

**US ARMY
ACTIVE DUTY
EYE INJURY SUMMARY
CALENDAR YEAR 2007**

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2013



CY 2007 US ARMY 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>.

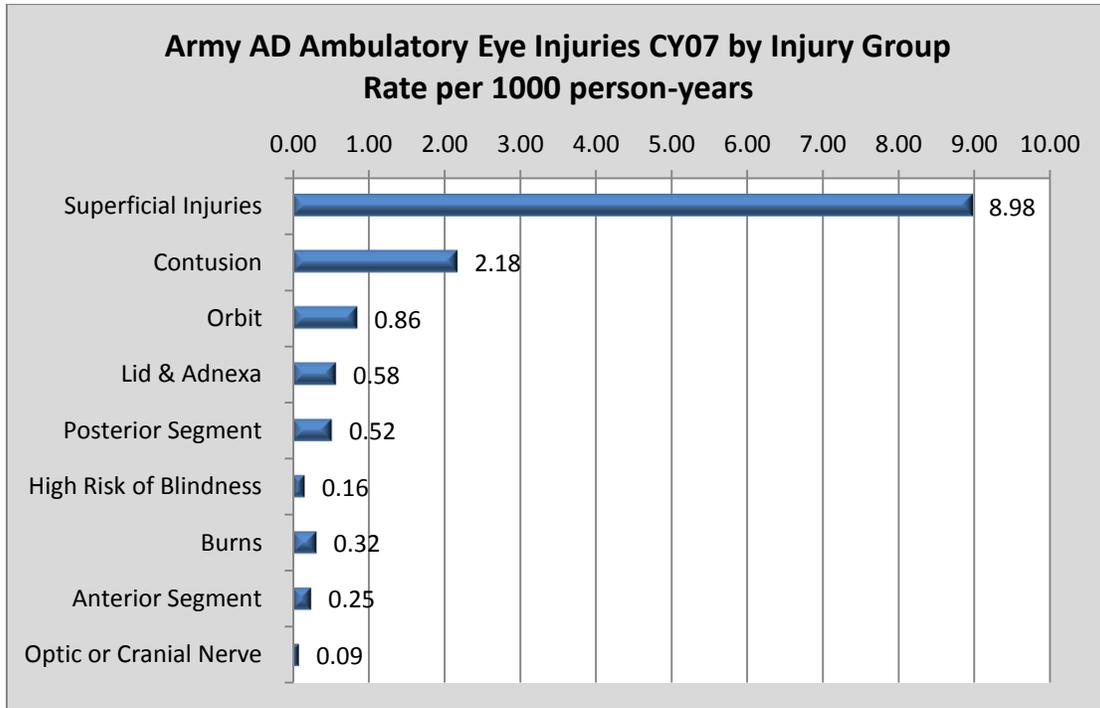
- 1) **Superficial:** all 918 series codes (superficial injury of eye and adnexa) and all 930 series codes (foreign body on external eye).
- 2) **Contusion:** all 921 series codes (contusion of eye and adnexa).
- 3) **Orbit:** All 802 series codes (fracture of face bones), 870.3 and 870.4 (penetrating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

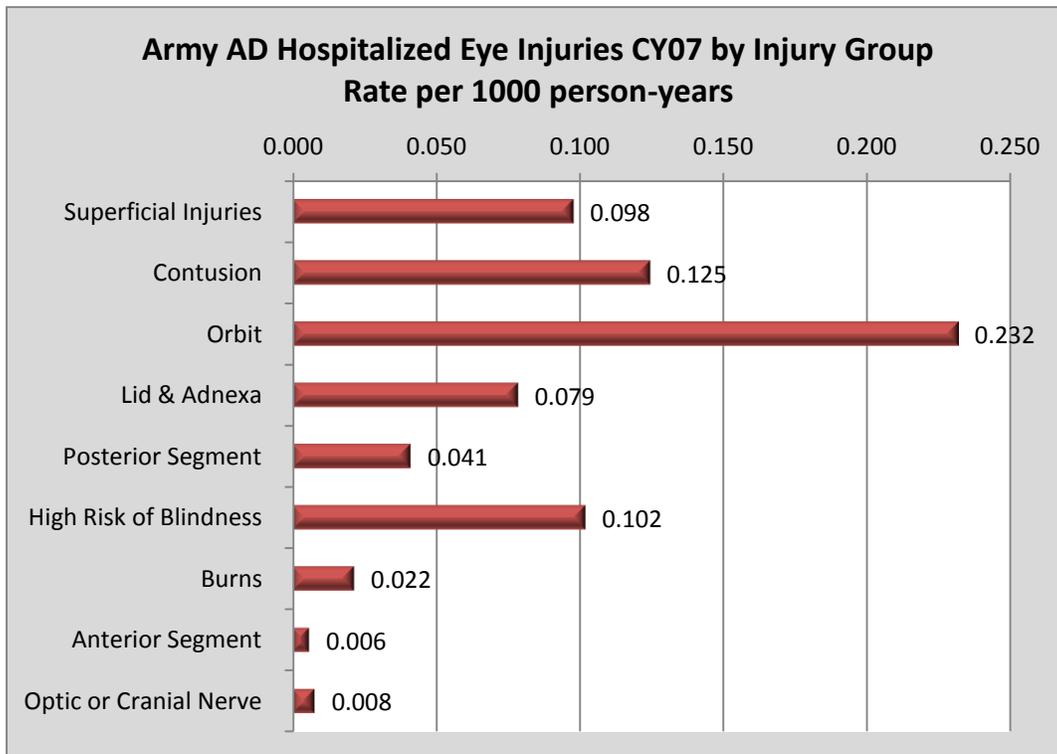
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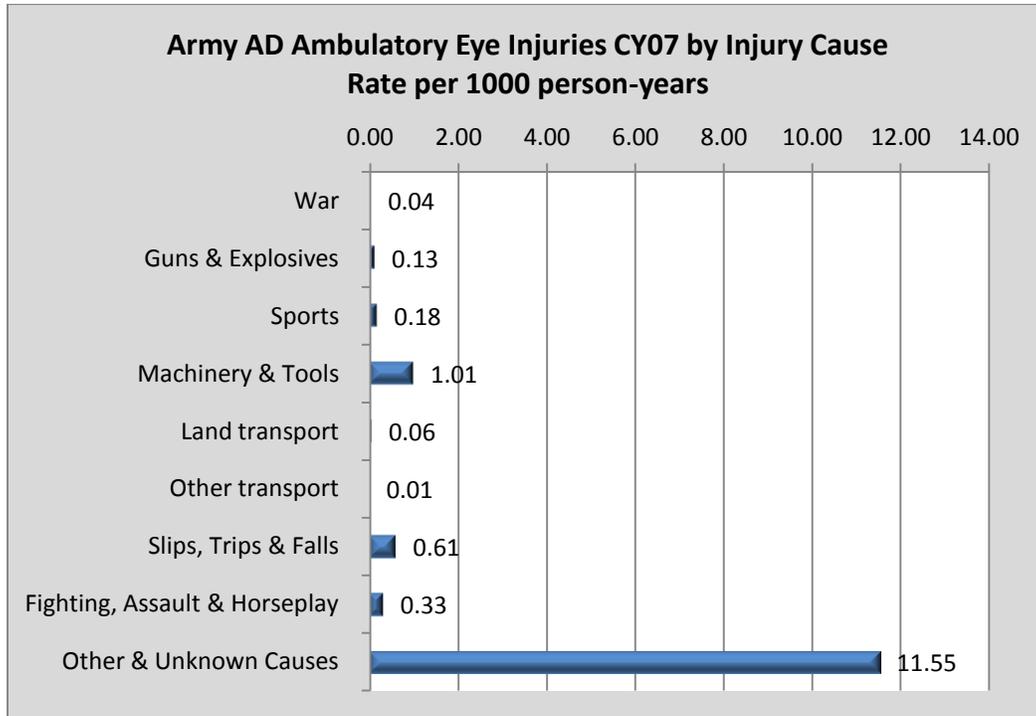
Please note the difference in scale between Ambulatory and Hospitalized graphs



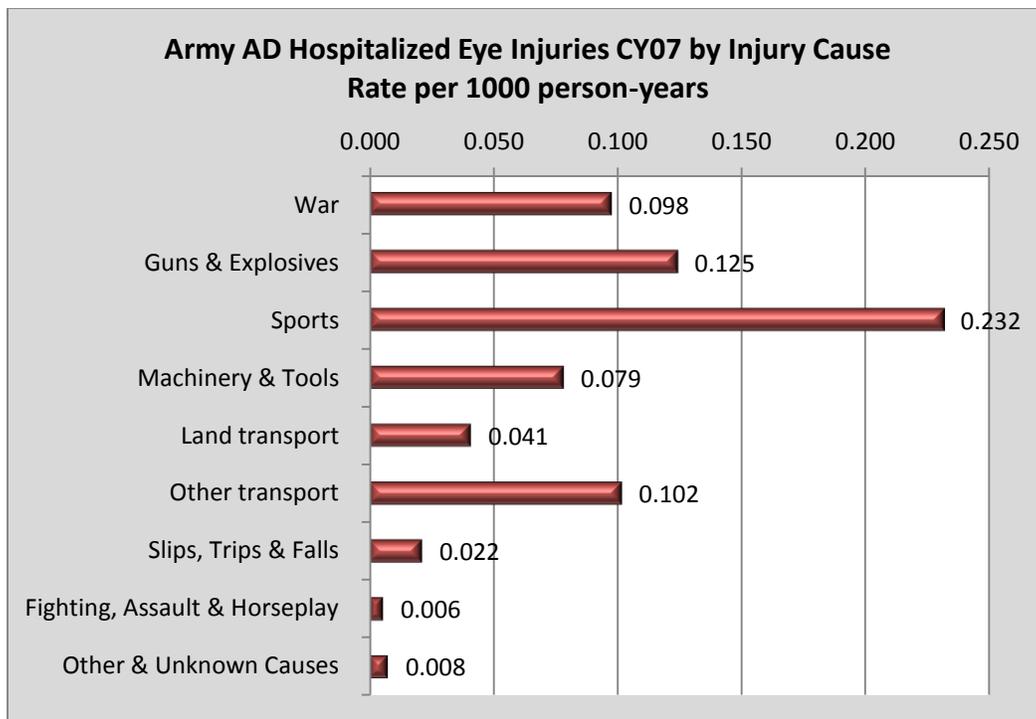
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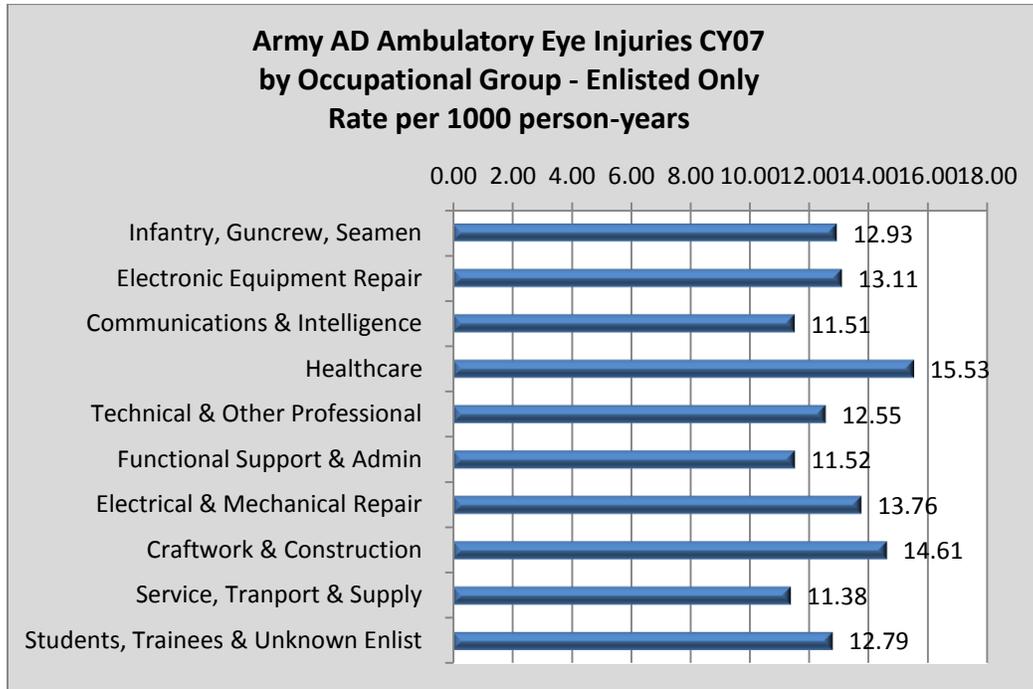
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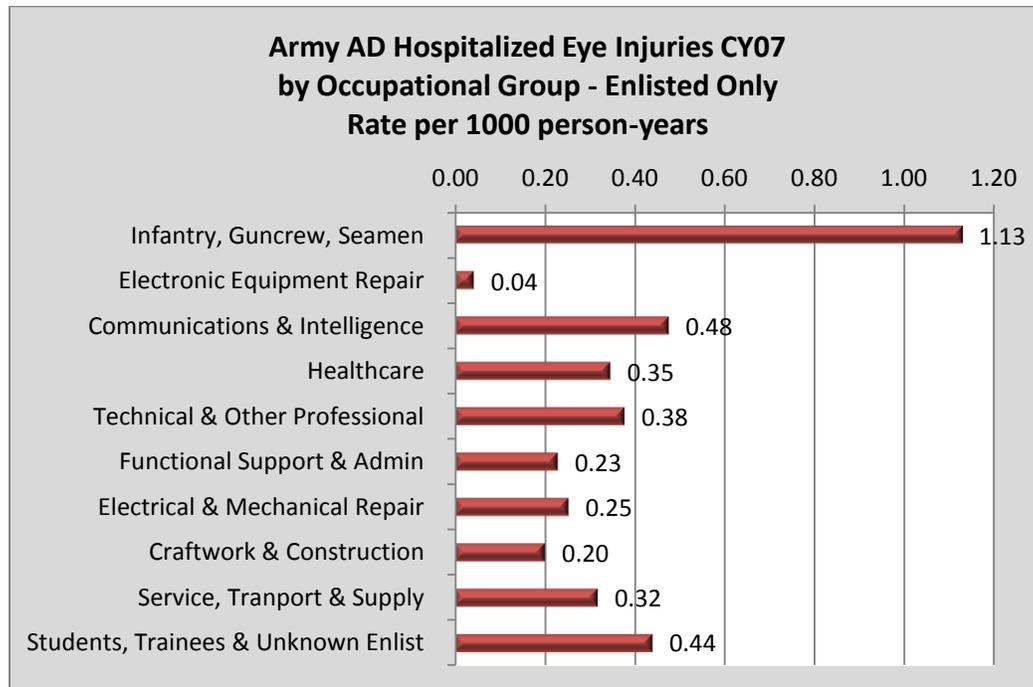
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Please note the difference in scale between Ambulatory and Hospitalized graphs

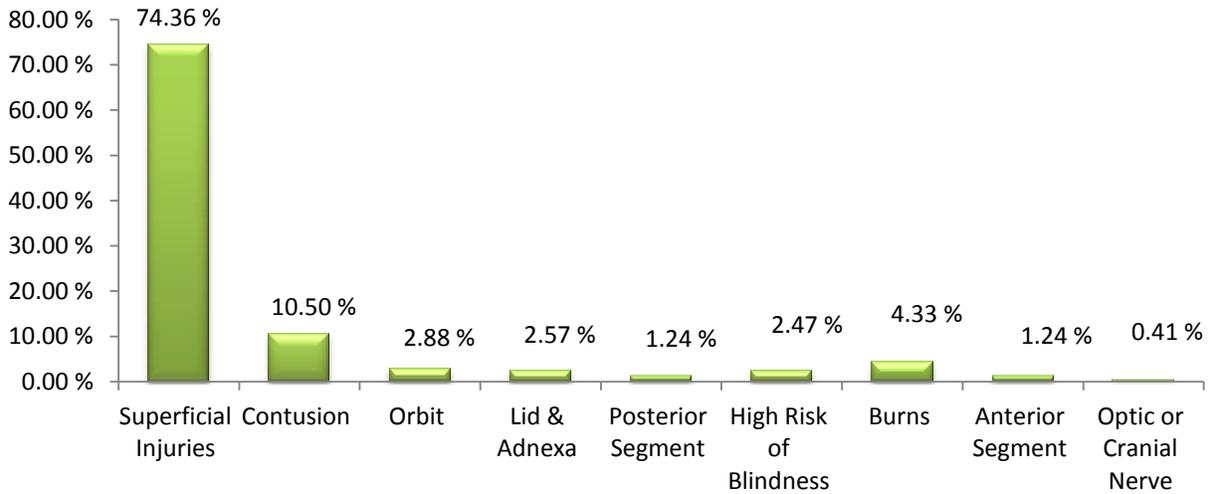


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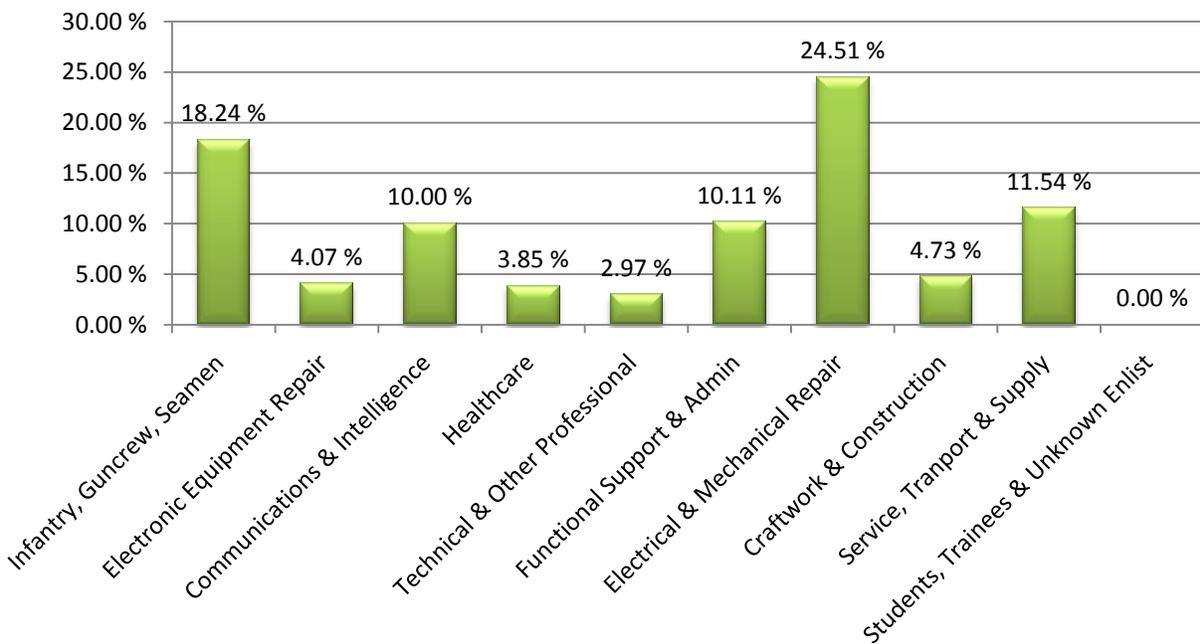


CY 2007 US ARMY ACTIVE DUTY (AD) EYE INJURY SUMMARY

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



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



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CY 2007 US ARMY 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	5,173	10.14	6,365	12.47	817	100.00	910	100.00	54	0.11	238	0.47
Superficial Injuries	3,859	7.56	4,581	8.98	655	75.11	722	74.36	14	0.03	50	0.10
Contusion	855	1.69	1,102	2.18	86	9.86	102	10.50	13	0.03	63	0.12
Orbit	313	0.62	436	0.86	25	2.87	28	2.88	37	0.07	118	0.23
Lid & Adnexa	238	0.47	294	0.58	23	2.64	25	2.57	12	0.02	40	0.08
Posterior Segment	163	0.32	267	0.52	8	0.92	12	1.24	9	0.02	21	0.04
High Risk of Blindness	67	0.13	84	0.16	20	2.29	24	2.47	21	0.04	52	0.10
Burns	144	0.28	163	0.32	41	4.70	42	4.33	2	0.00	11	0.02
Anterior Segment	104	0.20	127	0.25	10	1.15	12	1.24	2	0.00	3	0.01
Optic or Cranial Nerve	28	0.05	46	0.09	4	0.46	4	0.41	2	0.00	4	0.01
Male	4,369	9.93	5,395	12.26	711	87.03	797	87.58	53	0.12	229	0.52
Female	804	11.45	970	13.81	106	12.97	113	12.42	1	0.01	9	0.13
War	13	0.03	22	0.04	not assessed ²				25	0.05	82	0.16
Guns & Explosives	59	0.12	67	0.13					29	0.06	120	0.24
Sports	86	0.17	94	0.18					2	0.00	7	0.01
Machinery & Tools	477	0.93	514	1.01					13	0.03	13	0.03
Land transport	20	0.04	31	0.06					4	0.01	21	0.04
Other transport	2	0.00	3	0.01					0	0.00	3	0.01
Slips, Trips & Falls	281	0.55	312	0.61					5	0.01	17	0.03
Fighting, Assault & Horseplay	93	0.18	166	0.33					16	0.03	25	0.05
Other & Unknown Causes	4,740	9.29	5,891	11.55					18	0.04	74	0.15
ENLISTED (all diagnoses combined)												
Enlisted	4,411	10.35	5,415	12.71	730	89.35	819	90.00	51	0.12	219	0.51
<20	415	9.63	510	11.83	33	4.04	36	3.96	6	0.14	28	0.65
20-24	1,664	10.28	2,061	12.73	347	42.47	389	42.75	28	0.17	107	0.66
25-29	1,038	11.00	1,258	13.34	184	22.52	204	22.42	7	0.07	44	0.47
30-34	599	10.70	716	12.79	75	9.18	88	9.67	4	0.07	28	0.50
35-39	418	9.23	519	11.45	66	8.08	74	8.13	3	0.07	5	0.11
>=40	277	10.83	351	13.73	25	3.06	28	3.08	3	0.12	7	0.27
E0-E4	2,602	11.29	3,203	13.89	451	55.20	509	55.93	34	0.15	141	0.61
E5-E9	1,809	9.25	2,212	11.30	279	34.15	310	34.07	17	0.09	78	0.40
Infantry, Guncrew, Seamen	1,132	10.24	1,429	12.93	138	16.89	166	18.24	30	0.27	125	1.13
Electronic Equipment Repair	255	10.96	305	13.11	35	4.28	37	4.07	0	0.00	1	0.04
Communications & Intelligence	463	9.20	579	11.51	75	9.18	91	10.00	5	0.10	24	0.48
Healthcare	442	12.78	537	15.53	33	4.04	35	3.85	2	0.06	12	0.35
Technical & Other Professional	159	10.03	199	12.55	25	3.06	27	2.97	2	0.13	6	0.38
Functional Support & Admin	576	9.47	701	11.52	85	10.40	92	10.11	2	0.03	14	0.23
Electrical & Mechanical Repair	690	11.68	813	13.76	212	25.95	223	24.51	4	0.07	15	0.25
Craftwork & Construction	124	12.50	145	14.61	40	4.90	43	4.73	0	0.00	2	0.20
Service, Transport & Supply	544	9.13	678	11.38	87	10.65	105	11.54	6	0.10	19	0.32
Students, Trainees & Unknown Enlist	26	11.46	29	12.79	0	0.00	0	0.00	0	0.00	1	0.44
OFFICER (all diagnoses combined)												
Officer	762	9.07	950	11.31	87	10.65	91	10.00	3	0.04	19	0.23
<20	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
20-24	96	10.43	112	12.17	9	1.10	10	1.10	1	0.11	4	0.43
25-29	161	8.73	185	10.03	26	3.18	26	2.86	1	0.05	7	0.38
30-34	167	9.42	191	10.77	17	2.08	19	2.09	0	0.00	2	0.11
35-39	151	8.58	202	11.47	19	2.33	19	2.09	0	0.00	4	0.23
>=40	187	8.89	260	12.36	16	1.96	17	1.87	1	0.05	2	0.10
O0-O3,W0-W3	497	9.60	587	11.34	64	7.83	68	7.47	2	0.04	14	0.27
O4-O10,W4-W5	265	8.22	363	11.26	23	2.82	23	2.53	1	0.03	5	0.16
General/Flag Ofc & Executives	3	9.38	7	21.89	1	0.12	1	0.11	0	0.00	0	0.00
Tactical Operations Off.	241	8.41	291	10.16	33	4.04	36	3.96	2	0.07	13	0.45
Intelligence Off.	51	8.76	73	12.54	7	0.86	8	0.88	0	0.00	0	0.00
Engineering & Maintenance Off.	120	8.85	148	10.91	17	2.08	17	1.87	0	0.00	0	0.00
Healthcare Off.	151	10.52	182	12.68	10	1.22	10	1.10	0	0.00	3	0.21
Scientists & Professional Off.	57	9.73	78	13.32	1	0.12	1	0.11	1	0.17	1	0.17
Administrative Off.	63	10.90	76	13.15	5	0.61	5	0.55	0	0.00	1	0.17
Supply & Logistics Off.	54	7.80	68	9.82	10	1.22	10	1.10	0	0.00	1	0.14
Students, Trainees & Unknown Off.	22	7.98	27	9.79	3	0.37	3	0.33	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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Prepared by Armed Forces Health Surveillance Center (AFHSC)

Source: Defense Medical Surveillance System (DMSS) as of 29-MAR-2011



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