

**US NAVY  
ACTIVE DUTY  
EYE INJURY SUMMARY  
CALENDAR YEAR 2003**

Approved for public release, distribution unlimited

2013



## CY 2003 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>.

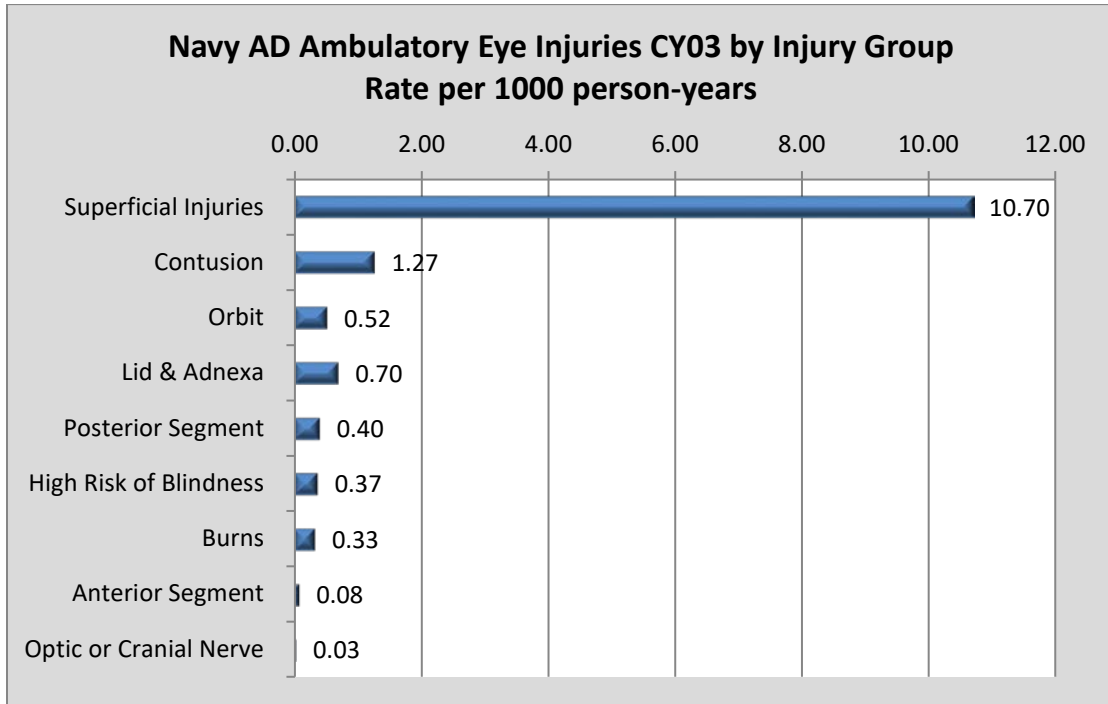
- 1) **Superficial:** all 918 series codes (superficial injury of eye and adnexa) and all 930 series codes (foreign body on external eye).
- 2) **Contusion:** all 921 series codes (contusion of eye and adnexa).
- 3) **Orbit:** All 802 series codes (fracture of face bones), 870.3 and 870.4 (penetrating 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.

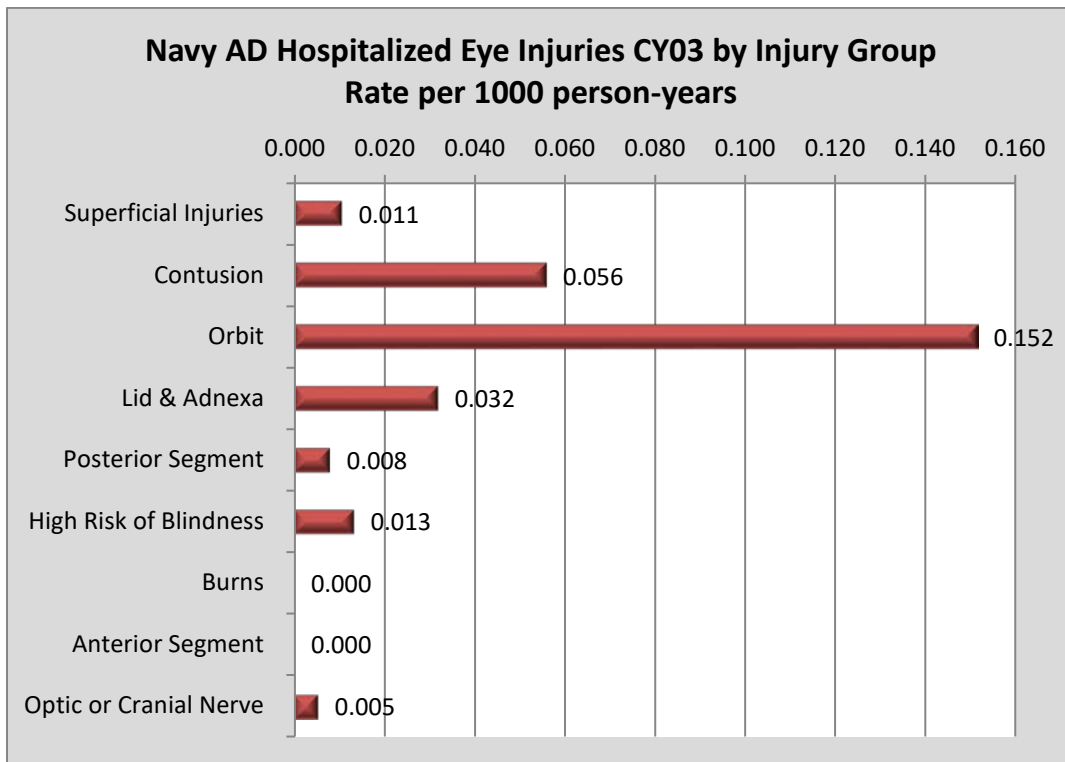
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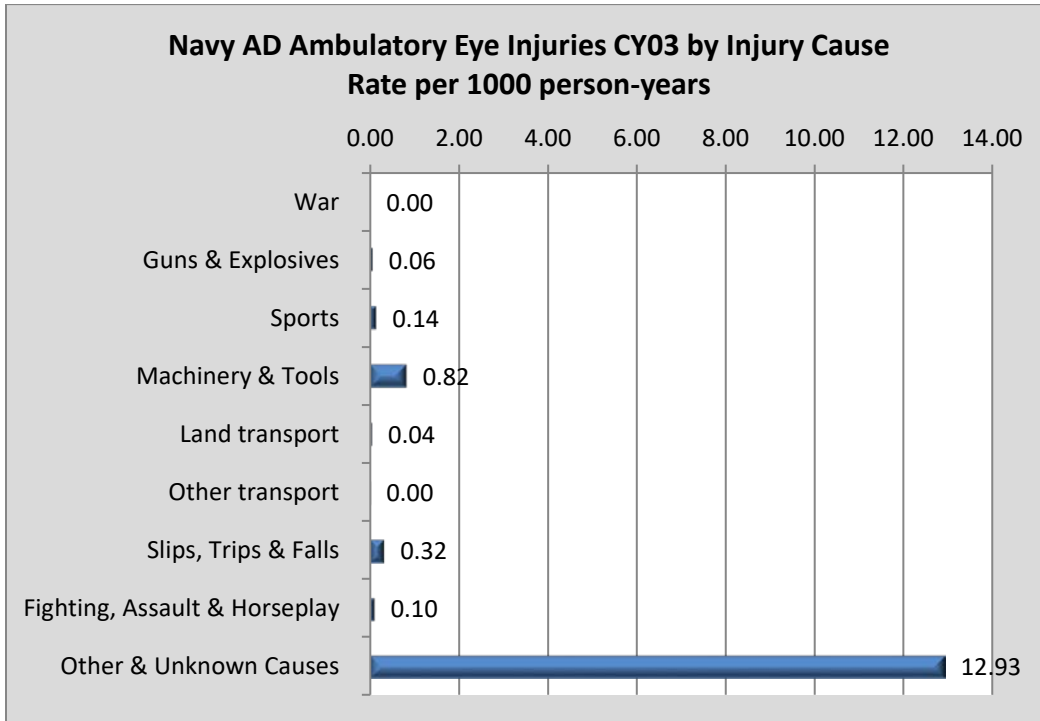
Please note the difference in scale between Ambulatory and Hospitalized graphs



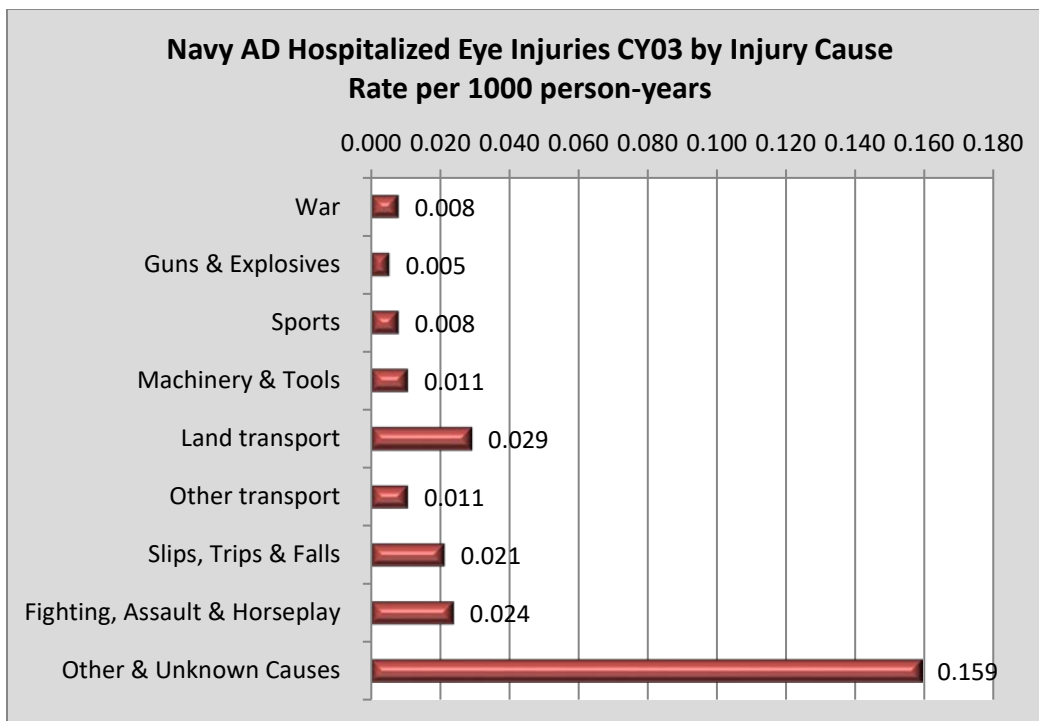
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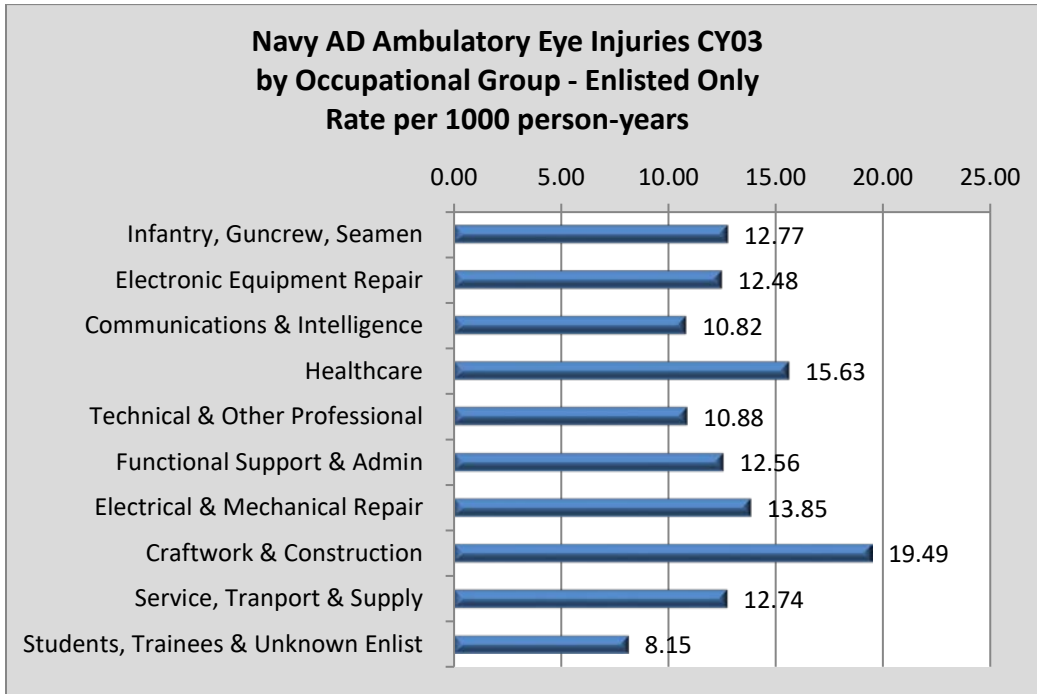
Please note the difference in scale between Ambulatory and Hospitalized graphs



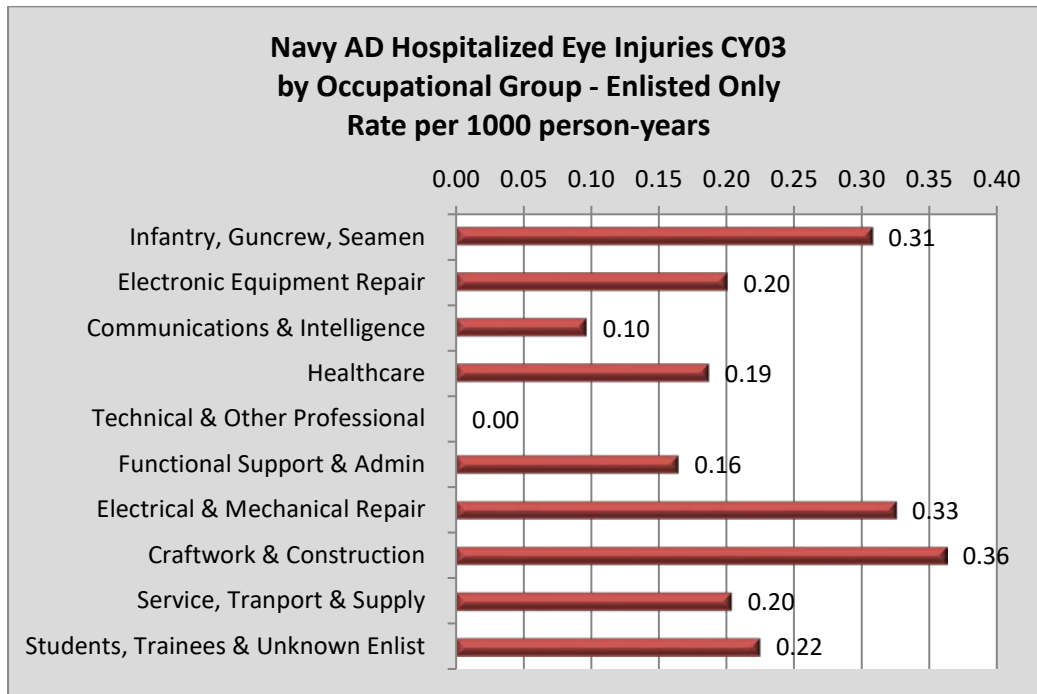
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## CY 2003 US NAVY ACTIVE DUTY (AD) EYE INJURY SUMMARY



Please note the difference in scale between Ambulatory and Hospitalized graphs



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# CY 2003 US NAVY ACTIVE DUTY (AD) EYE INJURY SUMMARY

	2003											
	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>4,625</b>	<b>12.28</b>	<b>5,155</b>	<b>13.68</b>	-	-	-	-	<b>23</b>	<b>0.06</b>	<b>84</b>	<b>0.22</b>
Superficial Injuries	3,731	9.90	4,032	10.70	-	-	-	-	1	0.00	4	0.01
Contusion	381	1.02	477	1.27	-	-	-	-	7	0.02	21	0.06
Orbit	147	0.39	196	0.52	-	-	-	-	15	0.04	57	0.15
Lid & Adnexa	229	0.61	263	0.70	-	-	-	-	3	0.01	12	0.03
Posterior Segment	96	0.26	152	0.40	-	-	-	-	1	0.00	3	0.01
High Risk of Blindness	129	0.34	140	0.37	-	-	-	-	3	0.01	5	0.01
Burns	117	0.31	124	0.33	-	-	-	-	0	0.00	0	0.00
Anterior Segment	21	0.06	31	0.08	-	-	-	-	0	0.00	0	0.00
Optic or Cranial Nerve	6	0.02	12	0.03	-	-	-	-	0	0.00	2	0.01
Male	3,973	12.33	4,441	13.79	-	-	-	-	22	0.07	77	0.24
Female	652	11.94	714	13.07	-	-	-	-	1	0.02	7	0.13
War	0	0.00	0	0.00	not assessed <sup>2</sup>				1	0.00	3	0.01
Guns & Explosives	21	0.06	22	0.06					2	0.01	2	0.01
Sports	44	0.12	51	0.14					1	0.00	3	0.01
Machinery & Tools	298	0.79	308	0.82					3	0.01	4	0.01
Land transport	6	0.02	16	0.04					6	0.02	11	0.03
Other transport	1	0.00	1	0.00					0	0.00	4	0.01
Slips, Trips & Falls	110	0.29	119	0.32					3	0.01	8	0.02
Fighting, Assault & Horseplay	33	0.09	38	0.10					6	0.02	9	0.02
Other & Unknown Causes	4,344	11.53	4,872	12.93					8	0.02	60	0.16
<b>ENLISTED (all diagnoses combined)</b>												
<b>Enlisted</b>	<b>3,791</b>	<b>11.79</b>	<b>4,240</b>	<b>13.18</b>	-	-	-	-	<b>22</b>	<b>0.07</b>	<b>77</b>	<b>0.24</b>
<20	226	5.99	268	7.11	-	-	-	-	3	0.08	4	0.11
20-24	1,236	10.07	1,383	11.27	-	-	-	-	13	0.11	46	0.37
25-29	813	13.73	900	15.19	-	-	-	-	2	0.03	12	0.20
30-34	576	13.29	630	14.53	-	-	-	-	2	0.05	8	0.18
35-39	568	14.70	641	16.58	-	-	-	-	1	0.03	3	0.08
>=40	372	18.66	418	20.97	-	-	-	-	1	0.05	4	0.20
E0-E4	1,619	10.34	1,831	11.69	-	-	-	-	15	0.10	51	0.33
E5-E9	2,172	13.16	2,409	14.60	-	-	-	-	7	0.04	26	0.16
Infantry, Guncrew, Seamen	336	11.50	373	12.77	-	-	-	-	1	0.03	9	0.31
Electronic Equipment Repair	495	11.03	560	12.48	-	-	-	-	1	0.02	9	0.20
Communications & Intelligence	296	9.53	336	10.82	-	-	-	-	1	0.03	3	0.10
Healthcare	367	13.72	418	15.63	-	-	-	-	1	0.04	5	0.19
Technical & Other Professional	43	9.74	48	10.88	-	-	-	-	0	0.00	0	0.00
Functional Support & Admin	408	11.19	458	12.56	-	-	-	-	0	0.00	6	0.16
Electrical & Mechanical Repair	1,149	12.47	1,276	13.85	-	-	-	-	11	0.12	30	0.33
Craftwork & Construction	354	18.35	376	19.49	-	-	-	-	4	0.21	7	0.36
Service, Transport & Supply	224	11.42	250	12.74	-	-	-	-	1	0.05	4	0.20
Students, Trainees & Unknown Enlist	119	6.69	145	8.15	-	-	-	-	2	0.11	4	0.22
<b>OFFICER (all diagnoses combined)</b>												
<b>Officer</b>	<b>834</b>	<b>15.14</b>	<b>915</b>	<b>16.61</b>	-	-	-	-	<b>1</b>	<b>0.02</b>	<b>7</b>	<b>0.13</b>
<20	0	0.00	0	0.00	-	-	-	-	0	0.00	0	0.00
20-24	36	6.15	42	7.17	-	-	-	-	0	0.00	0	0.00
25-29	156	12.75	170	13.90	-	-	-	-	0	0.00	1	0.08
30-34	158	13.57	170	14.60	-	-	-	-	1	0.09	3	0.26
35-39	184	17.09	202	18.76	-	-	-	-	0	0.00	1	0.09
>=40	300	20.54	331	22.66	-	-	-	-	0	0.00	2	0.14
O0-O3,W0-W3	460	13.76	501	14.99	-	-	-	-	1	0.03	3	0.09
O4-O10,W4-W5	374	17.25	414	19.10	-	-	-	-	0	0.00	4	0.18
General/Flag Ofc & Executives	1	4.06	3	12.19	-	-	-	-	0	0.00	0	0.00
Tactical Operations Off.	355	17.09	382	18.38	-	-	-	-	1	0.05	3	0.14
Intelligence Off.	29	12.76	31	13.64	-	-	-	-	0	0.00	0	0.00
Engineering & Maintenance Off.	121	17.76	131	19.22	-	-	-	-	0	0.00	1	0.15
Healthcare Off.	159	14.46	178	16.18	-	-	-	-	0	0.00	0	0.00
Scientists & Professional Off.	34	16.16	41	19.49	-	-	-	-	0	0.00	2	0.95
Administrative Off.	31	13.02	34	14.28	-	-	-	-	0	0.00	0	0.00
Supply & Logistics Off.	40	12.82	45	14.43	-	-	-	-	0	0.00	1	0.32
Students, Trainees & Unknown Off.	64	10.02	70	10.96	-	-	-	-	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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