

Innovation Award



CPT Leanne Cleveland and the
Fort Carson Army Hearing Program

February 25, 2010





The Fort Carson Army Hearing Program (AHP)

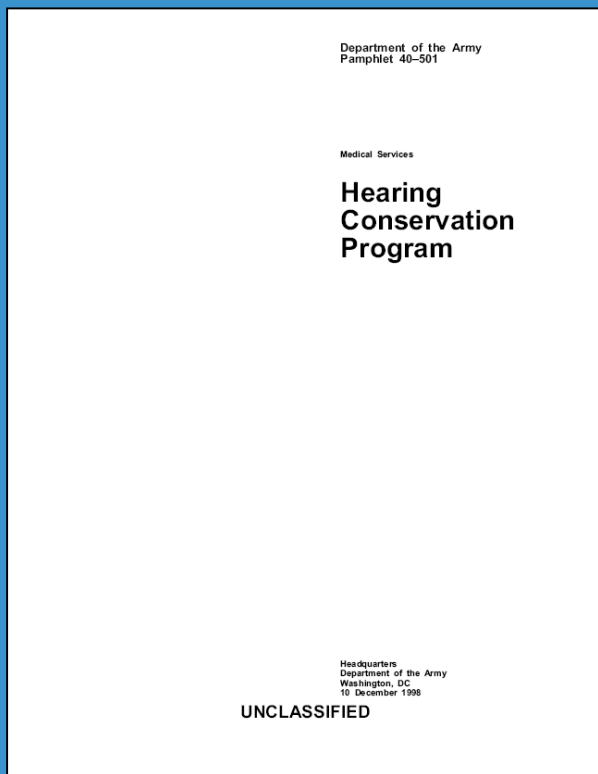
- Part of the Dept. of Preventive Medicine at Evans Army Community Hospital.
- Managed by CPT Leanne Cleveland & supported by CPT Jenny Davis and interdisciplinary staff (7 from occupational health, 4 from industrial hygiene, 5 from environmental health), civilians and soldiers.
- Designated as 1 of 3 pilot test sites by the Army Medical Command Chief of Staff.



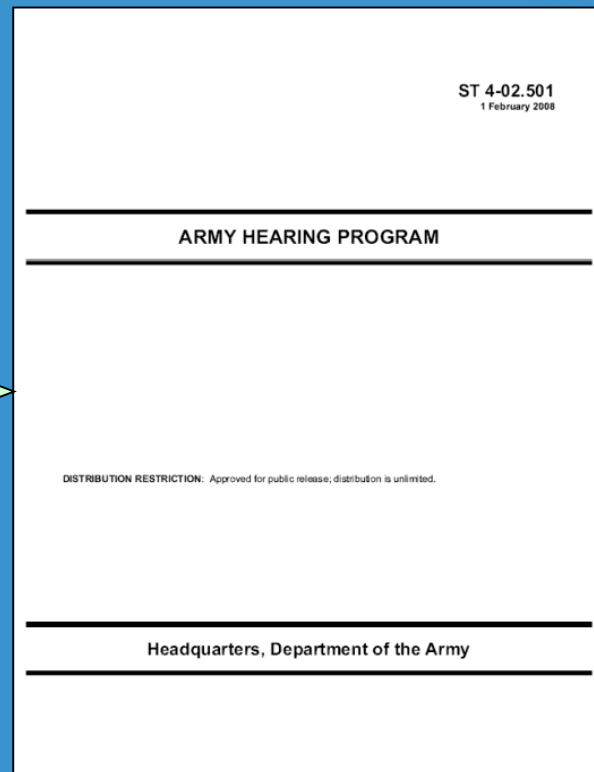


The Fort Carson (Pilot) Army Hearing Program

Evolution of The Army Hearing Program



10 December 1998



1 February 2008



Innovation Details

Integrating 4 Elements of the Army Hearing Program





Hearing Readiness



Hearing Readiness cont.



- ALL SOLDIERS
 - Pre-deployment audiogram
 - Post-deployment audiogram
 - 2 booths (8-person)
 - 4 skilled audiometric technicians
- Able to accommodate 400 hearing tests and/or hearing protector fittings per day.
 - ~45,000 audiograms were performed in 2009



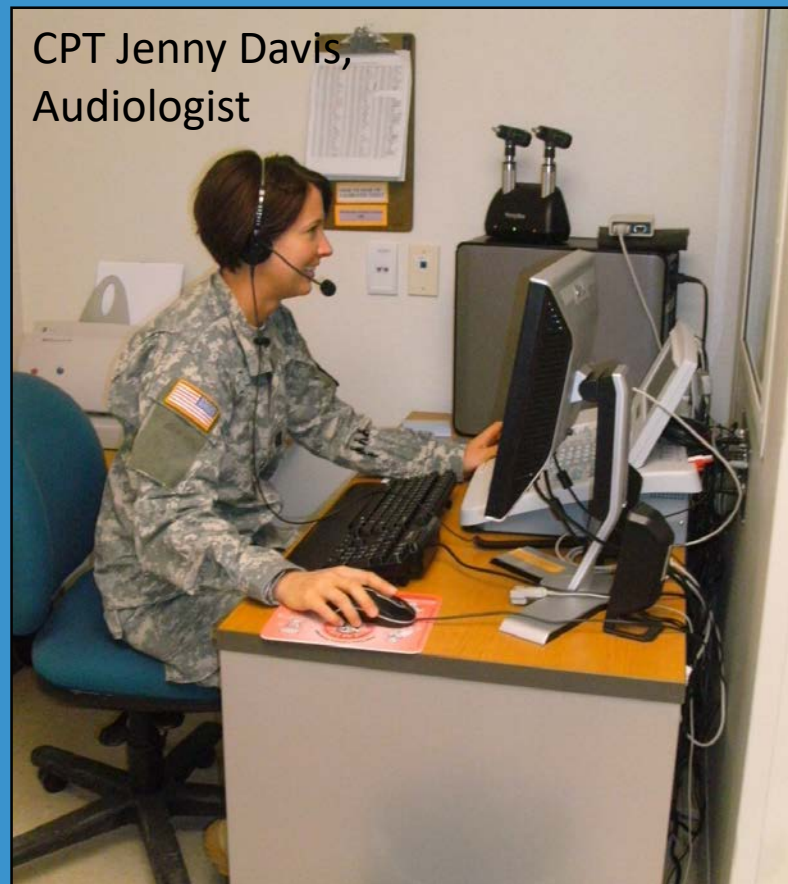
Clinical Hearing Services



Comprehensive diagnostic audiological examinations

- In deployed settings, hearing injury treatment services may be provided within the Combat Support Hospital and not only at permanent locations.

CPT Jenny Davis,
Audiologist



Operational Hearing Services



At COMPANY LEVEL

Assign a Unit Level Hearing Program Officer (HPO) / noncommissioned officer (NCO) on orders responsible for hearing program components who:

- must attend a 3-hour class and pass a written/practical examination.
- are in charge of coordinating an annual Hearing Health Brief for Soldiers.
- arrange for an official inspection of at least one noise hazardous area.



Hearing Conservation



Monitoring hearing status and hearing protection use for noise-exposed civilian personnel.





Programmatic Changes

✓ Implemented

- Efficient high-volume hearing testing while maintaining quality
- Multi-level educational programs
- Teamwork: Hearing Program Officer training & integration
- Hearing Protection Devices
 - Expanded variety and supply to units
 - Consideration of individual communication demands
 - Custom devices dispensed when required
 - Combat Arms earplug, increased distribution
- Appropriate amplification matched to a soldier's work-related hearing demands.

Challenges in war time



- Pilot program implemented in 2007
- Some loss of continuity of pilot program in 2010
 - Changes in base leadership at multiple levels
 - Decrease in full-time audiology staff
 - Hearing protection devices not under program control
 - Lack of unit level accountability

Lessons Learned

Unpredictable noise environment in combat. In certain circumstances, even when best prevention efforts are in place, it may be impossible to prevent hearing loss.

Two crucial features for future success:

- The interdisciplinary team & individual soldier approach.
- Understanding noise sources and hearing protection devices available for today's war fighters.

Apache Helicopter
101-104 dBA



High Mobility Multi-Wheeled Vehicle (HMMWV)
94 dBA when moving at 55 mph



Lessons Learned



- Soldiers and leaders have *very strong* opinions regarding hearing loss prevention. Diplomacy and education are key.
- Biggest challenge remains overcoming the culture and mindset that hearing loss/tinnitus are inevitable byproducts of military service, when they are most often entirely preventable.



Future of the Innovation

- Expand education efforts, especially at the leadership level to increase top-down reinforcement for the Army Hearing Program.
- Use data to show that operational hearing services and hearing loss prevention can increase the war fighter's survivability on the battlefield.
- Keep exploring alternatives for noise control and improved hearing protection.



Significance of the Award



- LEVERAGE! Seeking enhanced leadership buy-in for the AHP at Fort Carson and other installations.
- ADVOCATE for more Tactical Communication and Hearing Protection Systems as newer (louder) weapons are developed and available for military use.
- PROMOTE accountability at all levels.



Significance of the Award



- The AHP team at Fort Carson will continue to serve the Soldiers and noise exposed civilians of the United States Army with the highest level of commitment to excellence in operational and clinical hearing services.
- Disseminates information and lessons learned which can be adapted for civilian industries outside of the military.



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