

**US NAVY  
ACTIVE DUTY  
EYE INJURY SUMMARY  
CALENDAR YEAR 2006**

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2013



## CY 2006 US NAVY ACTIVE DUTY (AD) EYE INJURY SUMMARY

**INTRODUCTION:** In 2010 the Armed Forces Health Surveillance Center (AFHSC) and Tri-Service Vision Conservation and Readiness Program (TSVCRP) of the US Army Public Health Command (USAPHC) began development of an Annual Active Duty Military Eye Injury Summary that would detail cause and type of injury along with demographics of eye injuries (Age, Gender, Rank, Occupational Group).

The first edition of the summary and annual summaries back through calendar year 2000, were produced in the spring of 2011. An analysis of years 2000-2010 was published in the May 2011 Medical Surveillance Monthly Report (MSMR). The AFHSC also developed a Case Definition for Eye Injuries that details the code set and methodology used to develop the summaries. Both the MSMR Article and Case Definition for Eye Injuries are available on the AFHSC website: <http://afhsc.army.mil/home>.

This summary contains detailed data, along with a set of summary tables detailing Ambulatory and Hospitalization rates (per 1000 person-years) for Injury Group, Cause of Injury and Occupational Group. Summary tables for Deployment-Associated Eye Injuries detailing frequency of Eye Injuries by Type of Injury and Occupational Group are also provided. Occupational Group data is for Enlisted members only. Deployment-Associated Eye Injuries are presented without regard to Ambulatory or Hospitalized status.

As one of the underlying goals of the summary is to make eye injury surveillance data accessible and useable, individual annual eye injury summaries for all years and all services (Combined DoD, Army, Navy, Air Force, Marine Corps and Coast Guard) are posted on the USAPHC public website.

For questions or additional information regarding the summaries please contact the TSVCRP:

By Email: [usarmy.apg.medcom-phc.mbx.dcpm-tri-service-optometry@mail.mil](mailto:usarmy.apg.medcom-phc.mbx.dcpm-tri-service-optometry@mail.mil)

Telephone: 410-436-2714 FAX: 410-436-1325

Additional program information and educational materials can be found at: <http://dodvision.com/> and the USAPHC Public Website at: <http://phc.amedd.army.mil/Pages/default.aspx>

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**INJURY CODE GROUP DETAILS:** The following code groupings were used to develop the summary. Additional details may be found in the AFHSC Case Definition available at: <http://afhsc.army.mil/home>.

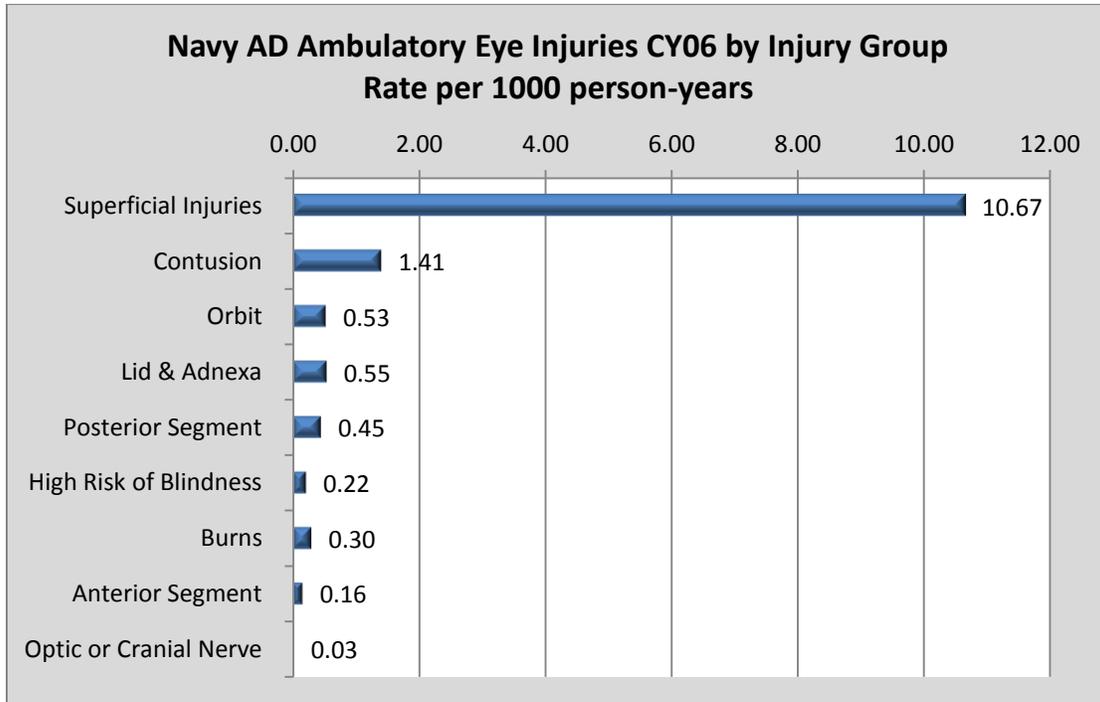
- 1) **Superficial:** all 918 series codes (superficial injury of eye and adnexa) and all 930 series codes (foreign body on external eye).
- 2) **Contusion:** all 921 series codes (contusion of eye and adnexa).
- 3) **Orbit:** All 802 series codes (fracture of face bones), 870.3 and 870.4 (penetrating wound of orbit without and with foreign body) and 376.32 (orbital hemorrhage).
- 4) **Lid/adnexa:** all 870 series codes (open wound of ocular adnexa) with the exception of 870.3 and 870.4 (see orbit above).
- 5) **Posterior segment:** 362.81 (retinal hemorrhage), all 361.0x series codes (retinal detachment with retinal defect), 363.61 (choroidal hemorrhage, unspecified), 363.63 (choroidal rupture), 379.23 (vitreous hemorrhage), 360.00 and 360.01 (purulent and acute endophthalmitis).
- 6) **High risk of blindness:** all 871 series codes (open wound of eyeball).
- 7) **Burns:** all 940 series codes (burn confined to eye and adnexa) as well as all 940.x2 codes (burns to eye with other parts of face, head and neck).
- 8) **Anterior segment:** 364.41 (hyphema), 366.21 and 366.22 (localized and total traumatic cataract), and 364.76 (iridodialysis).
- 9) **Optic/cranial nerve:** 950.0 (optic nerve injury), 950.1 (injury to optic chiasm), 950.9 (injury to optic nerve and pathways, unspecified), 951.0 (injury to oculomotor nerve), 951.1 (injury to trochlear nerve) and 951.3 (injury to abducens nerve).

**DETAILS FOR TOTAL NUMBERS:** Because patients may have been coded with more than one injury group or cause of injury, the sum of cases by injury group and the sum of cases by causes of injury will be greater than the total number of patients.

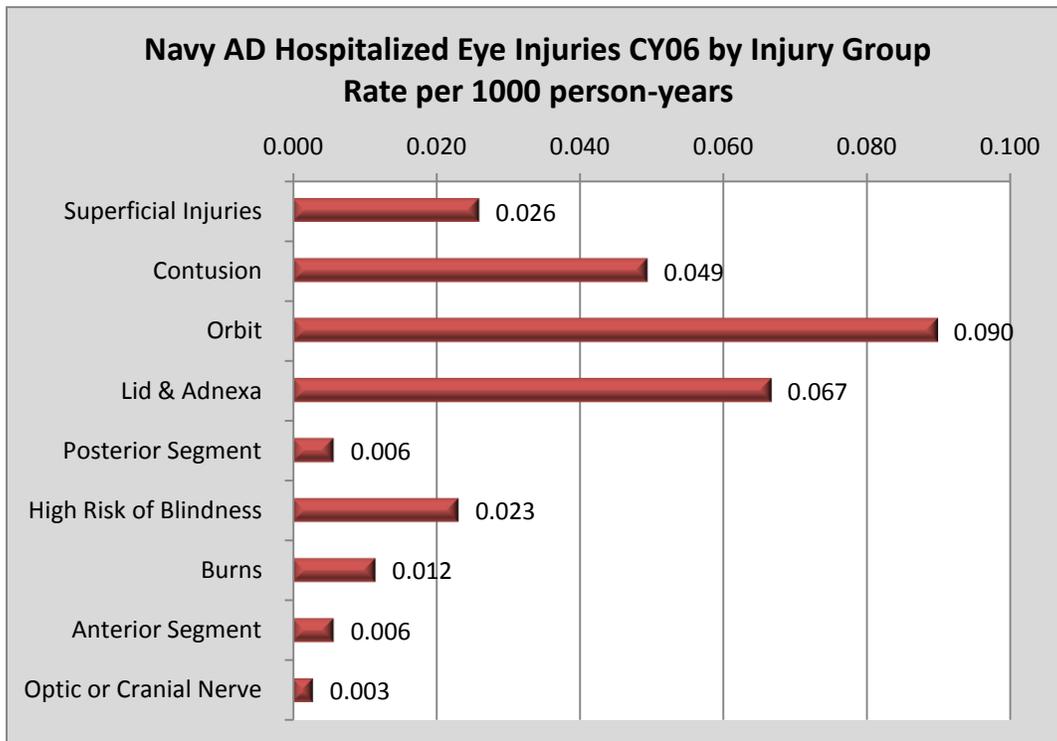
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## CY 2006 US NAVY ACTIVE DUTY (AD) EYE INJURY SUMMARY



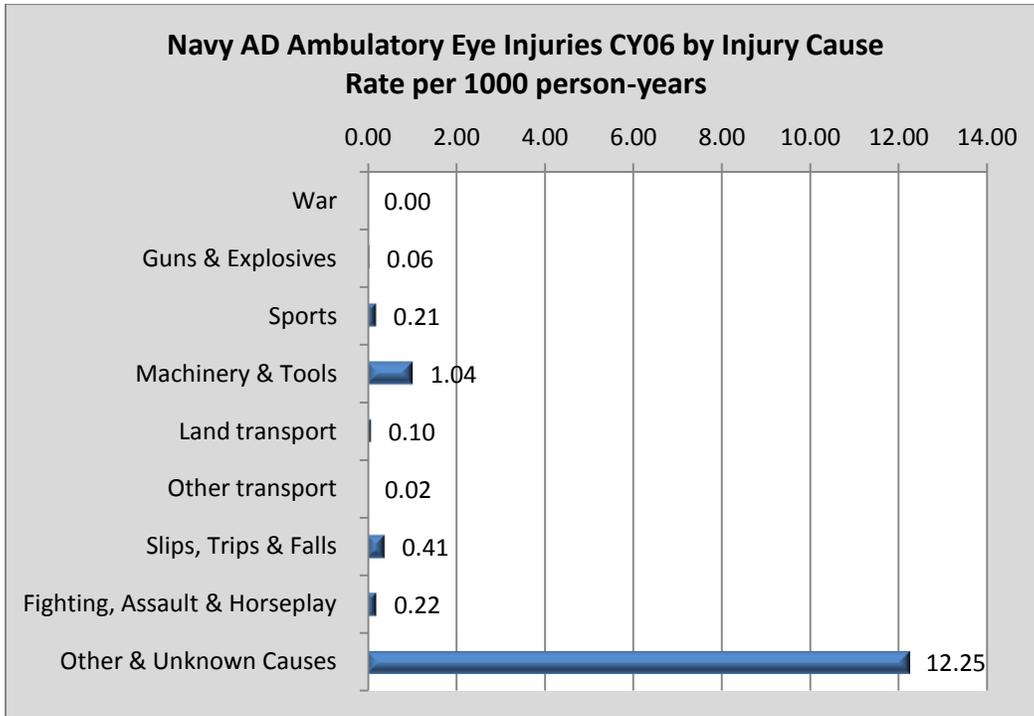
Please note the difference in scale between Ambulatory and Hospitalized graphs



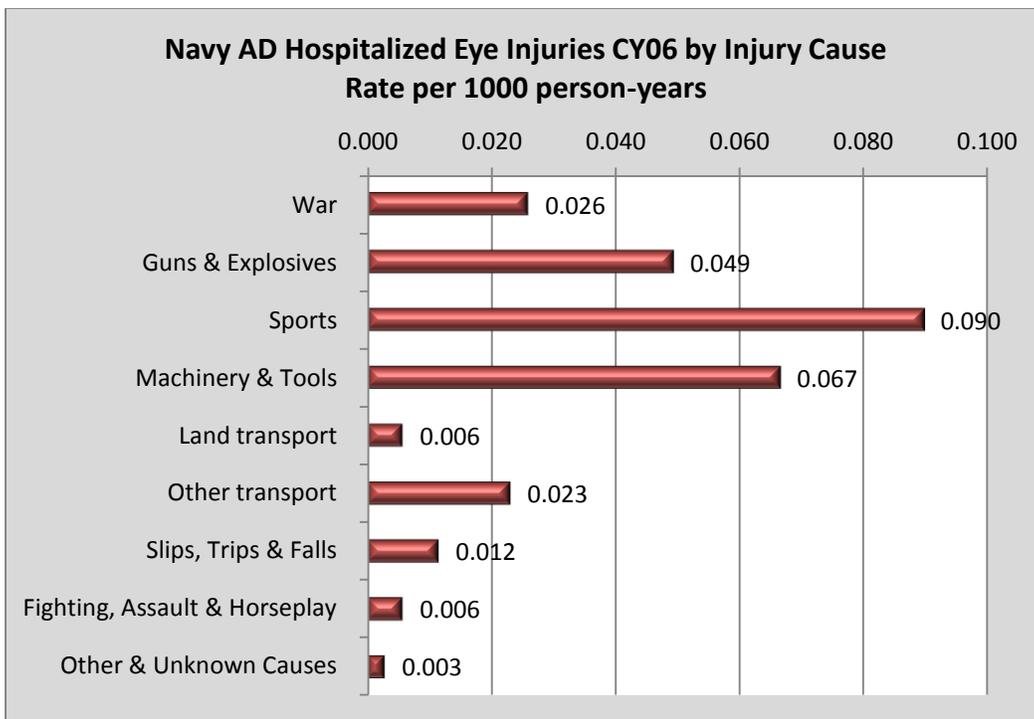
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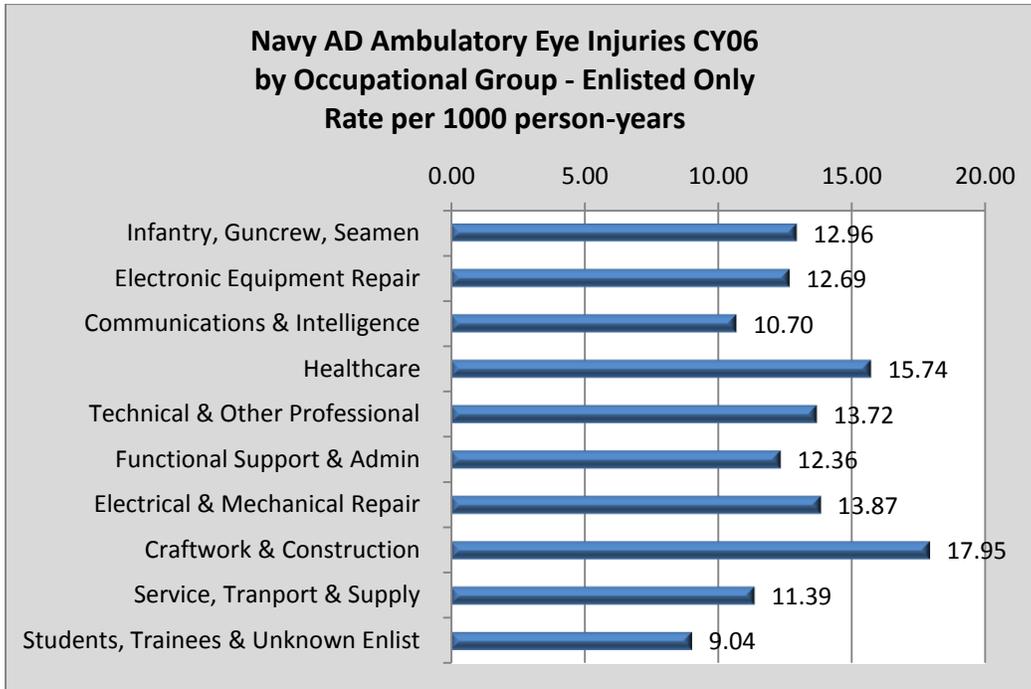
Please note the difference in scale between Ambulatory and Hospitalized graphs



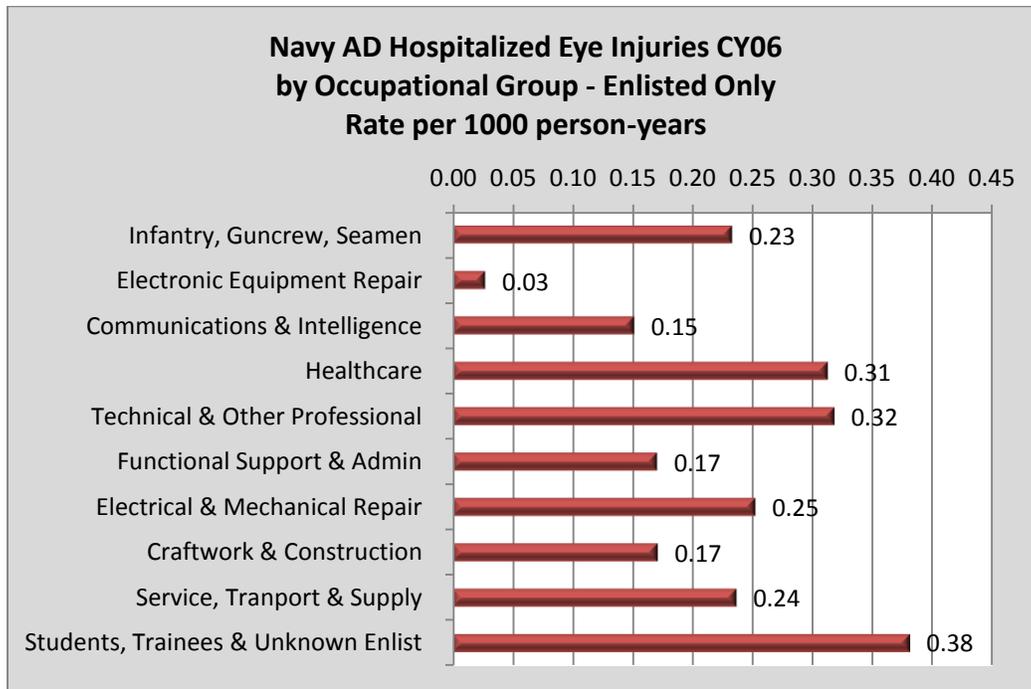
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## CY 2006 US NAVY ACTIVE DUTY (AD) EYE INJURY SUMMARY



Please note the difference in scale between Ambulatory and Hospitalized graphs

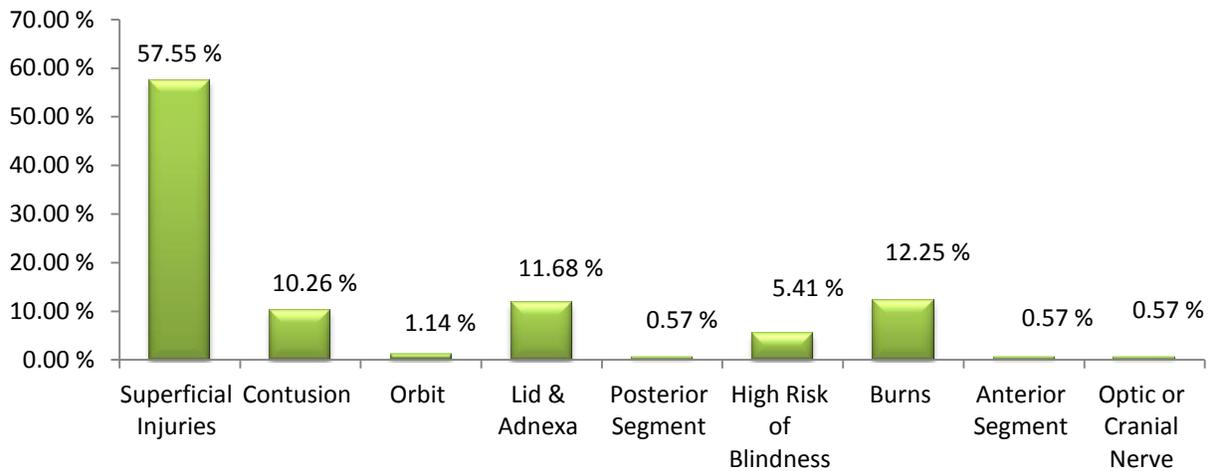


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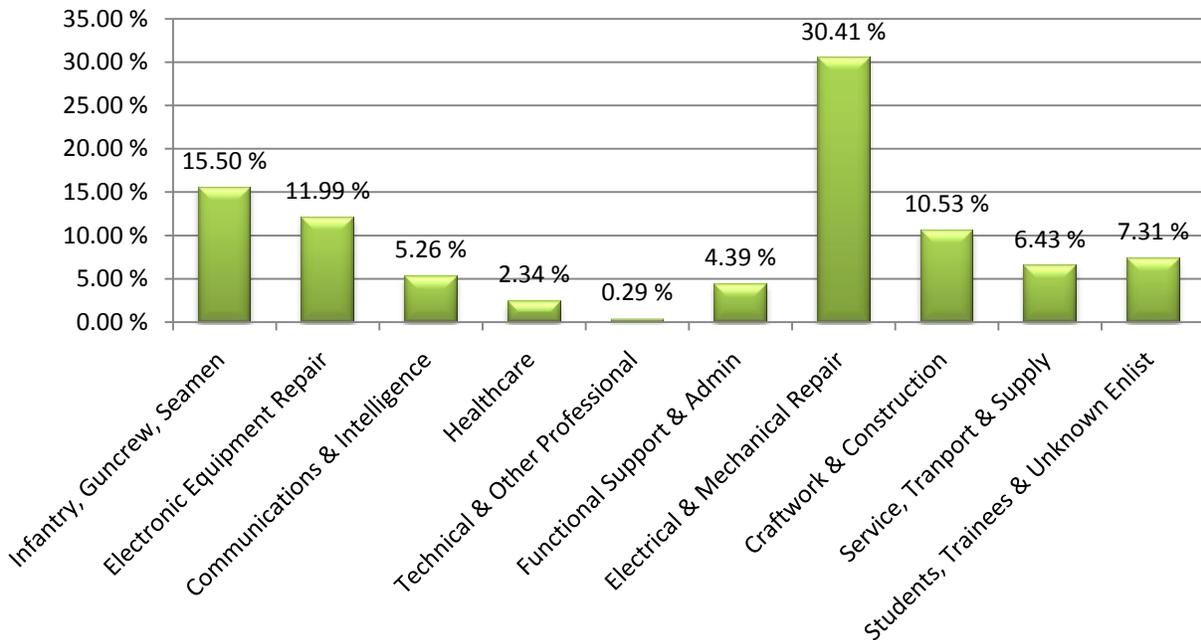


**CY 2006 US NAVY ACTIVE DUTY (AD) EYE INJURY SUMMARY**

**Navy AD Deployment Associated Eye Injuries CY06  
by Injury Group  
Percent of Total**



**Navy AD Deployment Associated Eye Injuries CY06  
by Occupational Group- Enlisted Only  
Percent of Total**



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# CY 2006 US NAVY ACTIVE DUTY (AD) EYE INJURY SUMMARY

	2006											
	Ambulatory MTF Visits				Deployment-Associated Healthcare				Hospitalizations			
	Primary		All Diagnoses		Primary		All Diagnoses		Primary		All Diagnoses	
	Count	Rate <sup>1</sup>	Count	Rate	Count	% total <sup>3</sup>	Count	% total <sup>3</sup>	Count	Rate	Count	Rate
<b>ALL ACTIVE COMPONENT</b>												
<b>Total</b>	<b>4,157</b>	<b>12.02</b>	<b>4,659</b>	<b>13.47</b>	<b>337</b>	<b>100.00</b>	<b>342</b>	<b>100.00</b>	<b>10</b>	<b>0.03</b>	<b>65</b>	<b>0.19</b>
Superficial Injuries	3,430	9.92	3,689	10.67	200	57.97	202	57.55	2	0.01	9	0.03
Contusion	376	1.09	485	1.41	35	10.14	36	10.26	4	0.01	17	0.05
Orbit	137	0.40	184	0.53	3	0.87	4	1.14	5	0.01	31	0.09
Lid & Adnexa	158	0.46	188	0.55	41	11.88	41	11.68	6	0.02	23	0.07
Posterior Segment	98	0.28	157	0.45	2	0.58	2	0.57	0	0.00	2	0.01
High Risk of Blindness	65	0.19	75	0.22	18	5.22	19	5.41	7	0.02	8	0.02
Burns	97	0.28	105	0.30	43	12.46	43	12.25	1	0.00	4	0.01
Anterior Segment	42	0.12	57	0.16	2	0.58	2	0.57	1	0.00	2	0.01
Optic or Cranial Nerve	4	0.01	9	0.03	1	0.29	2	0.57	1	0.00	1	0.00
Male	3,522	11.89	3,951	13.34	288	85.46	293	85.67	10	0.03	64	0.22
Female	635	12.78	708	14.25	49	14.54	49	14.33	0	0.00	1	0.02
War	0	0.00	0	0.00	not assessed <sup>2</sup>				4	0.01	7	0.02
Guns & Explosives	20	0.06	22	0.06					5	0.01	10	0.03
Sports	59	0.17	74	0.21					2	0.01	2	0.01
Machinery & Tools	346	1.00	360	1.04					2	0.01	2	0.01
Land transport	18	0.05	33	0.10					1	0.00	13	0.04
Other transport	5	0.01	6	0.02					0	0.00	1	0.00
Slips, Trips & Falls	128	0.37	141	0.41					0	0.00	3	0.01
Fighting, Assault & Horseplay	61	0.18	77	0.22					1	0.00	4	0.01
Other & Unknown Causes	3,770	10.90	4,236	12.25					12	0.03	55	0.16
<b>ENLISTED (all diagnoses combined)</b>												
<b>Enlisted</b>	<b>3,430</b>	<b>11.68</b>	<b>3,861</b>	<b>13.15</b>	<b>318</b>	<b>94.36</b>	<b>323</b>	<b>94.44</b>	<b>9</b>	<b>0.03</b>	<b>62</b>	<b>0.21</b>
<20	147	4.89	183	6.08	28	8.31	28	8.19	0	0.00	3	0.10
20-24	1,159	10.30	1,321	11.74	190	56.38	192	56.14	5	0.04	28	0.25
25-29	854	13.93	963	15.70	53	15.73	55	16.08	3	0.05	18	0.29
30-34	547	13.57	598	14.84	29	8.61	30	8.77	0	0.00	6	0.15
35-39	421	13.36	454	14.41	11	3.26	11	3.22	1	0.03	7	0.22
>=40	302	16.84	342	19.07	7	2.08	7	2.05	0	0.00	0	0.00
E0-E4	1,404	10.15	1,626	11.76	239	70.92	241	70.47	5	0.04	36	0.26
E5-E9	2,026	13.04	2,235	14.38	79	23.44	82	23.98	4	0.03	26	0.17
Infantry, Guncrew, Seamen	292	11.36	333	12.96	52	15.43	53	15.50	1	0.04	6	0.23
Electronic Equipment Repair	415	11.33	465	12.69	40	11.87	41	11.99	0	0.00	1	0.03
Communications & Intelligence	250	9.49	282	10.70	17	5.04	18	5.26	0	0.00	4	0.15
Healthcare	352	13.79	402	15.74	8	2.37	8	2.34	0	0.00	8	0.31
Technical & Other Professional	37	11.80	43	13.72	1	0.30	1	0.29	0	0.00	1	0.32
Functional Support & Admin	395	11.25	434	12.36	15	4.45	15	4.39	1	0.03	6	0.17
Electrical & Mechanical Repair	1,077	12.38	1,206	13.87	104	30.86	104	30.41	6	0.07	22	0.25
Craftwork & Construction	295	16.86	314	17.95	35	10.39	36	10.53	0	0.00	3	0.17
Service, Transport & Supply	204	9.68	240	11.39	21	6.23	22	6.43	1	0.05	5	0.24
Students, Trainees & Unknown Enlist	113	7.20	142	9.04	25	7.42	25	7.31	0	0.00	6	0.38
<b>OFFICER (all diagnoses combined)</b>												
<b>Officer</b>	<b>727</b>	<b>13.94</b>	<b>798</b>	<b>15.31</b>	<b>19</b>	<b>5.64</b>	<b>19</b>	<b>5.56</b>	<b>1</b>	<b>0.02</b>	<b>3</b>	<b>0.06</b>
<20	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
20-24	46	9.44	48	9.85	2	0.59	2	0.58	0	0.00	0	0.00
25-29	133	11.77	145	12.83	6	1.78	6	1.75	0	0.00	0	0.00
30-34	132	12.36	141	13.20	1	0.30	1	0.29	1	0.09	2	0.19
35-39	162	14.96	177	16.34	5	1.48	5	1.46	0	0.00	0	0.00
>=40	254	17.58	287	19.86	5	1.48	5	1.46	0	0.00	1	0.07
O0-O3,W0-W3	402	12.86	443	14.17	12	3.56	12	3.51	0	0.00	1	0.03
O4-O10,W4-W5	325	15.56	355	17.00	7	2.08	7	2.05	1	0.05	2	0.10
General/Flag Ofc & Executives	3	13.59	5	22.65	0	0.00	0	0.00	0	0.00	0	0.00
Tactical Operations Off.	277	13.31	302	14.51	7	2.08	7	2.05	0	0.00	2	0.10
Intelligence Off.	40	17.10	43	18.38	0	0.00	0	0.00	0	0.00	0	0.00
Engineering & Maintenance Off.	97	15.93	110	18.07	1	0.30	1	0.29	1	0.16	1	0.16
Healthcare Off.	154	15.30	172	17.09	7	2.08	7	2.05	0	0.00	0	0.00
Scientists & Professional Off.	35	16.87	39	18.80	0	0.00	0	0.00	0	0.00	0	0.00
Administrative Off.	27	10.76	30	11.95	1	0.30	1	0.29	0	0.00	0	0.00
Supply & Logistics Off.	36	13.77	37	14.15	0	0.00	0	0.00	0	0.00	0	0.00
Students, Trainees & Unknown Off.	58	10.71	60	11.08	3	0.89	3	0.88	0	0.00	0	0.00

1. Rates are per 1,000 person-years.

2. Use of ICD-9-CM E-codes for "cause of injury" is largely incomplete for theater healthcare records and therefore omitted.

3. Person-time is not available for deployers so the proportion of the total number of diagnoses is shown.

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