

A Wonderful Marriage

By Captain Nicholas Bell

As a junior chemical, biological, radiological, and nuclear (CBRN) officer, I once thought that the Chemical Corps was alone in certain things. For example, I thought that we were the only ones who knew about downwind hazards after a nuclear detonation. And I thought that we were the only ones who dealt with radiation safety, environmental management, medical chemical defense equipment and material, and the effects of CBRN incidents on human health. But those thoughts have been squashed! All Army units need to know who is to their left and right flanks. This means that CBRN leaders must fully understand the capabilities of resources outside the CBRN community.

Now that I have executed the CBRN consequence management response force and am working in one of the four Regular Army medical brigades, I know that the Army Medical Department (AMEDD) is well resourced to work closely with Dragon Soldiers. In our AMEDD unit in Afghanistan, we have a nuclear medical science officer, an area medical laboratory (AML), and preventive-medicine (PVNTMED) assets. In addition to this correlating knowledge, AMEDD also deals with medical chemical defense equipment and material.

The issue of radiation safety is often tackled by CBRN leaders in brigade combat teams, but AMEDD has dedicated professionals for that purpose. In our medical task force, the nuclear medical science officer provides guidance for the use of equipment at military treatment facilities and assists brigade combat teams with equipment that contains radiation. While they are part of the medical arsenal, nuclear medical science officers provide more than medical radiation information. They also understand plume models and the environmental effects of CBRN events; therefore, they can use their expertise to inform the commander about CBRN-related events. And these professionals are available while deployed and in garrison. As you establish your own radiation safety standards, I highly recommend that you consult with not only your local safety office, but also your local military hospital regarding their radiation safety standards.

An AML is comprised of several sections. Toxic industrial chemicals and materials are presumptively identified in the analytical chemistry section. Section personnel are capable of focusing on low levels of nerve and blister agents and can also evaluate for Soldier exposure to a nerve agent by analyzing for plasma cholinesterase.¹ The analyses and tools used are familiar to the Chemical Corps. But the similarities do not end there. The environmental surveillance section of an AML also makes use of a familiar piece of equipment—the HazMatID Chemical Detector—to presumptively identify the wide range of CBRN threats on the battlefield. In addition, AMLs use another familiar piece of equipment—

the AN/PDR-77 Radiac Set—during contingency operations following the use of weapons of mass destruction.²

Environmental management is another area that often falls under the purview of the CBRN Soldier. Although environmental management is very closely related to our profession, there are PVNTMED units that serve as subject matter experts on environmental policy. Those units execute forward operating base camp assessments, which reveal the sanitary conditions and environmental hazards on forward operating bases. The PVNTMED detachment, in conjunction with the local PVNTMED officer, then implements a plan to correct any deficiencies. The health of our Soldiers depends on these PVNTMED units and their assessments. Knowledge about the benefits of a PVNTMED unit is crucial to sustaining the fighting force when leading Soldiers in combat. I highly recommend that CBRN officers partner with the closest PVNTMED detachment and PVNTMED officer to help execute base camp assessments—or, at the very least, consult with them regarding environmental issues that may arise in garrison or while deployed.

The issues of storage and accountability of medical chemical defense equipment and material should also be on the mind of every CBRN leader during deployment. Although Army leaders often look to the Chemical Corps for guidance, the U.S. Army Medical Materiel Agency and the Office of the Surgeon General actually serve as lead agencies for the distribution and accountability of medical chemical defense equipment and material.³ In addition, every theater contains medical assets that act as the lead in this area, as well as subject matter experts such as pharmacists and medical logistics units. Therefore, CBRN leaders must know who to contact regarding these issues. Because medical chemical defense materiel contains a controlled substance, CBRN leaders must know the policies for its distribution and storage in a deployed environment.

The Chemical Corps and AMEDD are more related than not. CBRN leaders and Soldiers should refer to AMEDD

professionals regarding policy and expertise in certain areas. As Dragon Soldiers, we can do more with our training and knowledge than teach Soldiers how to don protective masks. CBRN leaders should learn about AMEDD capabilities for future career use. Working together, the Chemical Corps and AMEDD can successfully sustain and preserve the fighting force.



Endnotes:

¹Colonel Beau J. Freund, “Capabilities and Applications,” 1st AML, 1 October 2009, slides 27–29.

²Ibid.

³Supply Bulletin (SB) 8-75-S7, *Army Medical Department Supply Information*, 20 July 2009, pp. 5-1–5-10.

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