

**US AIR FORCE  
ACTIVE DUTY  
EYE INJURY SUMMARY  
CALENDAR YEAR 2006**

Approved for public release, distribution unlimited

2013



## CY 2006 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](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>.

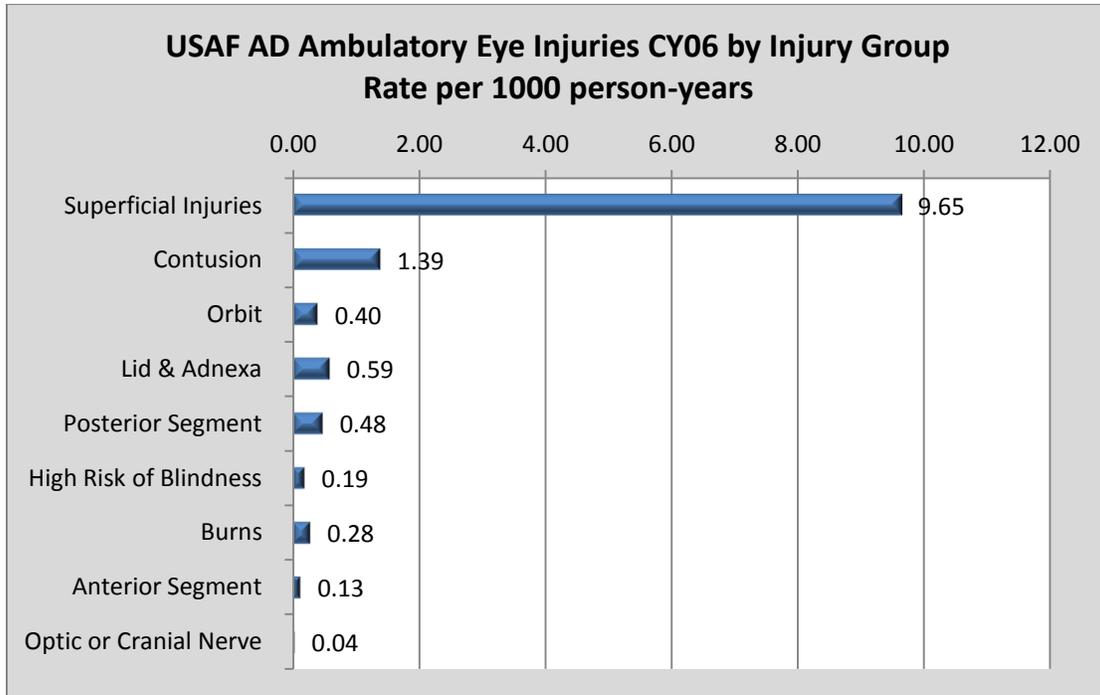
- 1) **Superficial:** all 918 series codes (superficial injury of eye and adnexa) and all 930 series codes (foreign body on external eye).
- 2) **Contusion:** all 921 series codes (contusion of eye and adnexa).
- 3) **Orbit:** All 802 series codes (fracture of face bones), 870.3 and 870.4 (penetrating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

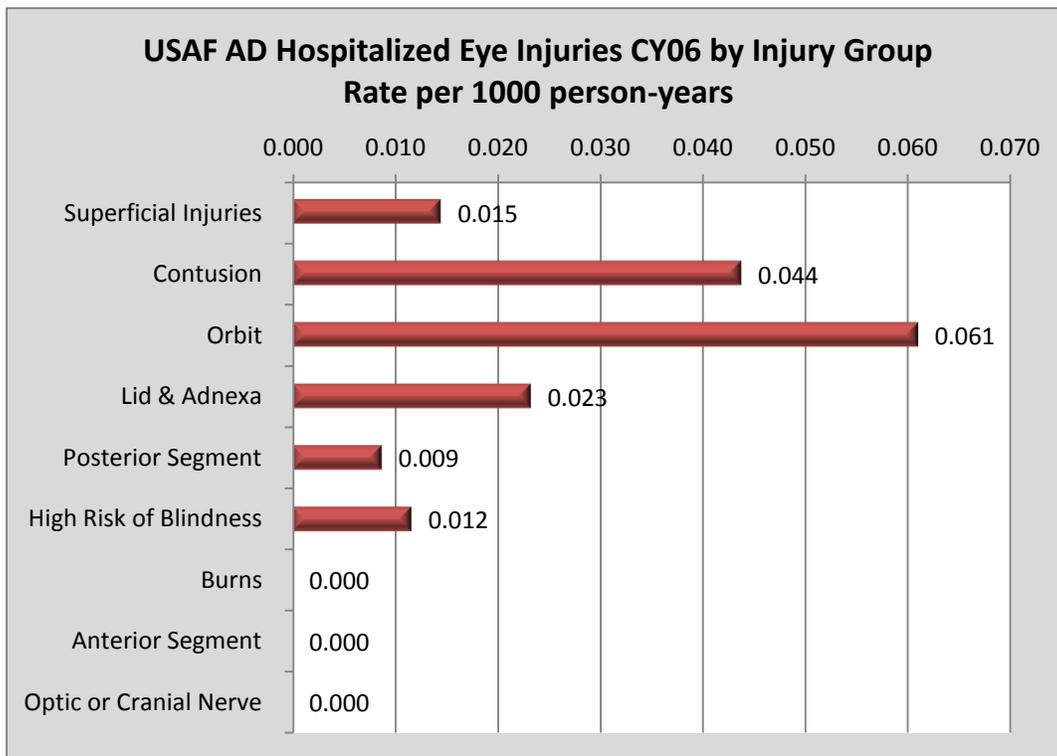
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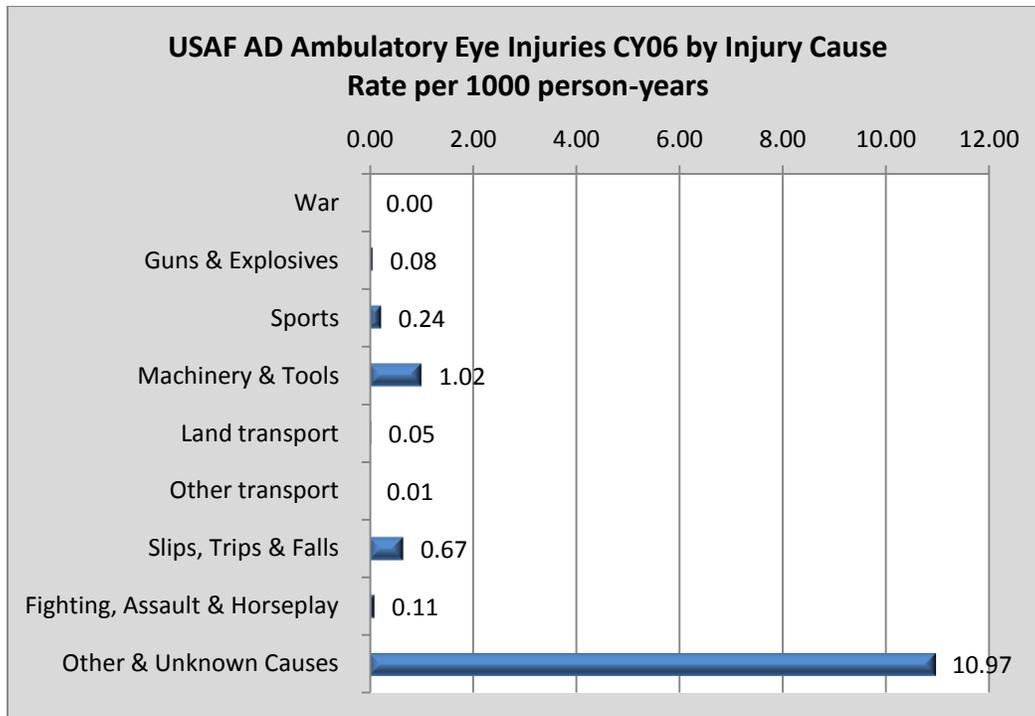
Please note the difference in scale between Ambulatory and Hospitalized graphs



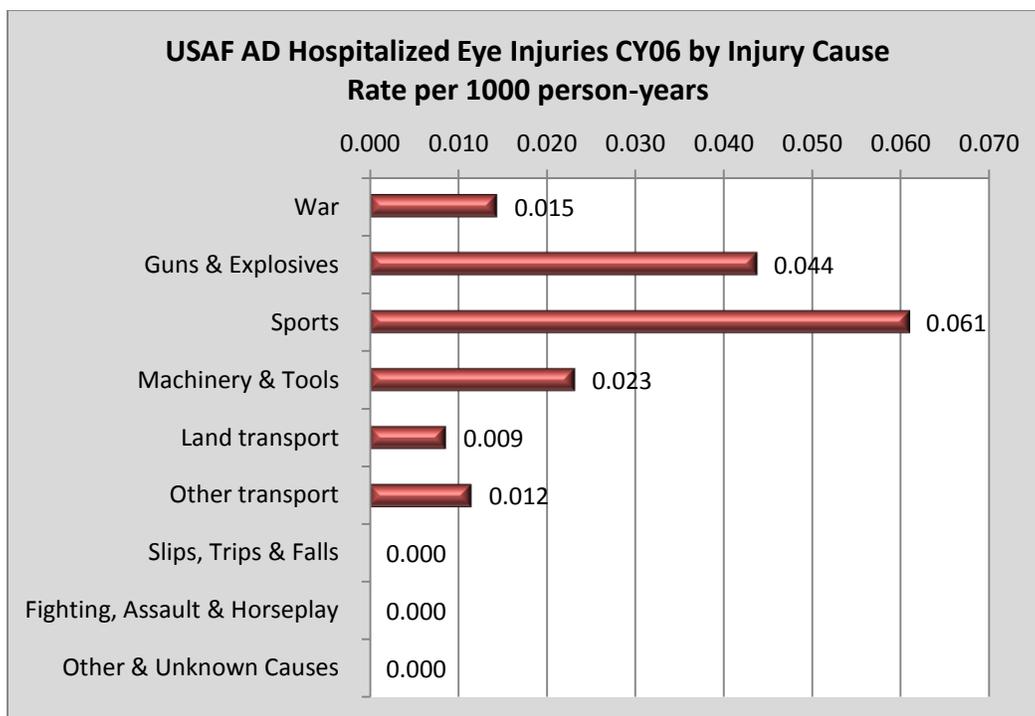
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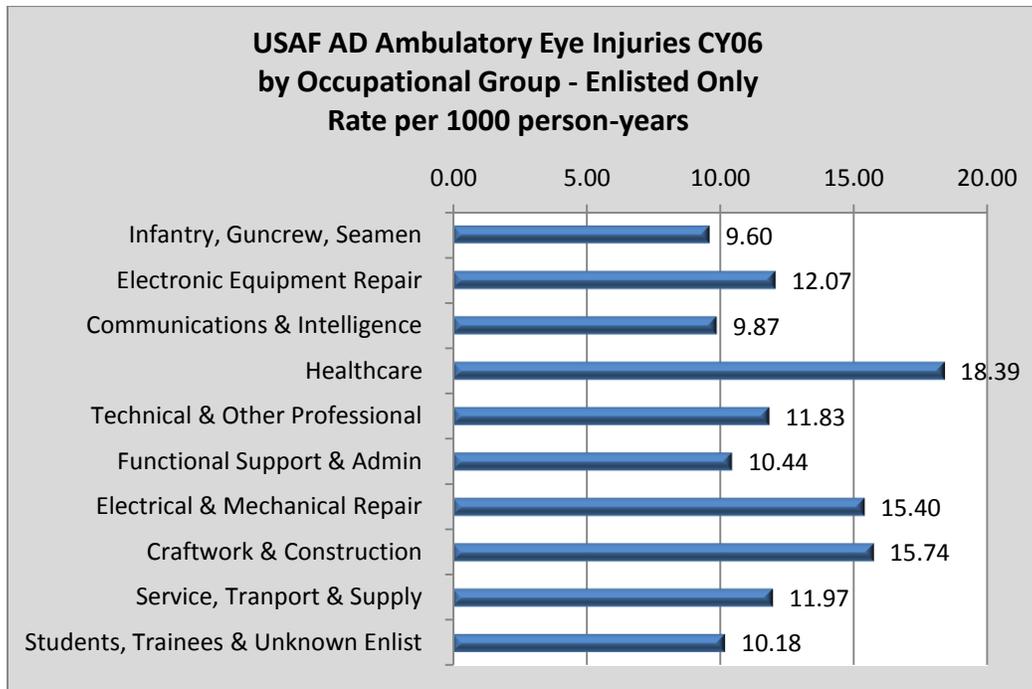
Please note the difference in scale between Ambulatory and Hospitalized graphs



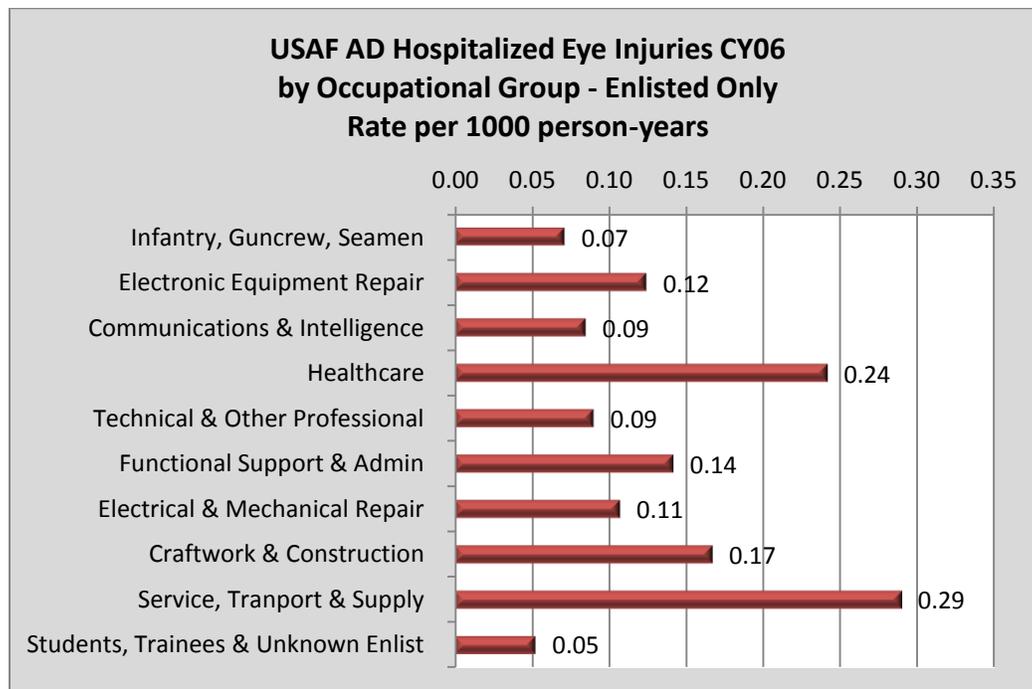
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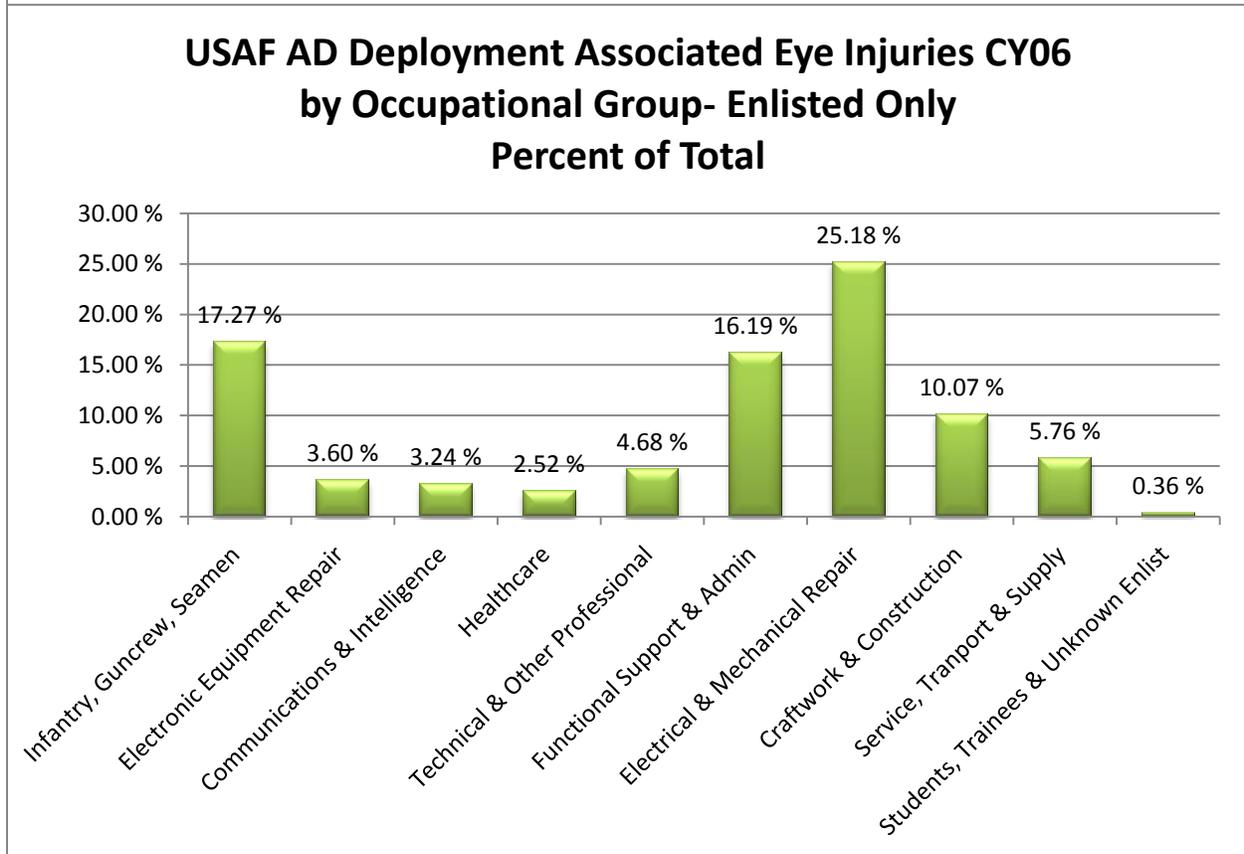
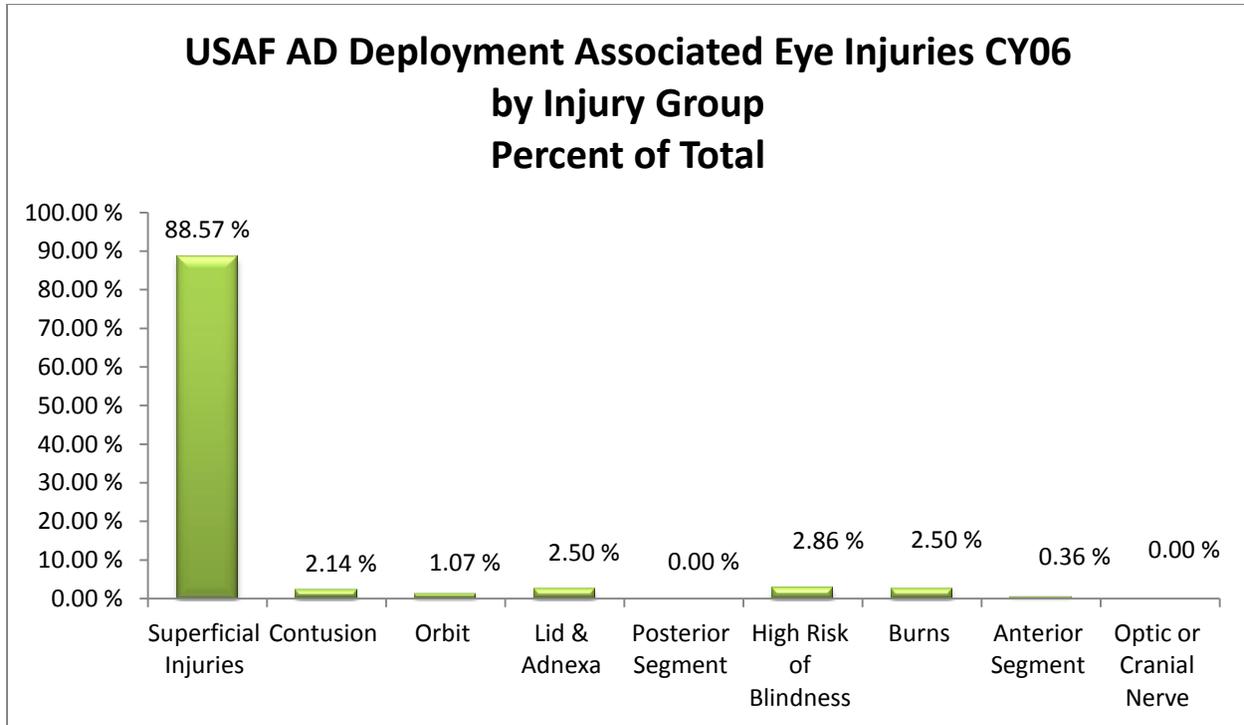
Please note the difference in scale between Ambulatory and Hospitalized graphs



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# CY 2006 US AIR FORCE 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>2</sup>	Count	% total <sup>2</sup>	Count	Rate	Count	Rate
<b>ALL ACTIVE COMPONENT</b>												
<b>Total</b>	<b>3,629</b>	<b>10.53</b>	<b>4,247</b>	<b>12.32</b>	<b>276</b>	<b>100.00</b>	<b>278</b>	<b>100.00</b>	<b>8</b>	<b>0.02</b>	<b>38</b>	<b>0.11</b>
Superficial Injuries	2,929	8.50	3,326	9.65	246	88.49	248	88.57	2	0.01	5	0.01
Contusion	404	1.18	477	1.39	6	2.16	6	2.14	5	0.01	15	0.04
Orbit	88	0.26	138	0.40	3	1.08	3	1.07	7	0.02	21	0.06
Lid & Adnexa	163	0.47	204	0.59	7	2.52	7	2.50	2	0.01	8	0.02
Posterior Segment	86	0.25	165	0.48	0	0.00	0	0.00	0	0.00	3	0.01
High Risk of Blindness	59	0.17	67	0.19	8	2.88	8	2.86	1	0.00	4	0.01
Burns	95	0.28	98	0.28	7	2.52	7	2.50	0	0.00	0	0.00
Anterior Segment	35	0.10	44	0.13	1	0.36	1	0.36	0	0.00	0	0.00
Optic or Cranial Nerve	6	0.02	13	0.04	0	0.00	0	0.00	0	0.00	0	0.00
Male	2,876	10.39	3,385	12.22	233	84.42	234	84.17	6	0.02	33	0.12
Female	753	11.11	862	12.72	43	15.58	44	15.83	2	0.03	5	0.07
War	0	0.00	0	0.00	not assessed <sup>2</sup>				0	0.00	0	0.00
Guns & Explosives	22	0.06	26	0.08	not assessed <sup>2</sup>				3	0.01	7	0.02
Sports	78	0.23	83	0.24	not assessed <sup>2</sup>				5	0.01	6	0.02
Machinery & Tools	330	0.96	352	1.02	not assessed <sup>2</sup>				2	0.01	3	0.01
Land transport	12	0.03	17	0.05	not assessed <sup>2</sup>				0	0.00	8	0.02
Other transport	4	0.01	4	0.01	not assessed <sup>2</sup>				0	0.00	2	0.01
Slips, Trips & Falls	209	0.61	231	0.67	not assessed <sup>2</sup>				1	0.00	4	0.01
Fighting, Assault & Horseplay	32	0.09	39	0.11	not assessed <sup>2</sup>				1	0.00	2	0.01
Other & Unknown Causes	3,178	9.22	3,780	10.97	not assessed <sup>2</sup>				5	0.01	24	0.07
<b>ENLISTED (all diagnoses combined)</b>												
<b>Enlisted</b>	<b>2,954</b>	<b>10.79</b>	<b>3,442</b>	<b>12.58</b>	<b>245</b>	<b>88.77</b>	<b>247</b>	<b>88.85</b>	<b>8</b>	<b>0.03</b>	<b>35</b>	<b>0.13</b>
<20	148	7.24	170	8.32	2	0.72	2	0.72	1	0.05	4	0.20
20-24	1,104	11.10	1,302	13.09	115	41.67	117	42.09	6	0.06	17	0.17
25-29	711	11.72	812	13.39	61	22.10	61	21.94	0	0.00	6	0.10
30-34	384	10.40	442	11.97	30	10.87	30	10.79	0	0.00	4	0.11
35-39	338	10.02	401	11.89	22	7.97	22	7.91	1	0.03	3	0.09
>=40	269	12.00	315	14.06	15	5.43	15	5.40	0	0.00	1	0.04
E0-E4	1,383	11.50	1,625	13.51	128	46.38	129	46.40	6	0.05	21	0.17
E5-E9	1,571	10.24	1,817	11.85	117	42.39	118	42.45	2	0.01	14	0.09
Infantry, Guncrew, Seamen	223	7.96	269	9.60	47	17.03	48	17.27	0	0.00	2	0.07
Electronic Equipment Repair	254	10.54	291	12.07	10	3.62	10	3.60	1	0.04	3	0.12
Communications & Intelligence	199	8.47	232	9.87	9	3.26	9	3.24	0	0.00	2	0.09
Healthcare	334	16.16	380	18.39	7	2.54	7	2.52	1	0.05	5	0.24
Technical & Other Professional	105	9.49	131	11.83	13	4.71	13	4.68	0	0.00	1	0.09
Functional Support & Admin	504	8.95	588	10.44	45	16.30	45	16.19	1	0.02	8	0.14
Electrical & Mechanical Repair	861	13.21	1,004	15.40	69	25.00	70	25.18	2	0.03	7	0.11
Craftwork & Construction	169	14.15	188	15.74	28	10.14	28	10.07	0	0.00	2	0.17
Service, Transport & Supply	141	10.23	165	11.97	16	5.80	16	5.76	2	0.15	4	0.29
Students, Trainees & Unknown Enlist	164	8.61	194	10.18	1	0.36	1	0.36	1	0.05	1	0.05
<b>OFFICER (all diagnoses combined)</b>												
<b>Officer</b>	<b>675</b>	<b>9.51</b>	<b>805</b>	<b>11.34</b>	<b>31</b>	<b>11.23</b>	<b>31</b>	<b>11.15</b>	<b>0</b>	<b>0.00</b>	<b>3</b>	<b>0.04</b>
<20	-	-	-	-	0	0.00	0	0.00	-	-	-	-
20-24	60	7.40	68	8.39	0	0.00	0	0.00	0	0.00	0	0.00
25-29	126	7.64	161	9.77	3	1.09	3	1.08	0	0.00	1	0.06
30-34	147	9.68	166	10.93	13	4.71	13	4.68	0	0.00	0	0.00
35-39	134	9.34	160	11.15	3	1.09	3	1.08	0	0.00	0	0.00
>=40	208	12.31	250	14.80	12	4.35	12	4.32	0	0.00	2	0.12
O0-O3,W0-W3	360	8.73	424	10.28	14	5.07	14	5.04	0	0.00	2	0.05
O4-O10,W4-W5	315	10.58	381	12.79	17	6.16	17	6.12	0	0.00	1	0.03
General/Flag Ofc & Executives	6	9.24	6	9.24	0	0.00	0	0.00	0	0.00	0	0.00
Tactical Operations Off.	205	8.57	250	10.45	10	3.62	10	3.60	0	0.00	1	0.04
Intelligence Off.	41	10.63	50	12.97	2	0.72	2	0.72	0	0.00	0	0.00
Engineering & Maintenance Off.	110	9.90	131	11.79	7	2.54	7	2.52	0	0.00	1	0.09
Healthcare Off.	133	11.90	151	13.51	3	1.09	3	1.08	0	0.00	1	0.09
Scientists & Professional Off.	38	8.19	43	9.26	3	1.09	3	1.08	0	0.00	0	0.00
Administrative Off.	41	8.31	52	10.53	3	1.09	3	1.08	0	0.00	0	0.00
Supply & Logistics Off.	59	9.43	74	11.83	3	1.09	3	1.08	0	0.00	0	0.00
Students, Trainees & Unknown Off.	42	9.40	48	10.74	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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