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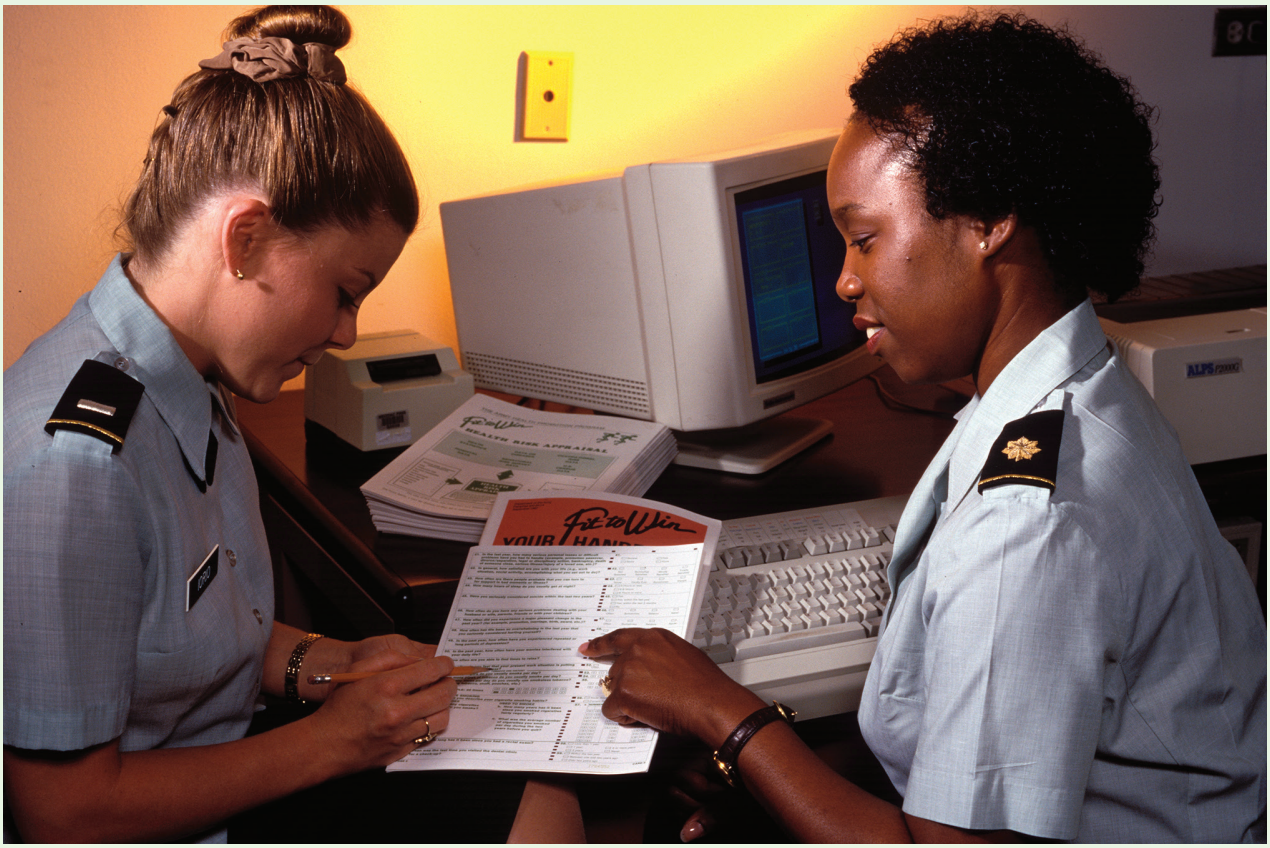
Section IV: Health Communication and Outreach



A physician communicating health information to a patient.

Photograph: Courtesy of the US Army Public Health Command (Aberdeen Proving Ground, Maryland).

Chapter 23

RISK COMMUNICATION: AN ESSENTIAL ELEMENT OF EFFECTIVE CARE

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INTRODUCTION

Risk communication is a critical foundation of the communication process used by healthcare providers who encounter service members and veterans with deployment health concerns. Effective risk communication is essential in establishing a trusting relationship between the provider and patient. It is a valuable tool for facilitating effective dialogue as they work together to assess the potential health risks that may be present as a result of deployment.

This chapter explains the science of risk communication—what it is, its benefits, and how to apply it in a clinical setting.

WHAT IS RISK COMMUNICATION?

Several well-regarded sources have defined risk communication; the most quoted is probably the 1989 National Research Council (NRC) report *Improving Risk Communication*.[1] This report notes that in the past, risk communication had often been thought of as a one-way process of experts informing nonexperts. Following an in-depth review, however, the NRC concluded that risk communication should be defined as a *two-way process*, that is: "an interactive process of exchange of information and opinions among individuals, groups, and institutions"[1(p21)] concerning a risk or potential risk to human health or the environment. Risk communication "involves multiple messages about the nature of risk and other messages not strictly about risk that express concerns, opinions, or reactions to risk messages or to legal and institutional arrangements for risk management."[1(p21)]

This two-way process definition has been reinforced many times since then. In 1995, the US Public Health Service defined risk communication as a "complex, multidisciplinary, multi-dimensional, and evolving process…used to give citizens necessary and appropriate information and to involve them in making decisions that affect them… ."[2(p1)]

The two-way risk communication process is also central to the work of Dr Vincent Covello, whose endeavor in this field is extensive. In a 2008 brief for the US Agency for International Development, Dr Covello defined risk communication as "…the two-way exchange of information about threats, including health threats… . The goals of risk communication are to enhance knowledge and understanding, build trust and credibility, encourage dialogue, and influence attitudes, decisions, and behaviors. These goals apply to all four major types of risk communication: 1) information and education; 2) behavior change and protective action; 3) disaster warning and emergency notification; and 4) joint problem-solving and conflict resolution."[3]

In a 2012 article that discussed using risk communication to address deployment-related exposure concerns, Dr Susan Santos reinforced the NRC's definition of risk communication and stated that "on a practical level, risk communication is needed when there is 1) complex health- or risk-related information being communicated; 2) a high level of concern; 3) expert disagreement or high uncertainty; and 4) low trust in those seen as responsible for the risk or for providing protection against a risk."[4(p753)]

The scientific discipline of risk communication is supported by several theories. Understanding risk perception is essential to understanding and using risk communication principles. The work of Slovic et al[5] and other social psychologists has yielded a core set of risk perception factors that help shape understanding of risk and that reflect a very different view of risk than that of medical and scientific experts. As Dr Santos notes, the public's responses to risk should not be viewed as misperceptions, just different perceptions. She also stresses that instead of trying to correct what experts in the scientific or medical realm believe are "incorrect perceptions," the goal of risk communication should be to understand concerned stakeholders' attitudes, knowledge levels, perceptions, and beliefs that support the underlying perceptions. By understanding and acknowledging the perceptions held by service members and veterans, healthcare providers can better discuss and address them in the clinical setting. The primary risk perception factors are listed below. For each factor, the version given first is more likely to provoke anxiety and feelings of great risk in the public than the version given second. For example, media attention is more likely to be perceived as a greater risk than is lack of media attention.

Primary Risk Perception Factors:

- involuntary versus voluntary risks; that is, risks wherein one had no choice (such as exposure to airborne hazards while deployed) appear more dangerous than those chosen voluntarily,
- control by the system versus control by the individual,
- exotic versus familiar,
- dreaded versus not dreaded,
- uncertainty versus certainty,
- media attention versus lack of media attention,
- human origin versus naturally occurring,
- benefits unclear versus benefits understood, and
- low trust and credibility versus high trust and credibility.

As Dr Santos discusses, "empowering veterans with information that addresses their concerns and reflects what we know about risk perception and what we do and do not know about possible health risks will set the stage for meaningful communication and empower veterans to better manage their health."[4(p758)] The remainder of this chapter provides further information about what providers can do to address the concerns of service members and veterans about exposures, including those from airborne hazards and burn pits.

EXHIBIT 23-1

EXPOSURE AND RISK COMMUNICATION RESOURCES

Federal Resources

- Risk Communication in the Healthcare Setting, Deployment Health Clinical Center, Department of Defense
  https://www.pdhealth.mil/508/clinicians/risk_comm.asp
- Health Risk Communication Training, US Army Public Health Command
  http://phc.amedd.army.mil/topics/envirohealth/HRC/Pages/HealthRiskCommunicationTraining.aspx
- VA Military Exposures Website
  http://www.publichealth.va.gov/exposures/index.asp
- Centers for Disease Control and Prevention, Risk Communication Website
  http://www.cdc.gov/healthcommunication/Risks/index.html
- Agency for Toxic Substances and Disease Registry (ATSDR), A Primer on Health Risk Communication
  http://www.atsdr.cdc.gov/risk/riskprimer/index.html
- Argonne National Laboratory, Risk Communications Training
  http://www.dis.anl.gov/groups/riskcomm/services/courses.html
- US Food and Drug Administration Risk Communication Resources
  http://www.fda.gov/AboutFDA/ReportsManualsForms/Reports/ucm268041.htm
- Nuclear Regulatory Commission, Effective Risk Communication
  http://www.nrc.gov/reading-rm/doc-collections/nuregs/brochures/br0308/br0308.pdf 2004
  http://www.nrc.gov/reading-rm/doc-collections/nuregs/brochures/br0308/
- World Health Organization, Outbreak Communication Guidelines
  http://www.who.int/infectious-disease-news/IDdocs/whocds200528/whocds200528en.pdf

Academic Resources

- Cornell University Risk Communication Courses
  http://www.risk.comm.cornell.edu/Courses.html
- Johns Hopkins University, Risk Communication Strategies for Public Health Preparedness
  http://www.jhsph.edu/research/centers-and-institutes/johns-hopkins-center-for-public-health-preparedness/training/online/riskcomm.html
- Harvard University School of Public Health, Effective Risk Communication—Theory, Tools, and Practical Skills for Communicating About Risk
  https://ccpe.sph.harvard.edu/programs.cfm?CSID=RCC0000&pg=cluster&CLID=1
- University of North Carolina, Gillings School of Global Public Health, Risk Communication
  http://cphp.sph.unc.edu/training/HEP_RISKC/certificate.php
- George Mason University, Center for Health and Risk Communication
  http://chrc.gmu.edu/
- University of Maryland, Center for Health and Risk Communication
  http://www.healthriskcenter.umd.edu/

Other Resources

- Dr Vincent Covello, Center for Risk Communications Training
  http://centerforriskcommunication.org/
- The Peter M. Sandman Risk Communication website
  http://psandman.com/

WHY RISK COMMUNICATION IS IMPORTANT

In recent years, the fears and concerns of service members and veterans about exposures to environmental, safety, and health hazards have increased along with a corresponding demand for risk information.[4] It is critically important that information disclosed or discussed with service members and veterans is both appropriate and helpful. Planning for how to handle the concerns of service members, veterans, the public, and the media is key to establishing trust and credibility while preventing unnecessary confusion and misunderstanding.

There are several reasons why effective risk communication techniques are important to healthcare providers encountering service members and veterans who have deployment health concerns:

- Good risk communication skills can help to control the message and address misinformation. Providers should focus on developing clear messages supported by facts that address the concerns of targeted stakeholders, as well as the sponsoring entity's goals.
- Given that some surveys have suggested that approximately 33% of service members and veterans have deployment health concerns,[4] good risk communication skills can help to address those concerns in a more timely manner before they become self-fulfilling prophecies or deeply entrenched beliefs.
- Effective risk communication can help create an environment of caring and trust between healthcare providers and their patients as the deployment health concerns are being addressed.
- Risk communication can play an important role in addressing missteps that may have occurred in the past and/or corrective actions currently being undertaken.[4]

Given the high percentage of service members and veterans concerned about potential airborne hazard exposures, utilizing risk communication tools prior to, during, and after deployments will serve to foster a better understanding of the known and unknown effects of potential exposures. Ideally, the US Department of Defense and the US Department of Veterans Affairs should collaborate to develop meaningful information and communication materials that reflect risk communication principles. In the absence of this critical dialogue, service members and veterans may fill the information gaps with incorrect information or may believe information that is inaccurate, thus providing fertile ground for misconception, rumor, and anger.[4] Science and research do not keep up with all of the potential exposures and combinations of exposures that service members and veterans may encounter during their deployments. Consequently, involving these personnel in the risk communication process from beginning to end supports a *partnership* in the process and acknowledges that a process is in place to address their concerns.[6–8]

PRINCIPLES OF EFFECTIVE RISK COMMUNICATION

Effective risk communication is necessary as new threats of deployment hazards surface in deployment and nondeployment settings. As a result of concerns by service members and veterans about the health risks associated with possible deployment-related exposures, primary care providers must learn and exercise effective risk communication methods to better inform these personnel and address their concerns. Employing effective risk communication strategies is not always easy; however, adhering to the following *seven cardinal rules* of effective risk communication[3] should assist healthcare providers:

1. Accept and involve the service member or veteran as a partner. The goal is to produce an informed individual, not to diffuse the concern or replace actions.
2. Plan carefully and evaluate your efforts. Different goals may require different actions.
3. Listen to the concerns of service members and veterans. People often care more about trust, credibility, competence, fairness, and empathy than about statistics and details.
4. Be honest, frank, and open. Trust and credibility are difficult to obtain; once lost, they are almost impossible to regain.
5. Work with other credible sources. Conflicts and disagreements among organizations make communication much more difficult.
6. Meet the needs of the media. They are usually more interested in politics than risk, simplicity than complexity, and danger than safety. These concerns are different from those of the public, so preparing to communicate with the media is different.
7. Speak clearly and with compassion. Never let your efforts prevent acknowledging a concern of service members or veterans or the tragedy of an illness, injury, or death. Service members and veterans can understand risk information, but they may still not agree with the information being conveyed. Realize that some people may not be satisfied.

Each of these rules is important for a variety of reasons.

Rule 1: Accepting and involving service members and veterans as partners demonstrates respect for them by engaging them early, before important decisions are made. Service members and veterans have the right to participate in decisions that affect their lives, their health, and the things they value.

Rule 2: Planning carefully and evaluating one's efforts support flexibility in using different risk communication strategies among service members and veterans. Beginning with clear objectives and evaluating technical information about risks help to direct specific communications to the individual patient who may have political, cultural, or agenda-driven concerns.

Rule 3: Listening to the specific concerns of service members and veterans allows healthcare providers to open a two-way dialogue that facilitates trust and credibility, as well as fosters compassion and competence. Gathering information about the values and beliefs of service members and veterans through interviews, discussion groups, and surveys allows for identification of what really matters to them and supports addressing their concerns. Such information gathering also aids providers in identifying the scientific and medical information that need to be shared with their patients.

Rule 4: Honesty, frankness, and openness must be present to establish trust and credibility with the patient. The patient's expectation that the healthcare provider will be credible based on his or her credentials alone provides a false sense of comfort. Providers should express willingness to answer questions and correct errors that may have been made. Do not minimize or exaggerate the level of risk; always lean toward sharing more information, not less.

Rule 5: Coordination and collaboration with credible sources help to build trust and communicate risk-related information. Conflict and disagreements, as well as inconsistency, among various experts and sources of information may lead to confusion and frustration, and may heighten uncertainty and raise concern (even outrage) among service members and veterans. Interorganizational coordination and communication foster a *team* approach in responding to service members and veterans. Efforts of healthcare providers to partner with other communication sources, both internally and externally, will go a long way toward establishing effective risk communication strategies.

Rule 6: Meeting the needs of the media is often critical in communicating information on risks. Today's media contributes significantly to setting the tone for how service members, veterans, and the general public view health, safety, and environmental risks. On the one hand, science and the media may be at odds, and the media may be more skeptical and more interested in the sensational than in the technical. Yet, on the other hand, experts too often do not present concise or clear messages, thus adding to the distortion that can occur. Working with the media to convey helpful and accurate information as a partner is imperative and will help to minimize potential misinformation. Because the media covers various viewpoints, it needs input from subject matter experts to provide the public with information that is useful, factual, and reliable.

Rule 7: Speaking clearly, with compassion, and minimizing the use of technical language and jargon can help to bridge the gap of understanding between the healthcare provider and the service member or veteran. Foremost, in any discussion of risk and benefits, empathy and caring should carry more weight than numbers, statistics, and technical facts.

HOW TO APPLY RISK COMMUNICATION TO THE CLINICAL ENCOUNTER

In many instances, primary care providers are the first point of contact for service members and veterans who have questions about deployment exposures. For this reason, it is important that primary care providers be familiar with risk communication principles when addressing deployment exposure concerns. Trying to follow risk communication principles during busy primary care encounters is not always easy. Several concrete and actionable items[4,9–13] are listed below to assist busy clinicians with addressing these concerns more effectively:

- Emphasize compassion, empathy, and concern at the outset of the interview.
- Work to establish trust and credibility with the service member and veteran.
- Gain an understanding of the perception of the service members or veterans about the potential health effects that may be related to an exposure.
- Acknowledge what you do not know.
- Recognize that there may be conflicting information about potential health effects regarding a particular exposure.
- Keep the message simple about what is and is not known about potential health effects related to an exposure.
- Realize that service members and veterans may be more concerned about exposures they cannot control versus exposures they can control.

Emphasize Compassion, Empathy, and Concern at the Outset of the Interview

Set aside any preconceptions regarding whether or not deployment-related exposures are a legitimate cause of the health concerns of the service members or veterans, and

emphasize respect and gratitude for the patient's military service. Validating the patient's health concerns will help reassure the patient that the provider understands the patient's perspective. This, in turn, will instill the patient's confidence in the provider and enhance the rapport and trust between the two parties. The primary care provider must also be aware that unspoken factors may be present that may hinder trust-building. For example, service members or veterans may not trust their healthcare providers to diagnose a health problem that may implicate the military. Such a patient may fear being labeled as a troublemaker and possibly losing his or her military benefits as a result. The primary care provider should diffuse any potential for any such clinician–patient contests before they occur. Challenging or debating the validity, legitimacy, or cause of a service member's or veteran's deployment-related health concerns erodes trust, may cause the patient to worsen, and may lead to clinical miscues. It is honest and reasonable to respectfully acknowledge and explain to the patient that some of the symptoms or health effects causing service members or veterans to seek care may not be the result of exposures in the military and/or may ultimately lack clinical explanations. The primary care provider's focus should be on using his or her skills in advocacy, explanation, and compassion to fulfill the provider's duty and obligation to help the service member or veteran.

Work to Establish Trust and Credibility With the Service Member and Veteran

Establish trust and credibility early in the provider–patient relationship by agreeing on an agenda for the initial interview. Encourage the service member or veteran to offer his or her concerns about deployment-related illnesses. Given the potential for mistrust, service members and veterans may not share the connections they have made between their symptoms and their deployment unless the primary care provider asks about them directly and specifically. At the beginning of the interview, the provider should ask the service member or veteran to name his or her top one or two health concerns. If time constraints are present, acknowledge this fact and address it. To save time and facilitate a more productive interview, the patient's top health concerns can either be recorded by the medical assistant conducting the intake interview or collected on an intake form that is reviewed prior to the interview. After the initial greetings and introductions have been made, the healthcare provider could begin the conversation with: *My understanding is that you have some health concerns about nerve agent use at Khamisiyah. During the next 5 to 10 minutes, I would like to discuss with you what we know about this.* Engage the patient in establishing an agreed-upon agenda for the time available, and offer to schedule follow-up phone calls or longer appointments with the patient if he or she has additional questions, or if the complexity of the concerns necessitates further discussion.

Gain an Understanding of the Perception of the Service Members or Veterans About the Potential Health Effects That May Be Related to an Exposure

The provider needs to understand *why* the service member or veteran links the concern to deployment and what sources of information he or she is relying on. A prompt for this conversation could be: *Tell me what you know about what happened at Khamisiyah*. Gaining insight into a service member's or veteran's preexisting views about potential health risks is important, because such information often helps to guide the message. In some cases, the service member or veteran may be more receptive to hearing certain messages once his or her viewpoint has been acknowledged. In other instances, healthcare providers must recognize strongly entrenched beliefs held by service members and veterans. These viewpoints may prove more difficult to change even in the presence of conclusive scientific evidence.

Acknowledge What You Do Not Know

In some instances, primary care providers may not be familiar with the environmental exposure concern that a service member or veteran wishes to discuss, or the provider may need more information to obtain clarity as to exactly what transpired. This is particularly true for exposures that may not occur very frequently or that may have occurred in the remote past. In these cases, it is important to acknowledge that you do not have the information and to reassure the service member or veteran that you will follow up with the patient after you have researched the issue and, if needed, consulted with specialists. For example, suggested language could be: *I am not familiar with this particular exposure, but I will talk to some of my colleagues who may be more knowledgeable about it. I would like to schedule a time to meet with you again in 2 weeks to discuss what I find out*. It is important to schedule the follow-up appointment with the service member or veteran to ensure that a timeline is established for addressing the concern. Additionally, following up within a designated timeframe helps to further establish the provider–patient trust and rapport that are so critical when risk communication principles are being used. Depending on the exposure or particular health issue, the primary care provider may choose to consult with the local environmental health clinician or an occupational and environmental medicine specialist at the War Related Illness and Injury Study Center or the US Army Public Health Command. These personnel may have helpful information about potential deployment-related exposures and health effects.

Recognize That There May Be Conflicting Information About Potential Health Effects Regarding a Particular Exposure

Often, a reasonable uncertainty exists as to whether a given exposure occurred or, if it did, the magnitude of the exposure (dose). In other instances, uncertainty exists as to whether a given exposure or dose can lead to illness, and, if so, what symptoms would potentially indicate such an exposure having taken place. Acknowledge the existence of a *reasonable clinical uncertainty*, that is, an expert consensus may not be present, and the exposure data or information may be limited. For example, suggested language could be: *There is a great deal of information about Agent Orange on the Internet, and some of the reports are conflicting. A number of studies are currently looking at this issue to review the data and try to improve the certainty of the results. At this point in time, based on the research reviewed, we believe that. …* The healthcare provider is best advised to acknowledge uncertainty rather than using exaggerated or demeaning expressions of certainty, or relying on bias or preconception. It is honest and reasonable to acknowledge that some of the symptoms causing service members or veterans to seek care may ultimately lack clinical explanations.

Keep the Message Simple About What Is and Is Not Known About Potential Health Effects Related to an Exposure

Ask the service member or veteran to rephrase what he or she thinks the *take-home message* is as it relates to the exposure concern. For example, suggested language could be: *We have discussed a lot today. What is your understanding of what depleted uranium is and how it may affect you*? Provider–patient collaboration, both in communication and the patient's care, is key to fostering rapport. After learning how the patient prefers to receive health information, try to accommodate that preference. Provide printed handouts and web resources from reputable sources, such as the Centers for Disease Control or the Agency for Toxic Substances and Disease Registry, to reinforce the discussion that took place during the clinical encounter. Providers should strive to provide resources that are tailored for a general audience and are easy to understand.

Realize That Service Members and Veterans May Be More Concerned About Exposures They Cannot Control Versus Exposures They Can Control

Empower service members and veterans with the realization that while some past exposures cannot be changed, steps can be taken to minimize potential future harmful exposures. For example, suggested language could be: *I understand that you are concerned about airborne pollutants that you may have been exposed to while in Iraq. We have discussed what we currently do know and what we are doing to better understand the potential health effects. While we are trying to better understand some of these exposures, your current health is important, so we need to do whatever we can to help you manage your current symptoms. At our next visit, we should also talk about general things you can do to protect/improve your health*.

At the next follow-up visit, the provider should inform the patient about measures that can reduce future exposures and provide advice about personal exposures that may impact the patient's health. For example, suggested language could be: *Let us now talk about ways that we can try to minimize future harmful exposures to airborne pollutants. … I am also concerned about your continued smoking and how this may affect your health. Maybe we can discuss some ways to work on this*. Discussion should take place between the provider and patient to determine how best to work together to promote the patient's overall health, as well as provide the patient with the necessary resources (Exhibit 23-1) and support to develop and maintain a healthy lifestyle.

SUMMARY

Good risk communication techniques do not alleviate all exposure concerns. However, poor risk communication almost always exacerbates the concern. For this reason, following the previously described principles and interacting with service members and veterans in an honest, caring, and compassionate manner may help to provide them with the important health information they need to improve their overall quality of life.[4,10–13]

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