

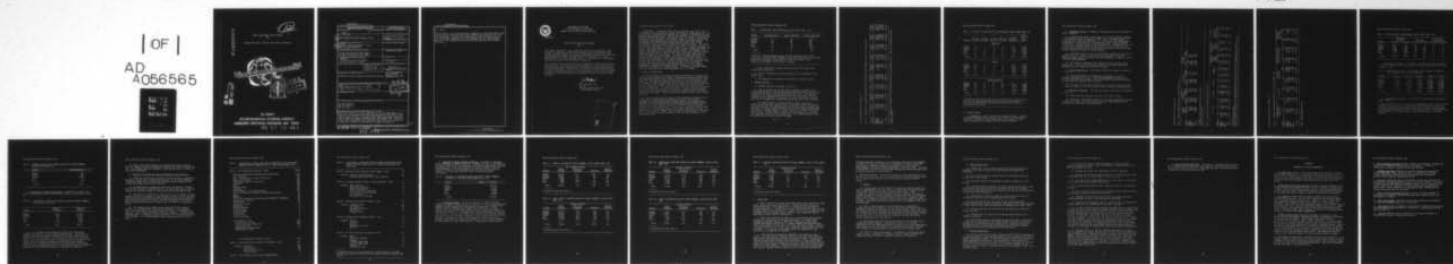
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1977

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20. ABSTRACT (Continue on reverse side if necessary and identify by block number) This report satisfies, in part, Department of the Army requirements under Section 19 of the Occupational Safety and Health Act of 1970 (Public Law 91-596) and under Section 2 of Executive Order 11807 (Occupational Safety and Health Program for Federal Employees) dated 28 September 1974. Succinctly stated, these requirements are to 'make an annual report...with respect to occupational accidents and injuries and the agency's program...'. This summary provides the best available assessment of the Army Occupational		

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DEPARTMENT OF THE ARMY  
U. S. ARMY ENVIRONMENTAL HYGIENE AGENCY  
ABERDEEN PROVING GROUND, MARYLAND 21010

ARMY OCCUPATIONAL HEALTH PROGRAM  
1977

This report satisfies, in part, Department of the Army requirements under Section 19 of the Occupational Safety and Health Act of 1970 (Public Law 91-596) and under Section 2 of Executive Order 11807 (Occupational Safety and Health Program for Federal Employees) dated 28 September 1974. These requirements are to "make an annual report ... with respect to occupational accidents and injuries and the agency's program ...".

This summary provides the best available assessment of the Army Occupational Health Program. It can be used by major commanders to assess the status of the Occupational Health Program within their commands and to identify areas that need improvement. Also, the entire report or its pertinent portions can be used by the major commanders as a labor-management tool to inform command personnel of the occupational health services provided them during Calendar Year 1977.

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Environmental Health

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## Army Occupational Health Program, 1977

1. INTRODUCTION. In December 1970, the 91st Congress passed Public Law 91-596 known as the Occupational Safety and Health Act whose objective is "to assure so far as possible every working man and woman in the Nation safe and healthful working conditions." Section 19 of the Act states "it shall be the responsibility of the head of each Federal agency to establish and maintain an effective and comprehensive occupational safety and health program." On 28 September 1974, the President issued Executive Order 11807 titled "Occupational Safety and Health Programs for Federal Employees." One of the many specific requirements of Executive Order 11807 is an annual evaluation of the Occupational Safety and Health Program of every Federal department and agency. Army Regulation 40-5, Health and Environment, 25 September 1974, requires submission of an annual occupational health report [Reports Control Symbol Med-20(R2) (DA Form 3076)]. This report provides a good tool for internal evaluation of the program. In 1973, this Agency was tasked to review the data reported in these annual occupational health reports. To satisfy legal requirements and to have maximum benefits and utilization of the data reported in Med-20, a cumulative summary report was prepared. This edition, the fifth annual one, provides not only the best available assessment of the Army Occupational Health Program, but also a general evaluation of trends of all program aspects. In addition, problem program areas are identified and a labor-management tool is provided.

## 2. SOURCE OF INFORMATION.

a. The installation Army Occupational Health Reports for Calendar Year 1977 were used to compile this report. These summaries were prepared from 77 of 80 expected reporting units (installations) for a reporting rate of 96.2 (Table 1). The number of expected reporting units does not represent the total number of Army installations, but the number of installations required to submit the Annual Summary. Many subinstallations are reported under superior headquarters. The remaining reports were received by US Army Health Services Command (HSC) too late for inclusion. However, these represent a fairly small population served, so that their exclusion does not markedly affect the final report. Reports include Continental United States, Alaska, and Hawaii.

b. Some installations with large military populations reported little information on occupational health services for military personnel. Seventeen USA Training and Doctrine Command (TRADOC), USA Forces Command (FORSCOM), USA Materiel Development and Readiness Command (DARCOM) and HSC installations with a combined population of 188,000 military personnel reported very little information. In some cases, many health services were provided, but, apparently, no mechanism to gather information existed. In other cases, such as in TRADOC installations with large numbers of trainees on the installation for short periods of time, the figures appear to be inordinately high.

## Army Occupational Health Program, 1977

TABLE 1. OCCUPATIONAL HEALTH REPORTING, UNITED STATES ARMY, 1977

Command	Expected Reports	Reports Received	Percent Reporting
DARCOM*	27	25	92.6
FORSCOM	20	20	100
TRADOC	19	19	100
HSC	3	3	100
Othert	<u>11</u>	<u>10</u>	<u>90.9</u>
Totals	80	77	96.2

\* Does not include Government-owned, contractor-operated activities.

† Includes: Military Traffic Management and Terminal Service, USA Military District of Washington, Deputy Chief of Staff for Personnel, USA Communications Command, and USA Security Agency.

c. Some installations reported estimates since true figures were apparently not available.

d. Not all installations provided figures for all categories of the health report.

e. The population of reporting installations is shown in Table 2.

### 3. PROGRAM STAFFING.

a. Program staffing is depicted in Table 3.

b. With an overall loss of physicians, including a decrease of 22 military physicians in full-time occupational health practice, there was an increase of over 2000 in the population/physician ratio. A concomitant increase of 727 in the population/nurse ratio was also noted. Despite a reduction of over 100,000 in the population served, the patient-to-staff ratio for all categories of occupational health personnel still increased.

c. DA Pamphlet 550-557, Staffing Guide for Medical Department Activities, 26 June 1974, Table 557-183, Occupational Health, recommends a full-time physician for 1500 employees and a full-time nurse for each 1400 employees. It can be clearly seen that no major Army command (MACOM) meets such a ratio, and the problem is particularly acute at FORSCOM and TRADOC installations. AR 40-3, Medical, Dental, and Veterinary Care, 10 October 1977, describes priorities for patient care. It is doubtful whether these priorities are, or can be, actually followed.

Army Occupational Health Program, 1977

TABLE 2. POPULATION OF INSTALLATIONS SUBMITTING OCCUPATIONAL HEALTH REPORTS, UNITED STATES ARMY, 1977

Command	Civilian Males	Civilian Females	Total Civilian	Military Males	Military Females	Total Military	Total Females	Total Males	Total Persons
DARCOM	69,006	24,298	93,304	11,355	511	11,866	24,809	80,361	105,170
FORSCOM	40,382	21,649	62,031	262,943	15,580	278,523	37,229	303,325	340,554
TRADOC	35,487	25,258	60,745	153,397	14,380	167,777	39,638	188,884	228,522
HSC	3,710	3,172	6,882	1,895	412	2,307	3,584	5,605	9,189
Other	12,958	3,623	16,581	13,016	365	13,381	3,988	25,974	29,962
Totals	161,543	78,000	239,543	442,606	31,248	473,854	109,248	604,149*	713,397

\* Not all installations reported civilian employees and military personnel by sex. Those not reported by sex were counted as males.



Army Occupational Health Program, 1977

TABLE 3. STAFFING OF OCCUPATIONAL HEALTH PHYSICIAN(S), UNITED STATES ARMY, 1977

Command	Full-time Civilian	Full-time Military	Part-time Civilian	Part-time Military	Total Professional Man-years	Total Population Staff Ratio*
<u>Physician</u>						
DARCOM	26	7	5	5	35.5	2,963
FORSCOM	2	2	3	11	7.5	45,407
TRADOC	6	2	3	8	10.75	21,258
HSC	0	0	2	3	1.25	7,351
Other	<u>2</u>	<u>0</u>	<u>3</u>	<u>1</u>	<u>3</u>	<u>9,987</u>
Totals	36	11	16	28	58.0	12,300
<u>Nurses</u>						
DARCOM	72	2	6	1	75.75	1,388
FORSCOM	23	0	3	4	24.75	13,760
TRADOC	14	0	1	8	16.25	14,062
HSC	4	0	1	2	4.75	1,935
Other	<u>6</u>	<u>0</u>	<u>1</u>	<u>0</u>	<u>6.25</u>	<u>4,794</u>
Totals	119	2	12	15	127.75	5,584
<u>Technicians/Clerks</u>						
DARCOM	116	15	29	19	143	735
FORSCOM	15	3	9	20	25.25	13,487
TRADOC	18.5	18	7	10	40.75	5,608
HSC	1	0	5	7	4	2,297
other	<u>5</u>	<u>6</u>	<u>3</u>	<u>2</u>	<u>12.25</u>	<u>2,446</u>
Totals	155.5	42	53	58	225.25	3,167

\* Overall Army total population/staff ratio calculated using population data from Table 2. Based on experience with occupational health programs, part-time staff was deemed to have worked an average of one-quarter of a man-year/part-time position.

#### 4. PROGRAM ELEMENTS.

a. Examinations. Physical examinations are shown in Table 4. Increases were noted in the percentage of the population examined for most categories of physical examinations. The greatest increase is in periodic military physical examinations and probably represents improved reporting.



## Army Occupational Health Program, 1977

b. Occupational Vision A summary of the occupational vision program is shown in Table 5.

(1) A decrease was noted in the numbers of military personnel employed in eye-hazardous areas as compared to 1976. This is probably primarily attributable to inaccurate reporting. It is noted that an extremely small percentage of military working in eye-hazardous areas, except at DARCOM installations, received industrial safety spectacles. The DARCOM figures are probably due to underreporting of the numbers of military identified as working in eye-hazardous areas and the misclassification of military safety glasses dispensed as industrial safety glasses.

(2) The effective rate of the vision-screening program still remains at approximately 0.5. However, great variations were noted in different commands, ranging from a low of 0.07 for other commands to a high of 1.35 for TRADOC military personnel.

(3) The number of nonprescription industrial safety glasses issued appears low. In most situations, these glasses are issued by nonmedical personnel and true figures are difficult to obtain.

c. Hearing Conservation. The hearing conservation program is depicted in Table 6.

(1) A decreased number of preemployment audiograms for civilian personnel were reported in 1977. Baseline preemployment audiograms for military personnel are performed at the Armed Forces Examining and Entrance Stations prior to induction into the Army.

(2) The number of progressive hearing loss cases decreased from 13,431 in 1976 to 11,835 in 1977. This decrease may be a result of underreporting.

d. Radiation Protection. The radiation protection program is reflected in Table 7.

(1) There were more bioassays reported in 1977 than in 1976.

(2) There was a significant increase in film badge overexposures in 1977 as compared to 1976. The increase was caused by a large number of over-exposures (35) reported at one installation.

Army Occupational Health Program, 1977

TABLE 4. PHYSICAL EXAMINATIONS REPORTED, UNITED STATES ARMY, 1977

Command	CIVILIAN			MILITARY		
	Placement No. Reported	Periodic No. Reported	Percent* Examined	Voluntary No. Reported	Percent* Examined	Periodic No. Reported
DARCOM	15,314	29,918	32.1	4,937	5.3	6,089
FORSCOM	5,906	17,073	27.5	3,488	5.6	66,793
TRADOC	5,144	31,901	52.5	5,490	9.0	102,432
HSC	427	608	8.8	1,021	14.8	373
Other	1,352	2,532	15.3	502	3.0	543
Totals	28,143	82,032	34.2	15,438	6.4	176,230

\* Percent calculated using population data from Table 2.

† Overall Army percentages.

TABLE 5. OCCUPATIONAL VISION PROGRAM, UNITED STATES ARMY, 1977

Command	No. in EHA*		No. Screened		% Screened†		Effective Rate†		Prescription Industrial Safety Glasses Dispensed		Nonprescription Industrial Safety Glasses Dispensed		% in EHA	
	Civ	Mil	Civ	Mil	Civ	Mil	Civ	Mil	Civ	Mil	Civ	Mil	Who Obtained Industrial Safety Spectacles	Who Obtained Industrial Safety Spectacles
DARCOM	31,246	463	38,517	6,438	41.3	54.2	0.62	1.04	10,705	304	8,469	402	61.4	152
FORSCOM	11,287	21,509	18,587	60,456	29.9	21.7	0.51	0.40	3,074	459	613	327	32.7	3.6
TRADOC	9,430	8,193	18,945	118,672	31.2	70.7	0.54	1.35	2,112	1,389	597	1,007	28.7	29.2
HSC	840	61	1,681	377	24.4	16.3	0.43	0.32	193	0	22	0	25.6	0
Other	1,248	576	2,842	480	17.1	3.6	0.32	0.07	538	148	40	0	46.3	25.7
Totals	54,051	30,802	80,572	186,423	33.6	39.3	0.55	0.74	16,622	2,300	9,741	1,736	48.8	13.1

\* EHA - Eye-hazardous areas.

† Percent of employees provided vision screening examinations as compared to population served using data from Table 2.

† Equals proportion of examinations that were accomplished to those that should have been accomplished under USAEHA guidelines.

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TABLE 6. HEARING CONSERVATION PROGRAM, UNITED STATES ARMY, 1977

Command	Preemployment Audiograms		No. in NHA*		Periodic Audiograms		Hearing Protective Devices Dispensed		Progressive Hearing Loss Cases	
	Civ	Mil	Civ	Mil	Civ	Mil	Civ	Mil	Civ	Mil
DARCOM	6,336	2,427	19,724	2,427	26,087	2,068	13,558	1,746	298	36
FORSCOM	5,345	105,742	26,010	105,742	12,662	63,935	4,365	125,704	705	3,660
TRADOC	5,668	31,766	13,744	31,766	17,414	92,842	36,540	250,302	505	6,472
HSC	792	102	981	102	589	439	211	15	0	0
Other	534	559	991	559	1,934	575	775	2,375	136	23
Totals	18,675	140,596	61,450	140,596	58,686	159,859	55,449	380,142	1,644	10,191

\* NHA - Noise-hazardous areas.

Army Occupational Health Program, 1977

TABLE 7. RADIATION PROTECTION PROGRAM, UNITED STATES ARMY, 1977

Command	Film Badge Program		Bioassays		Film Badge Overexposures	
	Civilian	Military	Civilian	Military	Civilian	Military
DARCOM	3,632	551	608	9	6	0
FORSCOM	1,612	3,551	57	126	1	1
TRADOC	1,722	3,770	69	418	0	39
HSC	988	1,155	46	12	0	0
Other	37	186	0	60	0	1
Totals	7,991	9,213	780	625	7	41

e. Immunization Program. The numbers of immunizations given are shown in Table 8. Numbers of all immunizations increased significantly in 1977 as compared to 1976.

TABLE 8. IMMUNIZATIONS GIVEN IN OCCUPATIONAL HEALTH PROGRAMS, REPORTED BY MAJOR COMMANDS, UNITED STATES ARMY, 1977

Command	Tetanus	Smallpox	Typhoid	Other	Total
DARCOM	6,904	3,151	5,098	24,581	39,734
FORSCOM	14,578	6,633	8,687	42,388	72,286
TRADOC	201,888	148,123	198,643	270,894	819,548
HSC	337	113	101	3,358	3,909
Other	1,218	1,962	2,328	29,468	35,176
Total	225,125	159,982	214,857	370,689	970,653

f. Pregnancy Surveillance. The number of new pregnancies reported are shown in Table 9.

It would appear that there is considerable underreporting and that too little attention is being paid to the pregnancy surveillance program. With the increased numbers of pregnant women (especially military) in the Army work force and the increased varieties of occupational hazards to which women may now be exposed, this program deserves more attention than it currently receives.

Army Occupational Health Program, 1977

TABLE 9. PREGNANCY SURVEILLANCE PROGRAM, REPORTED BY MAJOR COMMANDS, UNITED STATES ARMY, 1977

Command	New Pregnancies
DARCOM	301
FORSCOM	477
TRADOC	2,394
HSC	45
Other	11
Totals	3,228

9. Occupational Illnesses and Injuries. Occupational illnesses and injuries reported for military and civilian personnel are depicted in Table 10.

TABLE 10. OCCUPATIONAL ILLNESSES AND INJURIES REPORTED BY MAJOR COMMANDS, UNITED STATES ARMY, 1977

Command	Number of Illnesses	Number of Injuries
DARCOM	1,425	18,397
FORSCOM	823	10,951
TRADOC	111	17,494
HSC	62	1,062
Other	116	1,411
Totals	2,537	49,315

(1) It is apparent from reviewing the reports that occupational illnesses and injuries are significantly underreported. For example, in numerous instances the numbers of occupational illnesses and/or injuries reported were not the expected proportion for the size of the population served. This is particularly true in relation to the military populations. Some of the factors which contribute to underreporting may include: inappropriate or misunderstood definitions of job-related illnesses and injuries, poorly developed mechanisms of reporting, and medical personnel not being aware of the job-related aspects of some medical conditions.



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(2) Many installations reported no occupationally related illnesses. The total number of reported occupational illnesses decreased 34 percent from 1976. This probably does not represent a true decrease, but is a result of the factors noted above.

h. Analysis of Illnesses and Injuries Reported in Narrative Form.

(1) Twenty-one installations reported, in narrative form, a breakdown of the types of occupational illnesses and injuries. Of the total numbers of illness and injury, 15.7 percent of the illnesses and 10.7 percent of the injuries were broken down in the narratives.

(2) AR 385-40 requires coding and reporting of occupational illnesses and injuries according to OSHA definitions. An attempt was made to code the injuries and illnesses reported in these narratives by these definitions.

(3) Reporting of occupational illnesses and injuries to Safety personnel requires that data be provided in such fashion that they can be easily coded. OSHA definitions are different from those commonly used by medical personnel. Unless medical personnel are familiar with the requirements of AR 385-40, Accident Reporting and Records, 15 August 1972, inaccuracies in coding will occur.

(4) The following Table (Table 11) was compiled from the narrative reports. It is apparent that coding may be inaccurate. As an example, "back" and "limb" injuries have been reported as Code 10: All Occupational Injuries. Some of these may very well actually be Code 26: Disorders Due to Repeated Trauma. In addition, injuries requiring first aid only do not have to be reported. It is unknown whether some of these were first aid only cases.

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TABLE 11. OCCUPATIONAL ILLNESSES AND INJURIES REPORTED BY OSHA CODES FROM NARRATIVE REPORTS SUBMITTED BY 17 US ARMY INSTALLATIONS, 1977

Code 10: All Occupational Injuries - Total	5,600
Abrasions/lacerations/contusions/avulsions/bruises	2,191
Sprains/strains	931
Back - including sprains/strains/injuries	363
Insect bites/stings	292
Compensable injury not classified	286
Limb/joint	270
Burns	186
Puncture wounds	155
Fractures	155
Foreign Bodies - including splinters	142
Head injuries/facial injuries (including concussions)	73
Falls	58
Hernias	48
Soft tissue injuries (including muscle trauma/torn ligaments)	39
Traumatic ear injuries	25
Animal bites	20
Electrical injuries	9
Amputations	9
Multiple injuries	8
Trunk injuries	7
Gun shot wounds	4
Dislocations	3
Tooth injuries	1
Fatality (crushed)	1
Eye Injuries - Total	324
Foreign bodies in eye	150
Eye injuries (not classified)	149
Corneal abrasions	17
Subconjunctival hemorrhages	7
Thermal burn of eye	1
All Occupational Illnesses - Total	399
Code 21: Occupational Skin Diseases or Disorders - Total	269
Includes: Dermatitis	206
Conjunctivitis	34
Chemical Burns - Eye	20
Chemical Burns	9
Code 22: Dust Diseases of the Lungs (Pneumononioses)	0

Army Occupational Health Program, 1977

TABLE 11. OCCUPATIONAL ILLNESSES AND INJURIES REPORTED BY OSHA CODES FROM NARRATIVE REPORTS SUBMITTED BY 17 US ARMY INSTALLATIONS, 1977  
(Continued)

Code 23: Respiratory Conditions Due to Toxic Agents - Total	41
Includes: Inhalation Fumes/Dust/Smoke	40
Pulmonary Edema (reaction to toxic exposure)	1
Code 24: Poisoning (Systemic Effects of Toxic Materials) - Total	13
Includes: Agent Exposures	4
Metal Fumes Inhalation	2
Ammonia Intoxication	2
Allergic Reaction to Chemicals	2
Toxic effects of Xylene/Toluene	1
TNT Intoxication	1
Poisoning (not classified)	1
Code 25: Disorders Due to Physical Agents - Total	44
Includes: Flashburn (eyes)	23
Cold Injury	15
Microwave Exposures	3
Heat Injury	2
Flashburn (skin)	1
Code 26: Disorders Due to Repeated Trauma* - Total	14
Includes: Bursitis	9
Tendinitis	2
Synovitis	1
Mechanical Irritation	1
Arthritis	1
Code 29: All Other Occupational Illnesses - Total	18
Includes: Angina	7
Others (not defined)	4
Anxiety	3
Thrombosed Hemorrhoid	1
Cancer of Lymph nodes	1
Pneumonia	1
Retracted Ear Drum	1

\* Although no hearing losses were reported in the narratives, the 11,835 hearing losses reported in the statistical summaries should be reported under Code 26.

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i. Treatment of Nonoccupational Conditions. Treatment of nonoccupational conditions is shown in Table 12. A decreasing trend in the number of treatments rendered for nonoccupational conditions has been noted since 1974. This change may, in part, be attributed to staffing reductions but more probably reflects an increased emphasis on the high priority areas of prevention in occupational medicine, such as job-related medical surveillance.

TABLE 12. TREATMENTS OF NONOCCUPATIONAL CONDITIONS BY MAJOR COMMANDS,  
DEPARTMENT OF THE ARMY CIVILIAN EMPLOYEES, 1977

Command	Numbers of Treatment
DARCOM	148,295
FORSCOM	47,316
TRADOC	10,348
HSC	6,412
Other	12,824
Totals	225,195

j. Screening Programs. Statistical analyses of disease-screening programs are shown in Tables 13, 14, 15, 16 and 17. In all disease-screening programs, except glaucoma and diabetes which increased only slightly, the referral rate has decreased and is lower than anticipated. In some installations, no referrals were reported in spite of the large numbers of individuals screened. It is probable that referrals were made, but data had not been kept. Such data are essential for evaluation of screening programs and for followup of individuals referred. Either installations are not using such data in evaluation of their own programs, or programs are poorly designed using either an inappropriate population (i.e., diabetic screening of large numbers of people under age 40) or inappropriate screening tools.



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TABLE 13. DIABETES SCREENING BY MAJOR COMMANDS, UNITED STATES ARMY, 1977

Command	Number Screened	Percent of Total Population Screened*	Referrals	Percent Referred
DARCOM	12,316	11.7	194	1.6
FORSCOM	13,831	4.1	44	0.3
TRADOC	4,965	2.2	27	0.5
HSC	1,008	11.0	0	0
Other	692	2.3	29	4.2
Totals	32,812	4.6	294	0.9

\* Population data from Table 2.

TABLE 14. HEART DISEASE SCREENING REPORTED BY MAJOR COMMANDS, UNITED STATES ARMY, 1977

Command	Number Screened	Percent of Total Population Screened*	Referrals	Percent Referred
DARCOM	19,754	18.8	637	3.2
FORSCOM	16,481	4.8	939	5.7
TRADOC	36,359	15.9	176	0.5
HSC	4,192	45.6	54	1.3
Other	3,097	10.3	285	9.2
Totals	79,883	11.2	2,091	2.6

\* Population data from Table 2.



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TABLE 15. TUBERCULOSIS SCREENING REPORTED BY MAJOR COMMANDS, UNITED STATES ARMY, 1977

Command	Number Screened	Percent of Total Population Screened*	Referrals	Percent Referred
DARCOM	12,374	11.8	145	1.2
FORSCOM	28,510	8.4	512	1.8
TRADOC	32,127	14.1	592	1.8
HSC	5,634	61.3	150	2.7
Other	2,845	9.5	32	1.1
Totals	81,490	11.4	1,431	1.7

\* Population data from Table 2.

TABLE 16. CANCER SCREENING REPORTED BY MAJOR COMMANDS, UNITED STATES ARMY, 1977

Command	Number Screened	Percent of Total Population Screened*	Referrals	Percent Referred
DARCOM	2,932	2.8	144	4.9
FORSCOM	10,304	3.0	440	4.3
TRADOC	4,679	2.0	23	0.5
HSC	136	1.5	0	0
Other	177	0.6	25	14.1
Totals	18,228	2.6	632	3.5

\* Population data from Table 2.

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TABLE 17. GLAUCOMA SCREENING REPORTED BY MAJOR COMMANDS, UNITED STATES ARMY, 1977

Command	Number Screened	Percent of Total Population Screened*	Referrals	Percent Referred
DARCOM	2,885	2.7	20	0.7
FORSCOM	7,219	2.1	260	3.6
TRADOC	9,320	4.1	9	0.1
HSC	201	2.2	5	2.5
Other	0	-	-	-
Totals	19,625	2.8	294	1.5

\* Population data from Table 2.

## 5. CONCLUSIONS.

a. While installation occupational health reporting has improved in some areas, obvious deficiencies still exist. Probably the most serious and obvious deficiency is the tendency not to include services provided to military personnel. It appears that on many installations that have civilian employee health clinics the report is given to the clinic for completion and, therefore, military figures are not included. Local mechanisms must be developed to obtain required information.

b. While some trends may be noted from the Occupational Health Report, caution must be exercised in interpreting the data. All reports were reviewed as they were received. When major discrepancies were noted, attempts were made to verify data. In some instances, when the data were highly questionable and could not be verified, they were excluded. The data, as stated previously, are in many cases incomplete, underreported and often estimated. It is apparent from surveys made by this Agency that many services are provided but not reported.

c. Some installations should be commended on the quality of their reports. Not only were the requested data given, but additional narrative reports were submitted which provided information valuable in assessing the Army Occupational Health Program (see the Appendix). These installations include Lexington-Blue Grass Depot Activity, Fort Riley, White Sands Missile Range, Rock Island Arsenal, Tobyhanna Army Depot, Sunny Point Military Ocean Terminal, and Fort McPherson. Excellent narratives were also received from Fort Jackson, Aberdeen Proving Ground, Fort Sill, Fort Polk, and Fort Ord.

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Although additional information is not required, submission of such addenda to reports as cited by the examples in the Appendix is highly encouraged. Other types of information which are desirable to include are major accomplishments and major problems encountered at the local level. Such data can be helpful in evaluation of the Army's occupational health program and in providing assistance to installations.

6. USAEHA OBSERVATIONS. During the installation surveys performed by this Agency, some improvements and many common problems have been identified which are not specifically reported in the installation occupational health reports.

### a. General.

(1) The most marked overall growth in occupational health programs has been in FORSCOM/TRADOC installations, most of which have formally developed occupational health programs only within the past 4 years. Other improvements include an increasing awareness of the need for inclusion of military personnel in program coverage, increased specificity of job-related medical surveillance, and increased efforts to make use of automatic data processing in managing the hazard inventory and periodic medical surveillance programs. While these constitute a certain level of improvement, they are not widespread.

(2) Only a limited number of installations have a comprehensive inventory of hazards available for use by the occupational health staff in establishing the job-related medical surveillance program. Use of job titles for identifying civilian employees requiring medical surveillance has helped, but it lacks specificity and does not provide for military personnel. As a result, there is no assurance that all personnel requiring job-related medical surveillance are receiving it.

(3) With some exceptions, military personnel are not included in the occupational health program. Of particular concern is the limited determination of the requirement for and the provision of job-related medical surveillance and the identification of job-related injuries and illnesses. This includes military assigned to troop units as well as other areas.

(4) There is limited consistency in maintenance of occupational health medical records. Department of the Army action to provide direction for occupational health records is expected to alleviate this problem.

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b. Occupational Vision.

(1) Occupational vision surveys indicate continued improvement and awareness of the need for good visual performance and adequate eye protection.

(2) The following specific problem areas are noted when performing occupational vision surveys.

(a) Eye practitioners are frequently not aware of industrial vision demands.

(b) Continued confusion between the safety standards established by the Food and Drug Administration for ordinary spectacles and the standards established by the American National Standards Institute for the construction of industrial safety spectacles.

(c) Photochromatic lenses in industrial safety spectacles are still occasionally seen, but are an unauthorized item of issue.

(d) New prescriptions are often required by installations when reordering prescription safety spectacles. New prescriptions should be based on physiological need, and not be required at frequencies less than 1 year.

(e) Military personnel are often not wearing appropriate industrial safety spectacles.

(f) Improper types and poorly maintained eye-lavage fountains are frequently observed.

(3) Anticipated increased involvement by eye practitioners in the total occupational vision program and the recent changes to AR 40-3 and AR 40-5 eliminating the prohibition on eye examinations at Government expense for employees working in eye-hazardous areas/operations may create a marked improvement in the services rendered to these individuals.

c. Hearing Conservation.

(1) Hearing conservation surveys conducted by Bio-Acoustics personnel of this Agency indicate a continued improvement in various aspects of the Army's hearing conservation program. These improvements are particularly evident at TRADOC and DARCOM installations. Such improvements include posting of noise-hazardous areas with appropriate caution signs, increased availability and use of hearing protection, as well as an increased awareness of the hazardous effects of noise. Repeated deficiencies are, however, noted in the following areas.



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(a) With the exception of Government-owned, contractor-operated operations, there is a general lack of enforcement in the mandatory use of hearing protection devices.

(b) Earplugs are issued, not individually fitted to each ear.

(c) Earplugs are not always readily available in noise-hazardous areas for personnel who do not have earplugs in their possession.

(d) Ear muffs are not always available, and often those ear muffs that are available have unserviceable earcup seals.

(e) Earplug carrying cases are not issued with each pair of preformed earplugs.

(f) Not all personnel working in noise-hazardous areas receive baseline and subsequent periodic pure-tone hearing tests.

(g) Audiometric tests are not administered by personnel who have received approved training in the techniques of audiometry.

(2) The monitoring audiometry aspect of the Army's hearing conservation program remains the least developed of the overall program.

(3) A survey conducted by the Audiology and Speech Center at Walter Reed Army Medical Center within CONUS and USAREUR indicates that approximately 616 corpsmen, health technicians and nurses are available to administer the estimated 500,000 annual audiograms required for the hearing conservation program. Of that total, only 33 percent (203) have received approved training as audiometric technicians. An annual turnover rate of 27 percent (166) was reported. Since only about 30 audiometric technicians are trained each year at the USAEHA Hearing Conservation Workshop, other sources of training must be developed. A course presented at Fort Polk by the Brooke Army Medical Center and the other MEDDAC's within that region could be a prelude to a cost-effective solution for additional audiometric technicians.

(4) Although there is an overall improved appearance in the Army's hearing conservation program, the Army does not have statistical measures of program effectiveness. Objective measures of program effectiveness include degrees of hearing loss by command, installation, MOS, etc. Department of Defense hearing conservation data forms are being developed that could interface with a computerized data registry for the Army. Pending final approval by The Surgeon General of the Army, a revision of TB MED 251 that strengthens and augments many features of the monitoring audiometry program will be available in the field.



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d. REPORT FORM (DA FORM 3076). The need for an improved report form has been recognized and a new form has been prepared. The new DA Form 3076 has not yet been finalized, and until it has been published, installations should continue to use the current DA Form 3076.

APPENDIX

SUMMARIES OF DETAILED NARRATIVES

1. Fort McPherson included a copy of the Inventory of Hazards by activity and building, a detailed list of accident/illness cases by month, copies of the Occupational Health History form used in the worker health appraisal, and reports of the accomplishments of the medical surveillance program by month. Information was also provided on the health education activities of the clinic.
2. Lexington-Blue Grass Depot Activity provided a detailed breakdown of the population receiving services from the clinic and a summary of occupational illnesses and the circumstances of each illness. Major occupational health hazards were identified. Screening programs were presented with information on the numbers of referrals made as a result of each type of examination.
3. Fort Jackson provided excellent summary information on the injuries reported during the year. Of particular interest was the detailed summary data reported on heat and cold injuries. Numbers of cases of heat injury were reported by category of WBGT, time of day (i.e., most frequent in afternoon), type of activity being performed, amount of fluid intake, and the hospitalization rates. They also reported pertinent summary data on trauma among trainees. Including these types of data on the occupational health report is extremely useful and this manner of reporting is encouraged, when possible, in lieu of long verbal commentaries.
4. Aberdeen Proving Ground provided supplemental information on their medical surveillance program including the number of examinations performed on various types of workers. They performed 1,044 examinations or evaluations for 36 different types of jobs or exposures. An active, almost daily, series of lectures was instituted at the clinic during the noon hour to keep clinic personnel updated on all aspects of medical practice. Some of the general areas presented at these seminars were treatment and transportation of various types of trauma victims, occupationally related malignancies, injury and illness from physical agents, counseling, abuse of drugs and/or alcohol, stress, and many more various topics. Such aggressive inservice programs are an important aspect of a good occupational health program.
5. Fort Riley provided detailed information on most program elements. As an example, information submitted on the hearing conservation program included a breakdown of the number of audiograms done by month, type of earplugs issued, and the total cost of providing hearing protection. They had no documented hearing loss cases in the reporting year.

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6. White Sands Missile Range provided a report on occupational illnesses and injuries by international classification of diseases. In addition, information on industrial hygiene surveys was available.
7. Tobyhanna Army Depot provided an excellent breakdown on occupational illness experience. They reported 85 cases of occupationally related illness, including 36 cases of progressive hearing loss, 20 cases of dermatitis and 6 cases of inhalation of fumes.
8. Fort Sill totaled the cases of occupational illness and injury for the reporting year and presented them by type of injury or illness. A few of the illnesses and injuries reported included two cases of smoke inhalation, one case of poisoning, 77 lacerations, 37 back injuries, 19 fractures and 14 insect bites. Similar reporting is encouraged by other installations to improve the overall value of the report.
9. Sunny Point Military Ocean Terminal provided a detailed breakdown of occupational injuries and illnesses which was used to compile part of the data reported in Table 11.
10. Rock Island Arsenal submitted detailed case histories on each hearing loss and each reported occupational illness case.
11. Fort Polk provided a breakdown of occupational illnesses and injuries by type and affected body area which was very useful in compiling part of the data for Table 11.
12. Fort Ord submitted useful information on the types and numbers of occupationally related illnesses and injuries.