

**US ARMY  
ACTIVE DUTY  
EYE INJURY SUMMARY  
CALENDAR YEAR 2008**

Approved for public release, distribution unlimited

2013



## CY 2008 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](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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## CY 2008 US ARMY ACTIVE DUTY (AD) EYE INJURY SUMMARY

**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>.

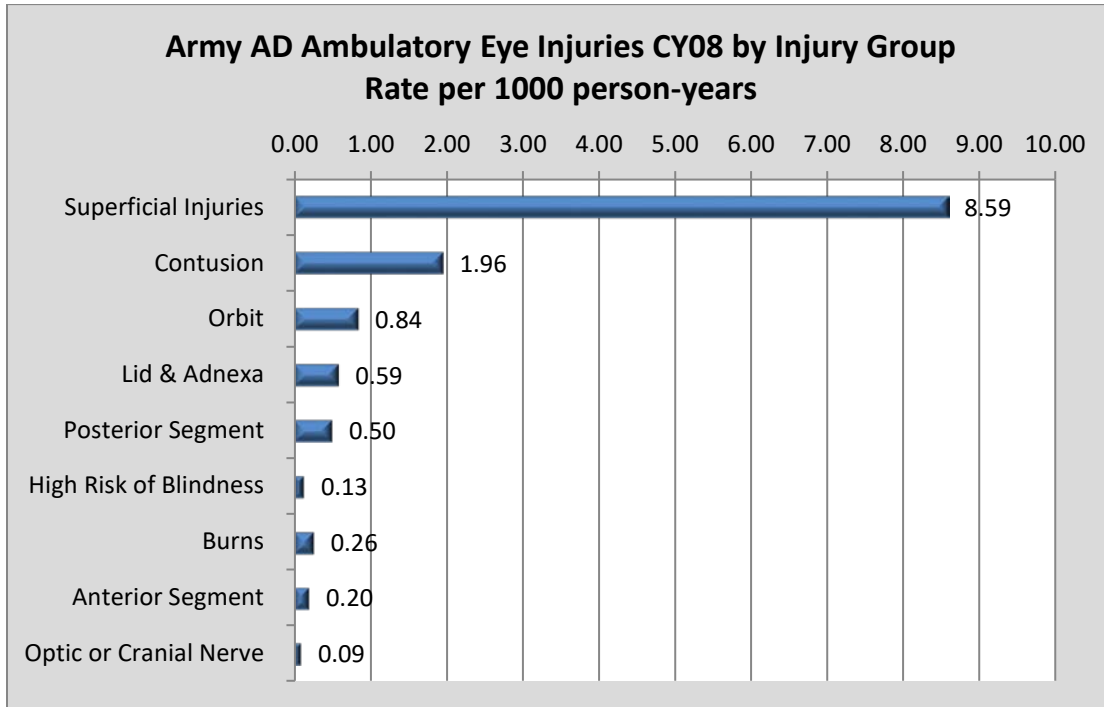
- 1) **Superficial:** all 918 series codes (superficial injury of eye and adnexa) and all 930 series codes (foreign body on external eye).
- 2) **Contusion:** all 921 series codes (contusion of eye and adnexa).
- 3) **Orbit:** All 802 series codes (fracture of face bones), 870.3 and 870.4 (penetrating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

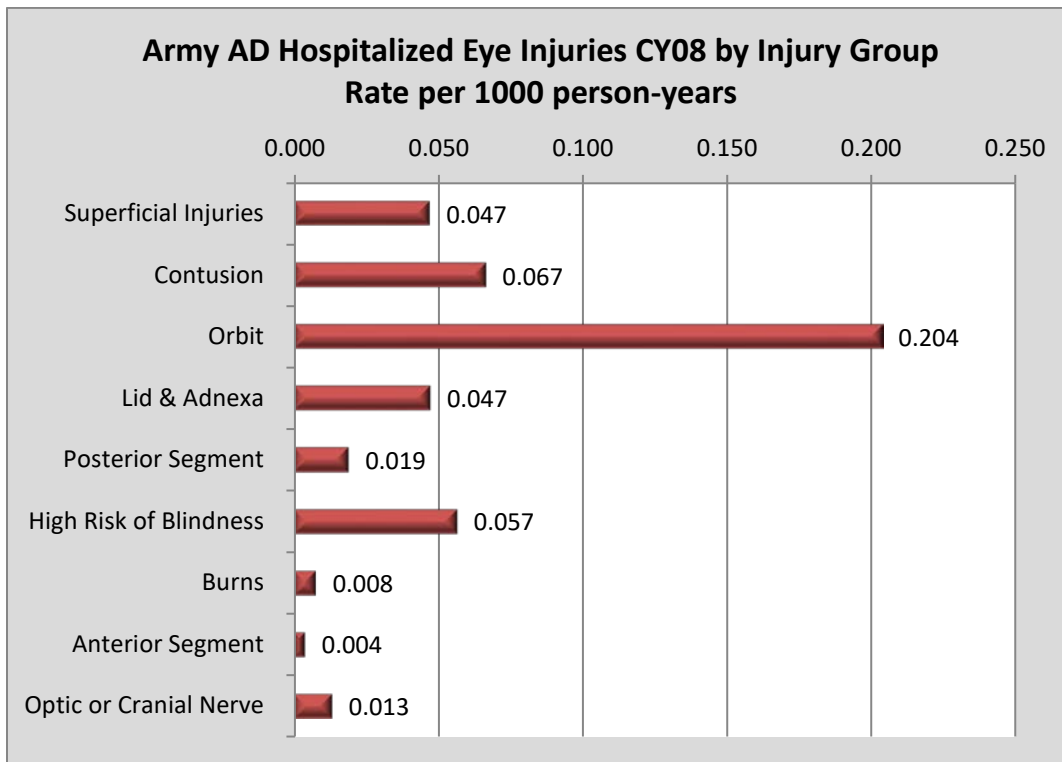
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## CY 2008 US ARMY ACTIVE DUTY (AD) EYE INJURY SUMMARY



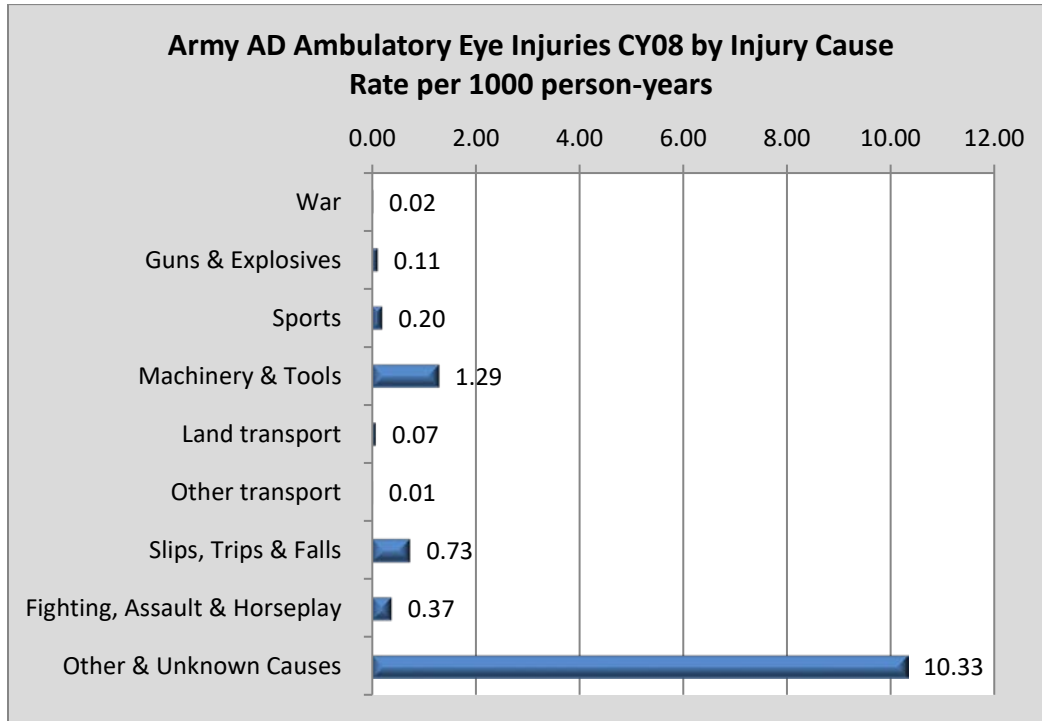
Please note the difference in scale between Ambulatory and Hospitalized graphs



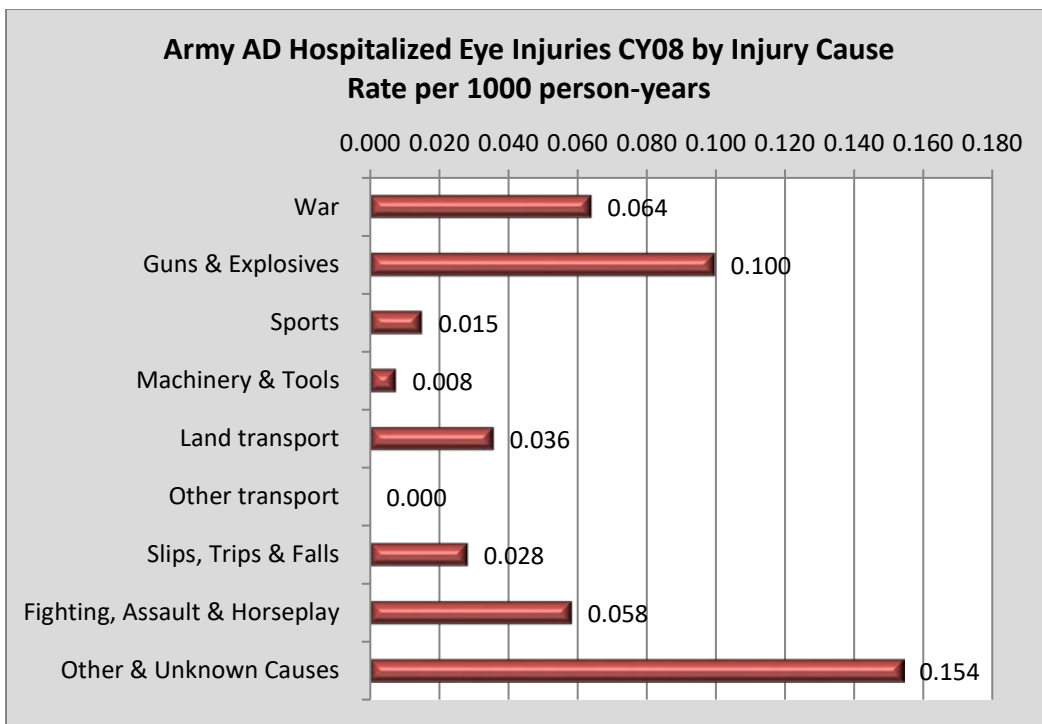
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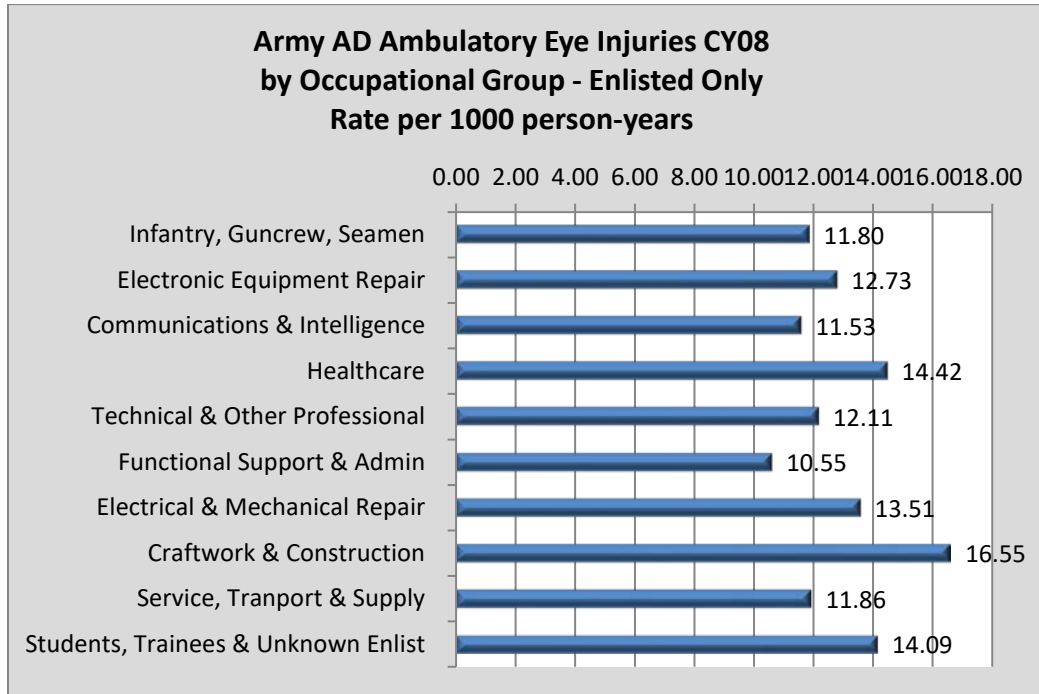
Please note the difference in scale between Ambulatory and Hospitalized graphs



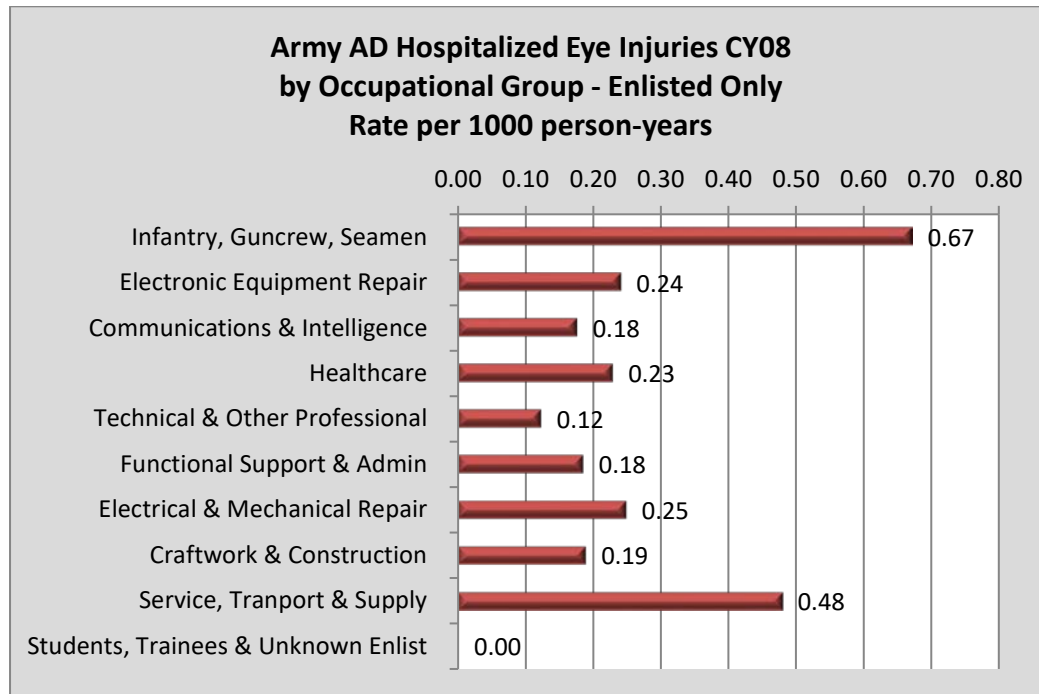
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## CY 2008 US ARMY ACTIVE DUTY (AD) EYE INJURY SUMMARY



Please note the difference in scale between Ambulatory and Hospitalized graphs

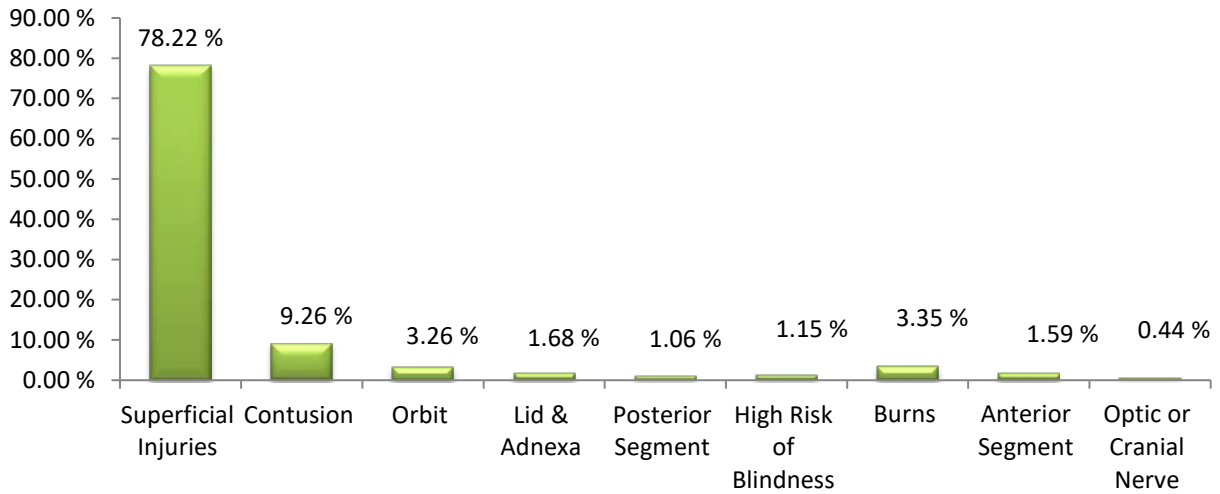


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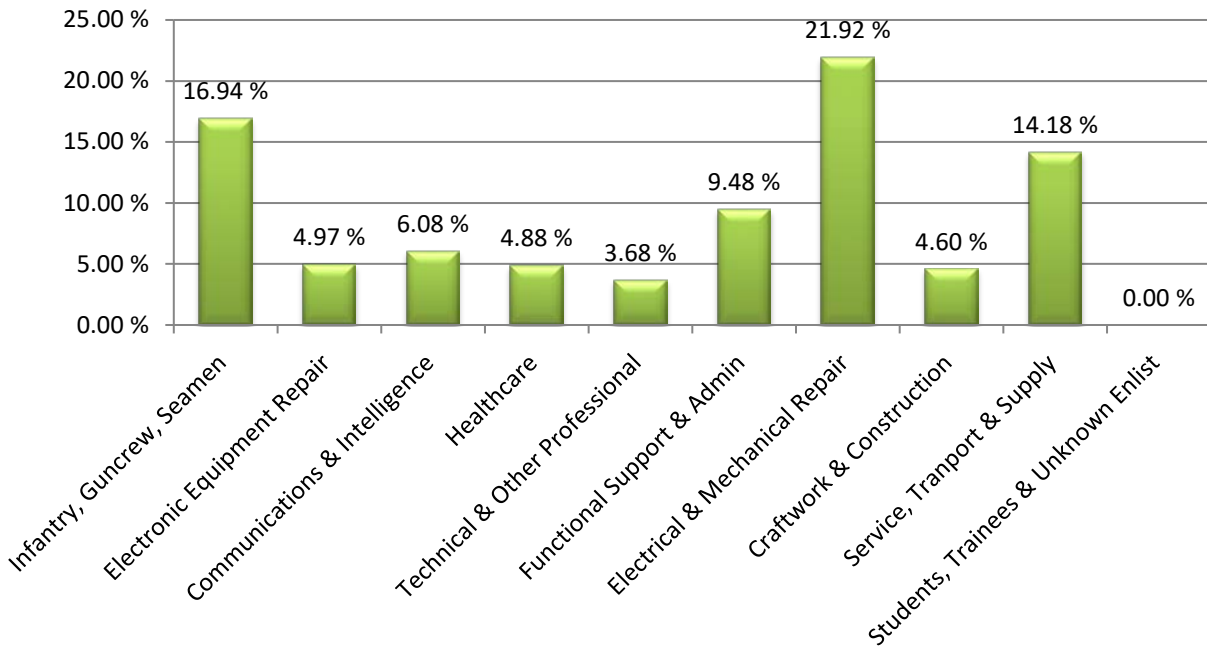


**CY 2008 US ARMY ACTIVE DUTY (AD) EYE INJURY SUMMARY**

**Army AD Deployment Associated Eye Injuries CY08  
by Injury Group  
Percent of Total**



**Army AD Deployment Associated Eye Injuries CY08  
by Occupational Group- Enlisted Only  
Percent of Total**



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# CY 2008 US ARMY ACTIVE DUTY (AD) EYE INJURY SUMMARY

	2008											
	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>5,128</b>	<b>9.65</b>	<b>6,393</b>	<b>12.03</b>	<b>1,016</b>	<b>100.00</b>	<b>1,086</b>	<b>100.00</b>	<b>48</b>	<b>0.09</b>	<b>175</b>	<b>0.33</b>
Superficial Injuries	3,851	7.24	4,568	8.59	842	79.36	887	78.22	5	0.01	25	0.05
Contusion	760	1.44	1,029	1.96	92	8.67	105	9.26	11	0.02	35	0.07
Orbit	310	0.59	446	0.84	33	3.11	37	3.26	36	0.07	108	0.20
Lid & Adnexa	246	0.46	310	0.59	19	1.79	19	1.68	5	0.01	25	0.05
Posterior Segment	157	0.30	264	0.50	8	0.75	12	1.06	4	0.01	10	0.02
High Risk of Blindness	55	0.10	69	0.13	12	1.13	13	1.15	11	0.02	30	0.06
Burns	115	0.22	137	0.26	36	3.39	38	3.35	1	0.00	4	0.01
Anterior Segment	75	0.14	105	0.20	16	1.51	18	1.59	0	0.00	2	0.00
Optic or Cranial Nerve	30	0.06	48	0.09	3	0.28	5	0.44	3	0.01	7	0.01
Male	4,398	9.57	5,509	11.99	872	85.83	936	86.19	44	0.10	168	0.37
Female	730	10.14	884	12.28	144	14.17	150	13.81	4	0.06	7	0.10
War	4	0.01	8	0.02	not assessed <sup>2</sup>				5	0.01	34	0.06
Guns & Explosives	48	0.09	57	0.11					15	0.03	53	0.10
Sports	88	0.17	104	0.20					8	0.02	8	0.02
Machinery & Tools	650	1.22	687	1.29					3	0.01	4	0.01
Land transport	25	0.05	38	0.07					4	0.01	19	0.04
Other transport	3	0.01	4	0.01					0	0.00	0	0.00
Slips, Trips & Falls	348	0.65	390	0.73					9	0.02	15	0.03
Fighting, Assault & Horseplay	122	0.23	199	0.37					12	0.02	31	0.06
Other & Unknown Causes	4,311	8.11	5,489	10.33					20	0.04	82	0.15
<b>ENLISTED (all diagnoses combined)</b>												
<b>Enlisted</b>	<b>4,357</b>	<b>9.80</b>	<b>5,435</b>	<b>12.23</b>	<b>886</b>	<b>87.20</b>	<b>942</b>	<b>86.74</b>	<b>42</b>	<b>0.09</b>	<b>161</b>	<b>0.36</b>
<20	365	8.65	454	10.76	35	3.44	38	3.50	6	0.14	19	0.45
20-24	1,651	9.97	2,070	12.50	349	34.35	372	34.25	18	0.11	84	0.51
25-29	1,077	10.45	1,331	12.91	237	23.33	252	23.20	12	0.12	28	0.27
30-34	548	9.45	682	11.76	124	12.20	129	11.88	3	0.05	16	0.28
35-39	469	9.86	577	12.13	76	7.48	80	7.37	2	0.04	7	0.15
>=40	247	8.79	321	11.42	65	6.40	71	6.54	1	0.04	7	0.25
E0-E4	2,530	10.52	3,173	13.19	502	49.41	533	49.08	31	0.13	113	0.47
E5-E9	1,827	8.96	2,262	11.09	384	37.80	409	37.66	11	0.05	48	0.24
Infantry, Guncrew, Seamen	1,032	9.11	1,337	11.80	172	16.93	184	16.94	13	0.11	76	0.67
Electronic Equipment Repair	254	10.17	318	12.73	51	5.02	54	4.97	2	0.08	6	0.24
Communications & Intelligence	466	9.09	591	11.53	61	6.00	66	6.08	3	0.06	9	0.18
Healthcare	407	11.60	506	14.42	52	5.12	53	4.88	4	0.11	8	0.23
Technical & Other Professional	166	10.16	198	12.11	34	3.35	40	3.68	1	0.06	2	0.12
Functional Support & Admin	568	8.73	686	10.55	98	9.65	103	9.48	2	0.03	12	0.18
Electrical & Mechanical Repair	678	11.22	817	13.51	228	22.44	238	21.92	8	0.13	15	0.25
Craftwork & Construction	149	14.01	176	16.55	49	4.82	50	4.60	1	0.09	2	0.19
Service, Transport & Supply	609	9.41	768	11.86	141	13.88	154	14.18	8	0.12	31	0.48
Students, Trainees & Unknown Enlist	28	10.38	38	14.09	0	0.00	0	0.00	0	0.00	0	0.00
<b>OFFICER (all diagnoses combined)</b>												
<b>Officer</b>	<b>771</b>	<b>8.85</b>	<b>958</b>	<b>11.00</b>	<b>130</b>	<b>12.80</b>	<b>144</b>	<b>13.26</b>	<b>6</b>	<b>0.07</b>	<b>14</b>	<b>0.16</b>
<20	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
20-24	95	10.10	114	12.11	8	0.79	12	1.10	1	0.11	1	0.11
25-29	157	8.25	204	10.72	39	3.84	39	3.59	3	0.16	5	0.26
30-34	145	8.03	168	9.30	24	2.36	27	2.49	1	0.06	3	0.17
35-39	154	8.44	187	10.25	33	3.25	37	3.41	0	0.00	2	0.11
>=40	220	9.85	285	12.76	26	2.56	29	2.67	1	0.04	3	0.13
O0-O3, W0-W3	492	9.07	601	11.08	90	8.86	101	9.30	5	0.09	10	0.18
O4-O10, W4-W5	279	8.50	357	10.87	40	3.94	43	3.96	1	0.03	4	0.12
General/Flag Ofc & Executives	0	0.00	1	3.10	0	0.00	0	0.00	0	0.00	0	0.00
Tactical Operations Off.	242	8.26	297	10.13	42	4.13	46	4.24	4	0.14	8	0.27
Intelligence Off.	42	6.93	54	8.92	10	0.98	11	1.01	0	0.00	1	0.17
Engineering & Maintenance Off.	132	10.09	158	12.08	29	2.85	30	2.76	2	0.15	2	0.15
Healthcare Off.	142	9.57	182	12.26	13	1.28	14	1.29	0	0.00	1	0.07
Scientists & Professional Off.	54	8.81	73	11.91	3	0.30	3	0.28	0	0.00	0	0.00
Administrative Off.	62	9.87	74	11.78	13	1.28	13	1.20	0	0.00	0	0.00
Supply & Logistics Off.	71	8.38	88	10.38	19	1.87	26	2.39	0	0.00	2	0.24
Students, Trainees & Unknown Off.	26	10.04	31	11.98	1	0.10	1	0.09	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



**TRI-SERVICE  
VISION  
CONSERVATION  
AND READINESS**