63
Ruptured intervertebral disk, nucleus pulposus, spinal fusion, laminectomy and spinal stenosis, compression disc, other back surgeries	14,979	2.57
Hayfever	14,477	2.49
Asthma	12,558	2.16
Other general heart pathology (abnormal ECG, open heart surgery, etc.). Wolff-Parkinson-White syndrome, ablation, AV block, right bundle branch block, left bundle branch block [†]	10,622	1.83
Hypothyroidism, underactive thyroid, euthyroid, Hashimoto	10,267	1.76
Neuroses – hysterical, hysterical-conversion type, hysterical-dissociative type, phobic, neurasthenic, depersonalization, hypochondriacal, adjustment disorder and other neurosis	10,232	1.76
Murmur – includes functional or physiological	9,809	1.69

* Excludes hay fever and asthma

[#] Excludes ulcers, gastrectomy, lapband staple bypass, gastric bypass, hernias, esophageal varices

[‡] Excludes dermatitis, pilonidal cyst, significant scarring, melanoma, squamous cell carcinoma

[§] Excludes deformity of toes, foot, or leg diseases (synovitis, arthritis, bursitis, osteomyelitis, neoplasms, polymyalgia rheumatica, etc.), rheumatoid arthritis, unstable knee (locked knee, herniated meniscus, no patella)

[†] Excludes cardiomyopathy, pacemaker, cardiac stents, cardiac angioplasty

Table 22. Medical Conditions by Issued Medical Class

		Issued Medical Class			Total
		First	Second	Third	
Vision	Color vision deficiency	1,543 (0.81)	851 (0.68)	1,730 (0.65)	4,124 (0.71)
	Monocular vision	279 (0.15)	380 (0.30)	1,288 (0.48)	1,947 (0.33)
Transplants	Lung transplant	2 (0.00)	1 (0.00)	3 (0.00)	6 (0.00)
	Heart transplant	0 (0.00)	0 (0.00)	5 (0.00)	5 (0.00)
	Liver transplant	6 (0.00)	7 (0.01)	39 (0.01)	52 (0.01)
	Kidney transplant	35 (0.02)	28 (0.02)	65 (0.02)	128 (0.02)
Cardiac	Myocardial infarction	581 (0.31)	344 (0.27)	2,099 (0.79)	3,014 (0.52)
	Coronary angioplasty with a stent	779 (0.41)	464 (0.37)	3,012 (1.13)	4,255 (0.73)
	Coronary angioplasty procedure	186 (0.10)	144 (0.11)	657 (0.25)	987 (0.17)
	Coronary artery bypass surgery	344 (0.18)	241 (0.19)	1,750 (0.66)	2,335 (0.40)
	Implanted pacemaker	67 (0.04)	55 (0.04)	300 (0.11)	422 (0.07)
	Aortic valve conditions*	563 (0.30)	391 (0.31)	1,336 (0.50)	2,290 (0.39)
	Mitral valve conditions [#]	762 (0.40)	489 (0.39)	1,763 (0.66)	3,014 (0.52)
	Hypertension with medication	13,870 (7.29)	13,607 (10.84)	38,116 (14.32)	65,593 (11.27)

(Continued on next page)

Table 22 (continued). Medical Conditions by Issued Medical Class

		Medical Class Issued			Total
		First	Second	Third	
Alcohol and Drugs	Alcohol abuse/dependence	1,916 (1.01)	986 (0.79)	1,663 (0.62)	4,565 (0.78)
	Drug abuse/dependence	759 (0.40)	528 (0.42)	769 (0.29)	2,056 (0.35)
	Alcohol/Drug case monitored	1035 (0.54)	78 (0.06)	13 (0.00)	1,126 (0.19)
	Alcohol related offense [‡]	10,108 (5.31)	7,238 (5.77)	13,323 (5.01)	30,669 (5.27)
	Drug related offense/misuse [§]	554 (0.29)	578 (0.46)	946 (0.36)	2,078 (0.36)
Other conditions of interest	Sleep apnea	1,717 (0.90)	1,361 (1.08)	3,082 (1.16)	6,160 (1.06)
	Applied for SSRI use	71 (0.04)	45 (0.04)	197 (0.07)	313 (0.05)
	SSRI special issuance	32 (0.02)	7 (0.01)	40 (0.02)	79 (0.01)
	Diabetes [†]	1,100 (0.58)	1,426 (1.14)	4,363 (1.64)	6,889 (1.18)

* Includes aortic valvular disease, aortic stenosis, aortic regurgitation, aortic insufficiency, bicuspid aortic valve, also replacement, ruptured aorta or lacerated, aortic bruit

Includes mitral valve disease, mitral stenosis, mitral regurgitation, and mitral insufficiency. Does not include valve replacement.

‡ Includes DUI, DWI, public intoxication, wet/reckless, .04-.09 blood alcohol

§ Includes drug offenses and positive drug test other than Drug Industry Program (Failed Drug Testing)

† Controlled by hypoglycemic drugs or insulin