Necessity of Medical Personnel on the Advance Party George Horsley, NREMT-P, APA-C, MPAS; Keith Wilson, RN, MPH

ABSTRACT

Often when a unit sends an advanced echelon party forward, medical and preventive medicine personnel are not included. Medical planners make plans based upon their best estimates. Any opportunity for the medical personnel to gain ground truth prior to the deployment of the main body is an opportunity that should be taken. This article tries to reinforce this by providing a personal example. It also provides examples of effective preventive measures taken to decrease exposure to the filth fly.

It can't be overstated that whenever possible, site survey teams or advanced echelon (ADVON) parties should include a medical person capable of accessing the environment of quartering areas for potential disease and non-battle injury (DNBI) threats prior to arrival of the main body. This concept is so important that FORSCOM Regulation 700-2 states "All commanders will ensure all field sanitation teams (FST) ... will be actively engaged in all phases of operations." Review of Army Regulation 40-5 Preventive Medicine, and FM 21-10 FIELD HY-GIENE AND SANITATION further emphasize this point. There are many concerns that may not be readily apparent to untrained individuals until there is evidence of disease in a force that is quartering in a medically inhospitable environment. If the mission dictates a less than optimal area be utilized for quartering, then the medical preventive medicine pre-assessment becomes even more critical. This pre-assessment allows medical personnel on the ADVON to collect data and complete the medical and preventive medicine (prevmed) situation report (sitrep), which is sent to the main body. This information allows medical providers and prevmed technicians to be proactive rather than reactive.

In a recent deployment to a friendly Middle Eastern country many DNBI cases were avoided by having the Command physician assistant (PA) on the ADVON. The decision to send the PA was made because of his previous experience as a Special Forces Medic (18D) and without authorized prevmed personnel assigned to the command. The initial site survey by the PA found the intended site was a fixed facility with running water and plumbing in good repair with reasonable cleanliness. There were no open drainage issues readily noticeable and there was no evidence of large collections of standing water, refuse, or waste products in the surrounding area. However, there was an unnaturally high amount of filth flies in the area where the main body was to be quartered. Although there was no initial evidence to explain the fly situation, it was later surmised that the fixed facility used for quartering was built upon the base's existing leach fields. The time between the deployment of the ADVON and the main body was 24 hours which allowed for the procurement of three commercial fly traps (figure 1).



Figure 1

Within a week of the arrival of the main body it became evident the commercial fly traps were being overwhelmed. Field expedient fly traps were then constructed similar to those presented in Armed Forces Pest Management Board Technical Guide Number 30 (figure 2). Of the many types of bait attempted, the milk and sugar combination caught the most flies of the field expedient traps (figure 3). Link up with other Special Operations Forces operating in the area allowed for the procurement of several more commercial fly traps. As demonstrated in the pictures, many flies were trapped by the improvised traps, but their results paled in comparison to the commercial traps.



Figure 2 Plastic water bottle fly trap (inverted cone model)



Figure 3

In addition to the employment of fly traps many locally procured rolls of fly paper were employed (figure 4). The fly tapes in the common areas and in areas with openings to the outside were the areas where the greatest concentration of fly papers were employed. The tapes were placed approximately 1 meter apart, over the entire common areas. While this at first may sound excessive, it proved to be appropriate. The papers from these areas would become completely full necessitating removal and replacement every 48 hrs.





Figure 4

In association with the use of fly traps other methods employed to combat the filth fly infestation and diseases carried by the fly included instituting the following protocols:

- Closed door policy reinforced with written reminders placed on each door with an opening to the outside or to a hallway or common area, for the person using the door to ensure that the door was closed.
- Hanging drapes made of canvas in doorways where doors where not available.
- No food to be brought into or opened in the facility.
- Trash dumpsters moved further from entrance to billeting.
- Trash to be removed daily or sooner if necessary.
- Hand washing stations placed in common area and dining facility.
- Dining facility entrance screen repaired.
- Manhole cover to remain over septic tank opening. (It had come off when a truck ran over it.)
- Initial education and daily dissemination of the dangers posed by the filth fly.
- A self help station stocked with alcohol hand cleaners, foot powder, insect repellant, and sun screen was established. This allowed service members to get needed supplies without waiting for medical personnel to draw the items from inventory.
- NCO supervised cleaning of common areas including latrines.

Aside from the nuisance that flies present, it has been demonstrated that many diseases can be transmitted by filth flies. The below table was taken from the Armed Forces Pest Management Board Technical Guide Number 30 and details some of the most significant pathogens known to contaminate filth flies (table 1).

| Table 1. Significant Pathogens of Human Diseases | | |
|--|------------------|---------------|
| Known to Contaminate Filth Flies | | |
| amoebic dysentery | hepatitis | Shigella |
| anthrax | intestinal worms | Streptococcus |
| cholera | leprosy | trachoma |
| diphtheria | polio | tubercul osis |
| Escherichia coli | rotavirus | typhoid fever |
| Eyeworms | Salmonella | yaws |

The above chart has caused me to review what I think I know about the filth fly. This review of the literature has added to my understanding of the filth fly and its importance in military medicine. I will publish this review in this publication in the near future.

Medical or preventive medicine personnel should be on the ADVON whenever possible. Having the Command PA on the ADVON for this deployment allowed for a proper assessment of the environmental situation.

REFERENCES

Army Regulation 40–5 Preventive Medicine FM 21-10 FIELD HYGIENE AND SANITATION FORSCOM Regulation 700-2 Armed Forces Pest Management Board Technical Guide NO. 30



CPT George W. Horsley joined the Army in April 1987. He was first assigned to 2nd Ranger Battalion as an infantryman. After his first enlistment he attended the 18D SFQC and was assigned to 10th SFG at Ft Devens, Massa-

chusetts. In 1995 he left the regular Army for A Co, 2nd Battalion, 19th SFG, RI ARNG. For the next two years he worked as a Paramedic until he was accepted into the Interservice Physician Assistant Program. Upon graduation in 1999 he returned to the RI ARNG until late 2001, where-upon he was assigned to HHC 2/19 SFG, WV ARNG. He stayed assigned there until early 2006 when he was assigned to the Special Operations Detachment-Global, RI ARNG where he is assigned today. He was mobilized in late 2006 for OEF supporting SOCCENT for one year. In late 2007 he was continued on mobilization for support to the USSO-COM Surgeon's office.



Maj Keith A. Wilson, NC, USAF, is currently the Chief of Medical Plans at SOC-CENT. Prior to this assignment he was a student at USUHS where he obtained a MPH. His prior assignments include duty as a flight nurse with the 43rd Aeromedical

Evacuation Squadron (AES) and, prior to nursing school he was a Medic with the 1st Ranger Battalion.