

**US AIR FORCE
ACTIVE DUTY
EYE INJURY SUMMARY
CALENDAR YEAR 2007**

Approved for public release, distribution unlimited

2013



CY 2007 US AIR FORCE 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

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>.

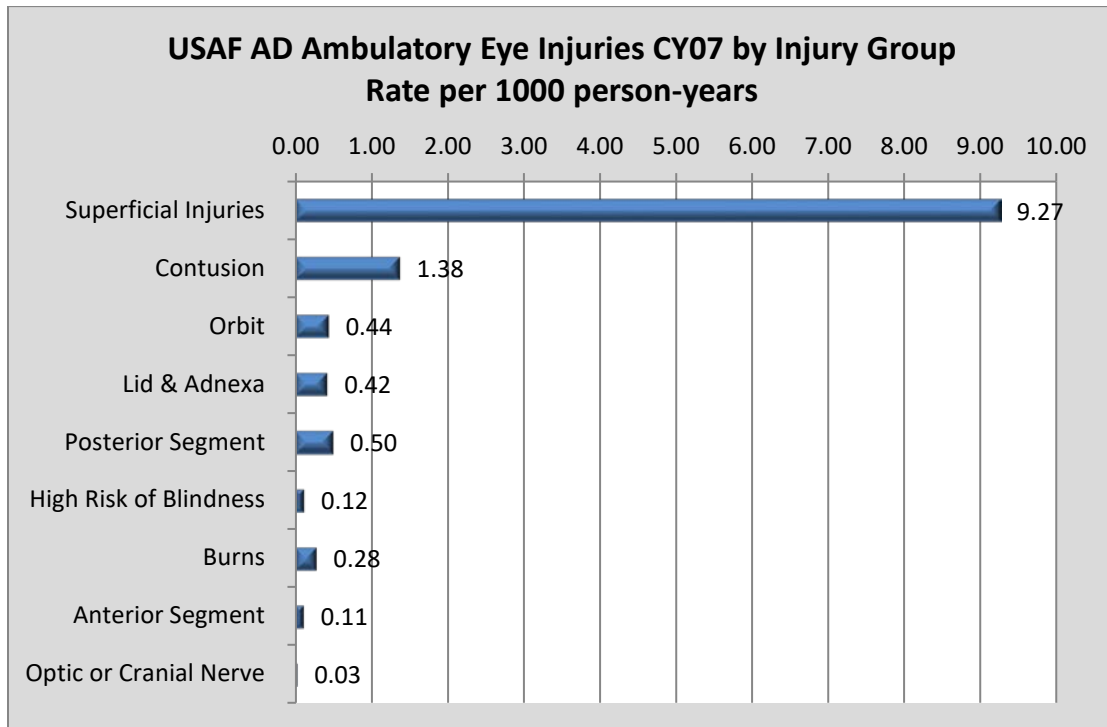
- 1) **Superficial:** all 918 series codes (superficial injury of eye and adnexa) and all 930 series codes (foreign body on external eye).
- 2) **Contusion:** all 921 series codes (contusion of eye and adnexa).
- 3) **Orbit:** All 802 series codes (fracture of face bones), 870.3 and 870.4 (penetrating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

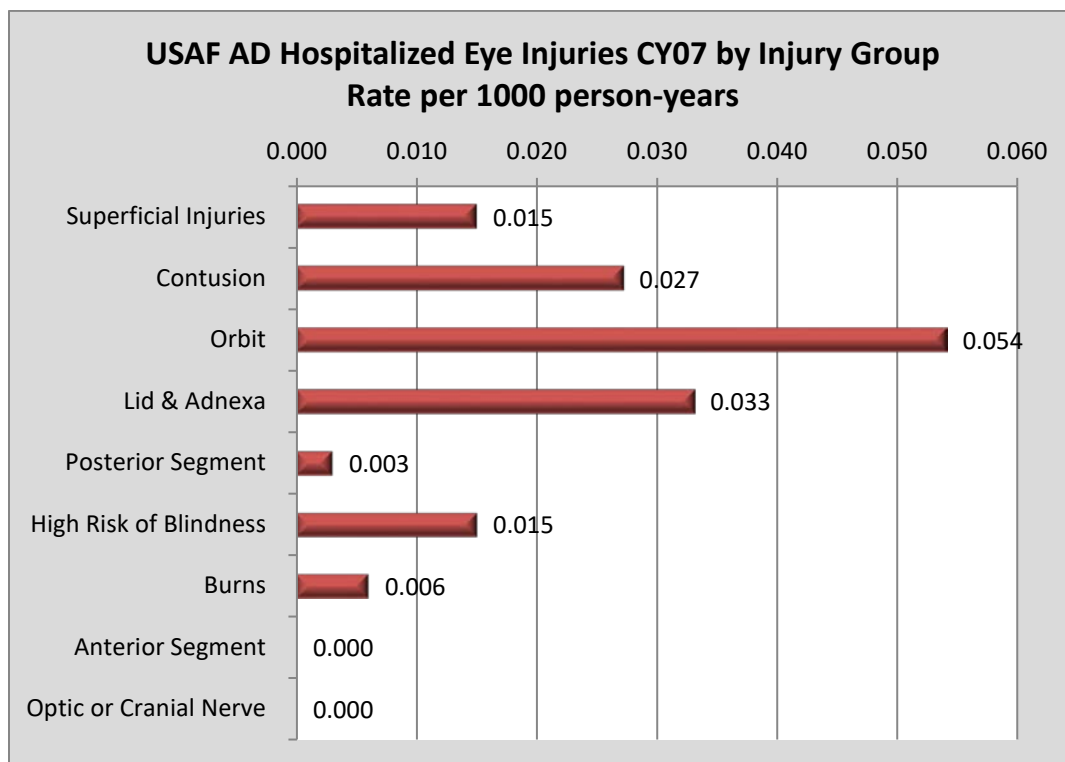
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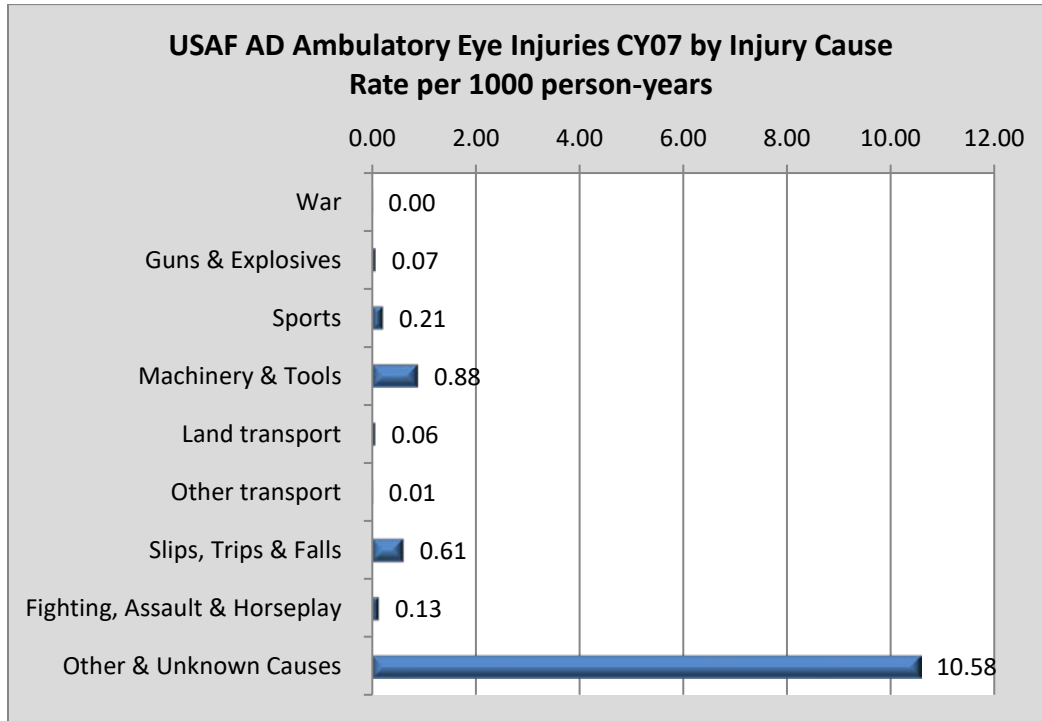
Please note the difference in scale between Ambulatory and Hospitalized graphs



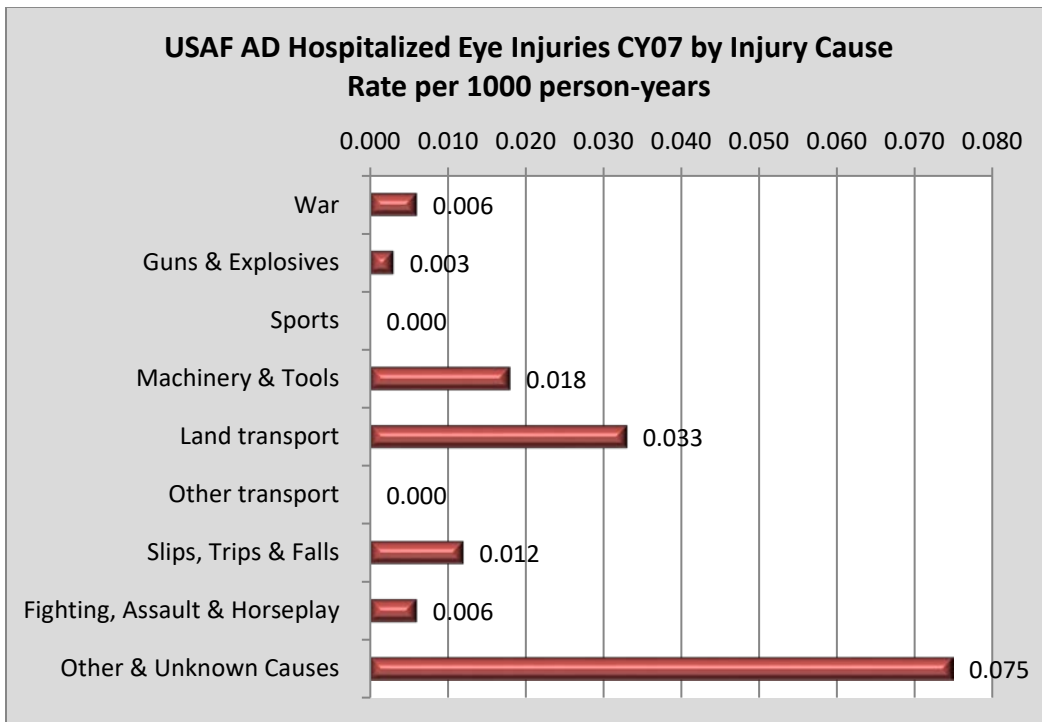
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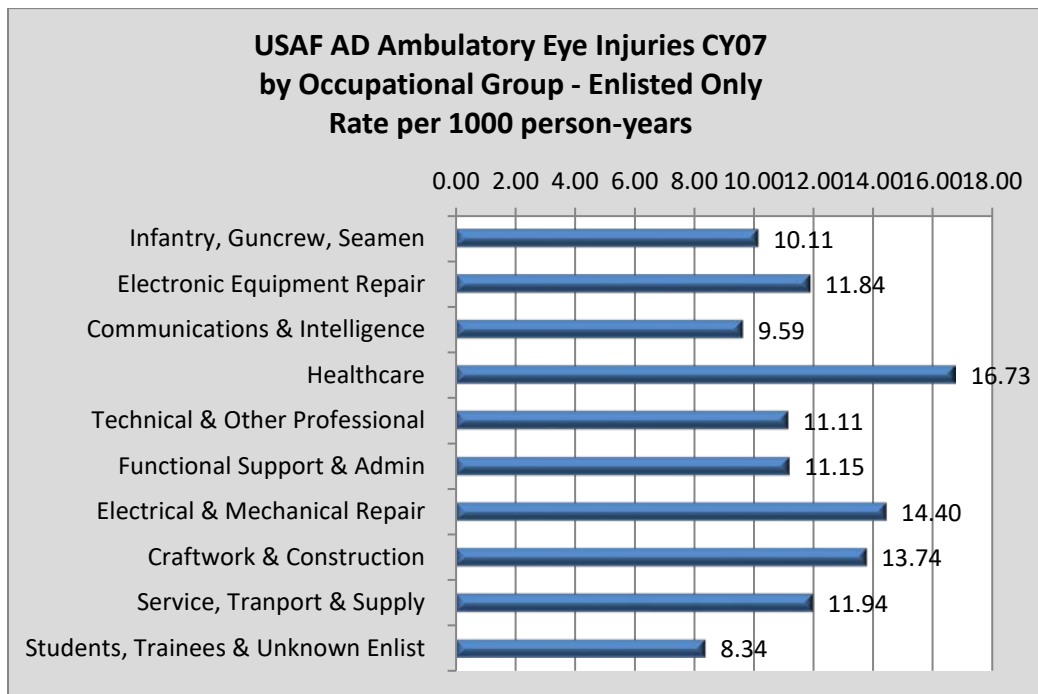
Please note the difference in scale between Ambulatory and Hospitalized graphs



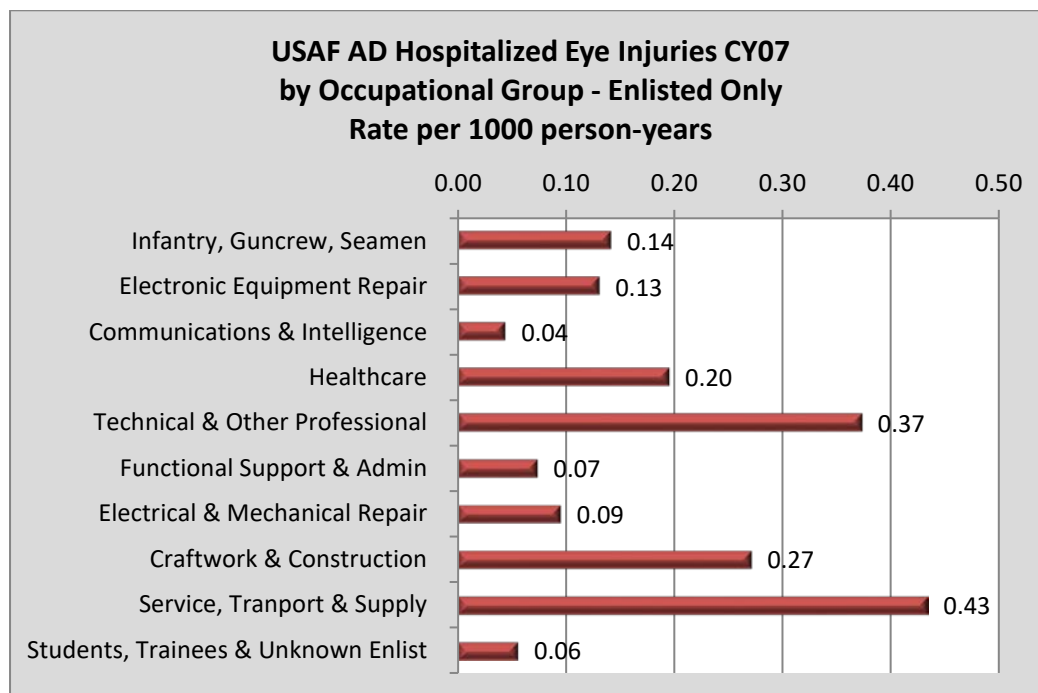
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Please note the difference in scale between Ambulatory and Hospitalized graphs

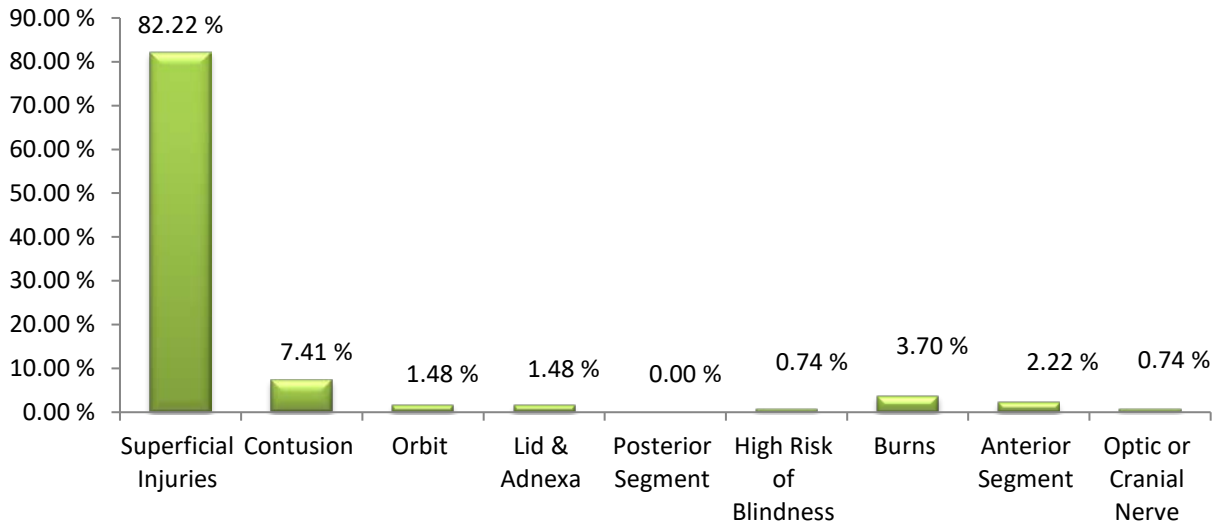


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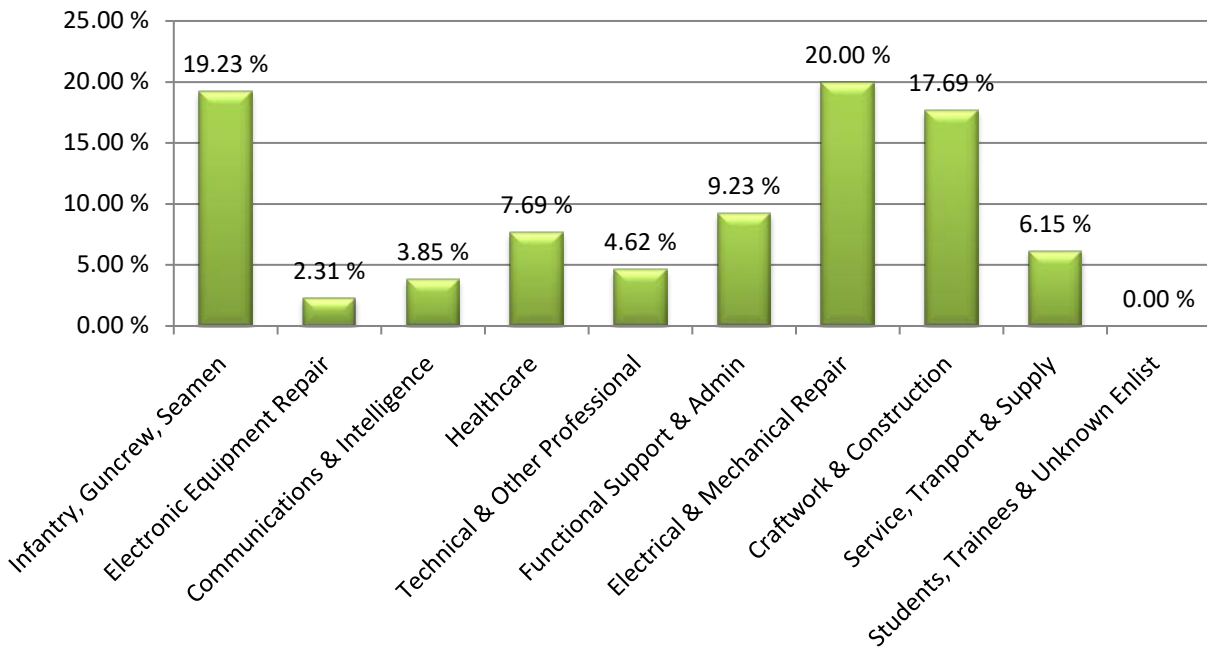


CY 2007 US AIR FORCE ACTIVE DUTY (AD) EYE INJURY SUMMARY

**USAF AD Deployment Associated Eye Injuries CY07
by Injury Group
Percent of Total**



**USAF AD Deployment Associated Eye Injuries CY07
by Occupational Group- Enlisted Only
Percent of Total**



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CY 2007 US AIR FORCE ACTIVE DUTY (AD) EYE INJURY SUMMARY

	2007											
	Ambulatory MTF Visits				Deployment-Associated Healthcare				Hospitalizations			
	Primary		All Diagnoses		Primary		All Diagnoses		Primary		All Diagnoses	
	Count	Rate ¹	Count	Rate	Count	% total ³	Count	% total ³	Count	Rate	Count	Rate
ALL ACTIVE COMPONENT												
Total	3,320	9.96	3,949	11.84	124	100.00	130	100.00	6	0.02	40	0.12
Superficial Injuries	2,704	8.11	3,091	9.27	108	84.38	111	82.22	0	0.00	5	0.01
Contusion	352	1.06	456	1.38	9	7.03	10	7.41	3	0.01	9	0.03
Orbit	100	0.30	147	0.44	1	0.78	2	1.48	6	0.02	18	0.05
Lid & Adnexa	114	0.34	141	0.42	1	0.78	2	1.48	2	0.01	11	0.03
Posterior Segment	87	0.26	167	0.50	0	0.00	0	0.00	0	0.00	1	0.00
High Risk of Blindness	34	0.10	40	0.12	1	0.78	1	0.74	3	0.01	5	0.02
Burns	92	0.28	94	0.28	5	3.91	5	3.70	0	0.00	2	0.01
Anterior Segment	24	0.07	38	0.11	2	1.56	3	2.22	0	0.00	0	0.00
Optic or Cranial Nerve	5	0.01	10	0.03	1	0.78	1	0.74	0	0.00	0	0.00
Male	2,644	9.86	3,133	11.69	103	83.06	109	83.85	6	0.02	33	0.12
Female	676	10.33	816	12.47	21	16.94	21	16.15	0	0.00	7	0.11
War	1	0.00	1	0.00	not assessed ²				0	0.00	2	0.01
Guns & Explosives	22	0.07	22	0.07					0	0.00	1	0.00
Sports	64	0.19	70	0.21					0	0.00	0	0.00
Machinery & Tools	278	0.83	294	0.88					5	0.01	6	0.02
Land transport	16	0.05	21	0.06					3	0.01	11	0.03
Other transport	4	0.01	4	0.01					0	0.00	0	0.00
Slips, Trips & Falls	185	0.55	202	0.61					1	0.00	4	0.01
Fighting, Assault & Horseplay	28	0.08	43	0.13					0	0.00	2	0.01
Other & Unknown Causes	2,914	8.74	3,527	10.58					5	0.01	25	0.07
ENLISTED (all diagnoses combined)												
Enlisted	2,710	10.19	3,224	12.12	112	90.32	118	90.77	6	0.02	36	0.14
<20	135	6.46	164	7.85	3	2.42	3	2.31	1	0.05	2	0.10
20-24	951	10.06	1,132	11.97	42	33.87	46	35.38	3	0.03	19	0.20
25-29	701	11.48	821	13.45	31	25.00	32	24.62	1	0.02	4	0.07
30-34	377	10.24	446	12.12	17	13.71	17	13.08	1	0.03	5	0.14
35-39	308	9.80	364	11.59	10	8.06	10	7.69	0	0.00	5	0.16
>=40	238	11.21	297	13.98	9	7.26	10	7.69	0	0.00	1	0.05
E0-E4	1,246	10.63	1,483	12.65	46	37.10	51	39.23	3	0.03	20	0.17
E5-E9	1,464	9.84	1,741	11.71	66	53.23	67	51.54	3	0.02	16	0.11
Infantry, Guncrew, Seamen	235	8.31	286	10.11	22	17.74	25	19.23	1	0.04	4	0.14
Electronic Equipment Repair	223	9.71	272	11.84	3	2.42	3	2.31	0	0.00	3	0.13
Communications & Intelligence	177	7.72	220	9.59	4	3.23	5	3.85	1	0.04	1	0.04
Healthcare	288	14.05	343	16.73	9	7.26	10	7.69	0	0.00	4	0.20
Technical & Other Professional	105	9.80	119	11.11	6	4.84	6	4.62	1	0.09	4	0.37
Functional Support & Admin	495	9.09	607	11.15	12	9.68	12	9.23	0	0.00	4	0.07
Electrical & Mechanical Repair	790	12.50	910	14.40	25	20.16	26	20.00	1	0.02	6	0.09
Craftwork & Construction	134	12.11	152	13.74	23	18.55	23	17.69	1	0.09	3	0.27
Service, Transport & Supply	138	9.98	165	11.94	8	6.45	8	6.15	0	0.00	6	0.43
Students, Trainees & Unknown Enlist	125	6.95	150	8.34	0	0.00	0	0.00	1	0.06	1	0.06
OFFICER (all diagnoses combined)												
Officer	610	9.03	725	10.73	12	9.68	12	9.23	0	0.00	4	0.06
<20	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
20-24	51	6.45	55	6.95	0	0.00	0	0.00	0	0.00	0	0.00
25-29	112	7.39	138	9.10	3	2.42	3	2.31	0	0.00	2	0.13
30-34	122	8.64	145	10.26	4	3.23	4	3.08	0	0.00	1	0.07
35-39	142	10.01	170	11.98	3	2.42	3	2.31	0	0.00	0	0.00
>=40	183	11.32	217	13.42	2	1.61	2	1.54	0	0.00	1	0.06
O0-O3,W0-W3	320	8.33	385	10.02	9	7.26	9	6.92	0	0.00	3	0.08
O4-O10,W4-W5	290	9.95	340	11.66	3	2.42	3	2.31	0	0.00	1	0.03
General/Flag Ofc & Executives	7	11.02	9	14.17	0	0.00	0	0.00	0	0.00	0	0.00
Tactical Operations Off.	166	7.17	194	8.38	1	0.81	1	0.77	0	0.00	1	0.04
Intelligence Off.	37	10.03	43	11.66	1	0.81	1	0.77	0	0.00	1	0.27
Engineering & Maintenance Off.	99	9.74	123	12.10	4	3.23	4	3.08	0	0.00	0	0.00
Healthcare Off.	103	9.46	128	11.76	3	2.42	3	2.31	0	0.00	2	0.18
Scientists & Professional Off.	51	11.38	59	13.17	0	0.00	0	0.00	0	0.00	0	0.00
Administrative Off.	40	9.44	45	10.62	1	0.81	1	0.77	0	0.00	0	0.00
Supply & Logistics Off.	63	11.25	77	13.75	2	1.61	2	1.54	0	0.00	0	0.00
Students, Trainees & Unknown Off.	44	9.30	47	9.93	0	0.00	0	0.00	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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