

www.vaccines.mil

The Military Immunization Communication Handbook

This handbook was commissioned by the Military Vaccine (MILVAX) Agency, a component of the Army Surgeon General's Office that supports all five Armed Services in optimizing the use of military immunizations to keep troops healthy. Its purpose is to help military leaders at all levels communicate effectively about what vaccines can and cannot do. This handbook was prepared by WPI (www.wpi.biz).

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Introduction

The anthrax immunization and smallpox vaccination programs remain a commander's force health protection responsibility.

Chief of Naval Operations, 1 Sep 04

Setting the Stage

Why does it continue to be important for the Department of Defense (DoD) to implement military immunization programs? What are the infections that threaten our troops? Can adversaries inflict deadly infections with biological weapons? How would these bioweapons most likely be delivered? Are vaccines the best countermeasure for these threats? How safe and how effective are vaccines? What have we learned from the military's use of vaccines through the centuries? Why should I care about the success of the military's immunization programs? How do I benefit from vaccines? These questions and many more set the stage for communicating about immunizations.

The Challenges

DoD's immunization program is an integral part of DoD's force protection program. One of the biggest challenges for the military immunization program involves maintaining a comprehensive communication effort to provide information to military personnel and their families. Further, this communication program must provide clear information about the specific threats, available vaccines, vaccine safety, medical protocols for administering vaccines, and the policies for managing and administering the program. Other challenges include the disagreements over biowarfare intelligence, reports of rare but serious reactions after immunizations, and the continuing legal challenges against the immunization programs.

This handbook was developed with these and other challenges in mind. The handbook was commissioned by the Military Vaccine (MILVAX) Agency, a component of the Army Surgeon General's Office that supports all five Armed Services in optimizing the use of military immunizations to keep troops healthy. The purpose for "The Military Immunization Communication Handbook" is to help military leaders communicate effectively about what vaccines can and cannot do. The goal is to provide leaders at all levels—warriors, healthcare providers, medics and corpsmen, logisticians, public affairs officials, and others—with the information, tools, and skills they need to ensure that military service members understand the value of immunization and make good choices about vaccines. The information presented here is based on experience, historical perspective, academic and experiential research, clinical input, conclusions from America's top scientists, and best practices in communicating about tough topics.

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Get the Most from This Handbook

The individual chapters in this handbook are designed to stand alone—so feel free to skip around. However, you will get full value by reading the entire handbook—which should take you about an hour or so. Throughout the handbook you'll find information and tools to address

- questions and concerns expressed by troops and their families regarding various aspects of the military immunization program,
- issues related to the military immunization program that have been covered in the media.
- the military's historical experiences with vaccines,
- the origins of service members' concerns, and
- key conclusions based on both vaccine research and practical experience in administering immunization programs.

This handbook emphasizes the communications skills and tools needed to effectively address the issues and questions you are likely to receive from service members. Think of the tools as the tested means to achieving a specific end, such as building and maintaining the necessary credibility to be respected as a trusted source of information. Think of the skills illustrated in this handbook as a little extra coaching to do something particularly well, such as listening to troops and their families or conveying the most appropriate messages in response to challenging questions.



Where practical, the authors have provided relevant and factual examples to use in responses. Note that **this is a guide and not a cookbook**. The most consistently reliable source for information about the military immunization program is the MILVAX Agency Web site: www.vaccines.mil. Several other key sources for nonmilitary information include the Centers for Disease Control and Prevention (CDC), Food and Drug Administration (FDA), the Institute of Medicine (IOM), and others. You would do well to do some reading and research on the topic, so that you can feel comfortable with the factual information you will eventually communicate to your troops. You should become aware of the types of negative messages troops and their families may be receiving about vaccines. Appendix A lists the top resources for the major categories of information your troops may be interested in discussing.

Graphics Key



Chapter summary-re-emphasizes key points to remember.



Success stories—shared by military leaders



Best practice tips—collected from on-the-ground experiences in the military immunization program.

Keep in Mind

Military units work and fight as teams. One service member's health affects his or her teammates. Survival of individual troops and the success of units both depend on troops working together. The military immunizes to protect mutually dependent people, reaching a collective decision based on the best available science.

The military immunization program has achieved several recent successes.

• More than 5 million doses of anthrax vaccine have been administered to more than 1.3 million members of the Department of Defense since May 1998. At the same time, DoD conducted one of the most intense vaccine safety surveillance programs ever conducted, collaborating with other federal agencies and civilian medical experts, with over 30 published articles now in respected medical journals. • More than 850,000 people have been vaccinated against smallpox since the DoD began the program in December 2002. In a similar intense surveillance program, it was DoD physicians and scientists who alerted America to a rare cardiac condition occurring in the second week after smallpox vaccination.¹ Again, DoD collaborated with federal agencies and state health departments to get the job done.

Additionally, the anthrax and smallpox vaccines have been subject to numerous reviews by the nation's leading scientific and public health organizations. DoD's approach has consistently been to use the scientific methods taught in America's best universities to guide its vaccine policies. The consensus of these reviews is that the anthrax and smallpox vaccines are appropriately safe and protect against disease.

The people who manage the military immunization program remain committed to

- the safety and health of all our troops,
- continued monitoring of vaccine safety and effectiveness,
- continued analysis of adverse events after immunization,
- providing high quality medical care to troops who experience adverse side effects after immunization,
- advancing the quality and effectiveness of the military immunization program by incorporating the results of new research and continued process improvement, and
- listening to military leaders as well as Soldiers, sailors, airmen, Marines,
 Coast Guardsmen, and DoD civilians and contractors who are covered by this program.

Finally, the MILVAX Agency encourages your continued feedback about the program. There is nothing more important than keeping you—the members of our military—safe and protected against the potential dangers of your mission, then reuniting you with your families to live out healthy and productive lives.



Vaccines Protect Troops from Infection

Vaccines are one of the greatest achievements of biomedical science and public health. CDC, 1999

History

For more than 228 years, military leaders have recognized the value of vaccines in keeping our forces healthy, protected, and ready for combat operations. In 1777, General of the Army George Washington ordered mandatory inoculations against smallpox for Continental Army recruits. Vaccines played a major role in protecting U.S. forces against crippling and deadly diseases through the major wars of the 19th and 20th centuries, to the current U.S. Global War on Terrorism. In U.S. military history, notable successes in the use of military vaccines include the following examples.

- With the Continental Army facing devastation from the scourge of smallpox, a disease John Adams called "the King of Terrors to America," General Washington ordered inoculation for susceptible troops and all new recruits. This was the first time a fighting force had been immunized by command order. By the time General Washington discontinued smallpox inoculations in 1778, the Continental Army was free of epidemic smallpox.²
- During the Spanish-American War and the later construction of the Panama Canal, Major (Doctor) Walter Reed and other notable researchers demonstrated the link between mosquitoes and the disease yellow fever. Their work led to control of the disease through eradicating the disease-carrying mosquitoes and eventually to a vaccine against the disease.³
- During World War I, U.S. troops were vaccinated against typhoid in a mandatory immunization campaign that led to greatly reduced morbidity and mortality rates of typhoid among military personnel.⁴
- During World War II, the Army Surgeon General received authority from the War Department to administer tetanus toxoid to American troops. A record of each dose of tetanus toxoid administered was stamped on Soldiers' identification tags. Only 12 tetanus cases were reported throughout the war, in all theaters of operations, despite the millions of Americans in uniform and more than 2.7 million hospital admissions for wounds or injuries. All 12 cases were in unimmunized or incompletely immunized troops.⁵

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• From 1966 to 1972, epidemic meningitis caused significant morbidity and mortality among U.S. troops. Drs. Malcolm Artenstein and Emil Gotschlich documented important pathological information about the attributes of meningococcal disease and conducted vaccine trials to protect against the disease. Due to the success of their research efforts, the military began vaccinating all recruits in late 1970, resulting in the virtual elimination of the disease.⁶

The distinguished history of military vaccine research and successful troop immunization campaigns provides a solid foundation for the current military immunization program. The Assistant Secretary of Defense for Health Affairs may have said it best. "Vaccinations are important tools to keep our service members protected and healthy,"

Within this historical backdrop, the current Department of Defense military immunization program continues to operate as part of a comprehensive force health protection strategy to ensure mission success. The military immunization program is guided by three fundamental principles:

• Preserving the health and safety of U.S. forces is the military's top concern.

• Adversaries possess the capability to use deadly biological warfare agents against U.S. military forces.

 Vaccines are an important part of the force health protection strategy, because they add a critical layer of protection against dangerous infections.

Historical Perspective on Vaccine Controversies

For as long as there have been immunization programs, there has also been some measure of opposition. Given our nation's democratic principles and the goals of a free society, opposition is both expected and respected. However, history and experience has demonstrated time and again that vaccines are a critical component of improvements in public health. With the exceptions of basic sanitation and clean drinking water, public health experts agree that vaccines have done more to



improve quality of life and reduce death than any other medical intervention in history.⁸ Not surgery, not antibiotics, not organ transplants—vaccines.

Nonetheless, the discrepancy between those who oppose immunization programs and the consensus opinion of public health experts regarding the necessity, safety, and effectiveness of immunization programs is likely to continue. To prepare for future dialogue about the role of military vaccines, it is useful to take a quick look at some historical controversies.

• Weigh Benefits and Risks—General Washington faced opposition from some who feared the government and the military had overstepped its authority with the mandatory smallpox inoculation program in 1777. Weighing a high rate of side effects, political support, political opposition, and a long

Best Practice Tip



Talking with Troops about the Value of Vaccines in Military History

- Familiarize yourself with two to three historical vignettes.
- Discuss the 200-plus years of continuity in the use of military vaccines in a balanced manner, including both success stories and opposing positions.
- Ask troops their opinion about the relevance of history to their current situation.
- As a leader, explain your thoughts about the relationship of historical examples to your current situation.

winter of encampments where outbreaks of smallpox were likely to have tragic consequences, General Washington ordered inoculations and saved his army.

- Infections Cause Casualties—Though not a U.S. experience, Great Britain faced opposition to the introduction of typhoid vaccine to protect troops deployed to southern Africa during the Boer War (1899–1902). This opposition came in spite of the fact that typhoid fever wreaked havoc on the British Army and proved to be the leading cause of casualties and death for British troops. Of 556,653 men who served in the war, 57,684 contracted typhoid, 8,225 of whom died, while 7,582 were killed in action. Voluntary typhoid immunization among British troops resulted in a twofold reduction in cases of typhoid fever among inoculated troops and a significant reduction in mortality.9
- *Critics May Be Wrong*—President Woodrow Wilson received warnings about implementing smallpox vaccination of troops mobilizing for World War I. Later, smallpox vaccination and intensive disease surveillance programs were used to eradicate smallpox disease from the face of the earth (the World Health Organization declared smallpox eradicated in 1980). One of the greatest achievements in public health history is, in large part, attributed to a vaccination program.

- Documentation Is Important—During the Persian Gulf War (1991), approximately 150,000 service members (about 1 in 5 of the people who served in the operation) received one or two doses of anthrax vaccine to immunize U.S. forces against Iraq's weaponization of anthrax spores. However, documentation of these immunizations was deficient and many Gulf War veterans later questioned the role of anthrax vaccine (among many other exposures) in post-war illnesses. Though several independent, nationally renowned scientific groups found no evidence to link anthrax vaccine with illnesses among Gulf War veterans, some veterans remain skeptical. From this experience, we learned that we need to put more effort into documentation of immunizations in service members' medical records.
- Maintain the Cold Chain—During the Korean War, when it was difficult to maintain constant refrigerated storage conditions (the "cold chain"), the lot (or supply) of smallpox vaccine being used gave inconsistent results. Because of this, a new supply of smallpox vaccine had to be flown in from the United States. In 1998, a large number of doses of anthrax vaccine en route to Germany were thrown out, after a few vials were found to be frozen. This loss prompted DoD leadership to look at the root cause of the problem and implement "Cold Chain Management" procedures ensuring that vaccines maintained prescribed temperatures while in transit. Key lesson: quality immunization delivery includes all phases of vaccine logistics and distribution.

Understanding the context of both historical opposition to vaccines and their effectiveness in protecting troops against disease will help improve dialogue between leaders and troops. Share these historical facts as relevant information that may be useful to your troops as they discuss the issues with their peers and family members.

It is also important to remember that today's Soldiers, sailors, airmen, Marines, and Coast Guardsmen did not witness the devastation and disease caused by pandemics and epidemics in the early to mid-20th century. In many ways, U.S. public health organizations are victims of their own successes. Before vaccinations and epidemiologic surveillance led to the eradication of smallpox, an estimated 300 million people died from this infection in the 20th century alone.

Another prominent public health success story is the vaccination program against influenza. This devastating disease, which killed between 20 and 40 million people in a worldwide pandemic in 1918-1919, is now preventable through vaccination. Other diseases such as poliomyelitis, tetanus, measles, mumps, and chickenpox, which were once commonplace in U.S. society, are now so uncommon (because of the positive effects of immunization) that

many people have never witnessed the effects of these diseases on family members, neighbors, or people they know. Groundbreaking research by noted vaccine scientists such as Jonas Salk, Maurice Hilleman, and others led to the development and production of vaccines to prevent these diseases. The lack of direct public experience with disease makes it more difficult for non-medical experts in our society to understand the potential devastation an infection can cause for individuals, families, communities, or troop units of all sizes.

Summary: History Teaches Us...



- Although opposition to immunization may be vocal, immunization saves lives. George Washington and Woodrow Wilson were right. Thousands of deaths of British soldiers during the Boer War could have been prevented by timely use of immunization.
- •Good science is the key to good vaccine decision making (e.g., Walter Reed, Artenstein & Gotschlich).
- Science keeps advancing and military medicine needs to keep pace with it (e.g., tetanus).
- Documenting immunizations is important, to make sure individuals are protected, to avoid redundant shots, to do good safety surveillance, and to avoid conspiracy theories.
- Don't take logistics for granted (e.g., vaccine distribution).



Effectively Communicating About Military Vaccines

Risk communication is an interactive process used in talking or writing about topics that cause concern about health, safety, security, or the environment.

Nuclear Regulatory Commission, 2004

At its basic level, communication involves a sender, a receiver, a communications channel, and a feedback loop. While issuing military orders is sometimes a one-way communication from leader to those who are led, more complex issues require interactive or two-way communication. In fact, the lack of or perceived lack of interactive communication fueled initial opposition to the anthrax immunization program in 1998. This chapter addresses the essentials of interactive communication about military vaccines.

Immunizations, like any other drug or medical procedure, involve benefits and risks. Given our nation's high level of knowledge about vaccine science, these risks, fortunately, are very small compared to the benefits. Indeed, the FDA requires vaccines to be the safest of all medicines, because vaccines are given to healthy people to keep them healthy.

However, it remains vital for military leaders to understand that communicating about vaccines does involve the discussion of risk. Knowledge of the practice of communicating about risk—that is, risk communication—is equally vital to achieving effective dialogue with troops about the military immunization program. The remainder of this chapter is devoted to helping you understand and apply the most useful features of the practice of risk communication.

Remember, it's not easy and it takes practice. The most effective risk communication practices regarding complex and emotional topics involve using a team approach to cover all the necessary areas of a given program. To effectively communicate about all aspects of military immunization will normally involve commanders, command surgeons and medical staff, noncommissioned officers, public affairs staff, and respected peers.

Why Communicating about Vaccine Benefits Versus Risks May Be Difficult

One of the greatest challenges for the military in communicating about vaccine risks versus benefits is that some troops and family members perceive vaccines as a source of harm. The situation is made even tougher when troops become agitated or concerned about particular aspects of the military immunization program. Here are some additional reasons why communicating about vaccines may be difficult:

- *Vaccine science is complex*—Like a mini-infection, an immunization starts a complicated sequence of events within the body's cells to produce the state of immunity. Now think about how you'd explain this to troops and family members who believe they may be harmed by possible side effects of immunization. You may lack the expertise to answer their more detailed, technical questions. That's why it is important to have medical experts on your risk communication team.
- Mistrust of information source—Some troops lack trust in experts and institutions involved in the various aspects of vaccine policy—this includes the military. It's unfortunate, but true nonetheless. Lack of trust is the biggest obstacle to achieving meaningful dialogue with troops about the military immunization program.
- Lack of scientific understanding—Despite high levels of education in the U.S. military and U.S. society as a whole, relatively few people understand the scientific method or how to interpret scientific results. Couple this situation with the overwhelming abundance of both good and questionable scientific information available at the click of a mouse button and you have the foundation for misunderstanding of good science, as well as spreading misinformation.
- Conflicting science—The perpetual (though mostly necessary) debate about science, methods, and results can be confusing. Nearly every scientific topic covered in the media today involves qualified experts debating pros and cons. Though this drama of "dueling scientists" can be useful, it often leaves the public unsure of whom to believe or which position is "scientifically right."
- *Perceptions and misperceptions*—All perceptions are personal perceptions. People believe and perceive things a certain way because of many factors, including where they were raised, their economic status, their parents' belief system, where they went to school, political leanings, religion, and others. To make sense of information, the human mind creates filters to help digest and categorize incoming data quickly. Understanding how perceptions—and mis-



perceptions—are formed and what role they play will lead to better communication about vaccines and any topic involving risk.

- Organizational track record—Over time, the military has faced several controversies about health risk issues. Just the mere mention of the words "Military Experiments," "Agent Orange," "Gulf War Illnesses," "Veterans' Benefits," and others conjures up images for some of an uncaring military that is perceived to be unresponsive to troops' health concerns. Regardless of your reaction to these statements, it is important to understand that this perception of the military's track record can affect communications with troops and their families about the military immunization program.
- Increasing media influence—There are more news choices today than at any time in history. In a highly competitive environment, media outlets have to be innovative and memorable to win you as a viewer and rise above the clatter of the other news providers. Part of that strategy involves providing reports on scientific findings and other issues that affect viewers' lives, including your troops. Over the past decade, the viewing public has become increasingly reliant on the media to identify, research, and interpret risk information—and there have not been many positive news broadcasts about military vaccines. The volume and frequency of media coverage can have a significant impact on concerns about any of the vaccines.
- *Desire for personal control*—In the US, military immunization programs are largely mandatory. Yet human nature often acts out against imposed requirements. People have a tendency to complain about required shots and, in exceptional cases, refuse the immunization outright.

Conclusions from Contemporary Research

The most significant factors in contemporary research in risk communication include:

• *Empathy*—Empathy is the ability to identify with and understand another person's feelings. Current research and empirical experience demonstrate that the most important factors in determining a spokesperson's credibility when communicating about riskrelated issues is his or her ability and willingness to empathize with and care about those who are concerned about or affected by an issue.11 To quote Will Rogers, "People don't care what you know until they know that vou care."

• Cognitive dissonance—

Cognitive dissonance is a term psychologists use to describe the discomfort people feel when there is a gap between what people already believe and newly presented information. When people are called on to learn something that contradicts what they already think they know—particularly if they are committed to that prior knowledge—they are likely to resist the new learning.12 In other words, people are sometimes uncomfortable with riskrelated information that does not conform to their current knowledge or expectations.

Best Practice Tip



Understanding Risk Perceptions

Several factors impact the way your troops perceive information about risks versus benefits. They include:

- Voluntary things seem less risky than if imposed by others.
 - Voluntarily smoking cigarettes or riding motorcycles versus involuntary exposure to asbestos or lead
- Things with dramatic or dreaded outcomes will seem more risky than mundane things.
 - ▼Rabies infection versus influenza infection
 - Airplane crashes versus automobile crashes
 - Depleted uranium versus lead in paint or water
- Beneficial things seem less risky than those with little perceived benefit.
 - ▼Gasoline versus industrial chemicals
 - Vaccination during a disease epidemic versus vaccination with nobody known to be infected
- Natural seems less risky than man-made things.
 - ▼Solar power versus nuclear power
- Familiar things seem less risky than exotic things.
 - ▼ Auto travel versus air travel
 - ▼Influenza versus AIDS
- Perception is reality for many of your troops.

- Value of third parties—It is critical to find out whom your troops consider credible sources of information. The best way to do this is to ask them whom they trust to provide information about risk-related topics. Sometimes the persons or organizations your stakeholders trust to provide risk-related information are independent third parties. Once you know who these third parties are, it is critical to research their views and align yourself with these same third parties, if possible. Your credibility is significantly enhanced by alignment with third parties.
- **Dominance of negatives**—As the saying goes, "One mistake outweighs a thousand attaboys." People respond more intently to negative information and bad news. If you've ever sneaked a peak at the *National Enquirer* while waiting in line at the grocery counter, paused for a moment when channel surfing to watch human drama unfold on a racy television talk show, or spoken with a coworker in whispered tones about the latest gossip on the job, then you've experienced the human fascination with negative communication. You can expect to receive a significantly more intense reaction to negative information than positive information.
- Outrage vs. hazard on perception—If some of your troops and family members respond emotionally to the military immunization program or react in a way that seems to be out of step with the context of the actual or perceived hazard (in this instance the hazard is side effects following vaccination), it is probably because they feel a high level of outrage. Dr. Peter Sandman, one of the nation's foremost experts on risk perception and outrage, writes "If the hazard is high, you may want high outrage. If the hazard is low, you usually want low outrage—unless you're an activist in need of an issue or a regulator in need of a victory, or a contractor or bureaucrat in need of a budget increase." You must understand the level of stakeholder outrage to help develop a sound risk communication program that addresses the needs of each audience.
- Emphasis on two-way communication—The basics of effective two-way communication must be applied to your risk communication program. Virtually all risk communication research shows the need for interactive communication among program sponsors and key stakeholders. Successful risk communication programs are developed around a solid commitment to meaningful dialogue and positive interaction with stakeholders.
- Building trust and establishing credibility—If your troops trust you and consider you a credible source of information, your discussions of the military immunization program or any subject that involves risk are likely to be very effective. On the other hand, if your troops lack trust in you or do not consider you a credible source of information, your discussions about the

military immunization program may be very difficult. The primary reason for implementing a comprehensive risk communication program is to build trust and establish credibility over the long term.

Trust and credibility aren't built quickly. They are earned over time through continuous interaction with stakeholders. To achieve an understanding of your troops' concerns, you must take the time and make the effort to listen and understand their perspectives. Developing and maintaining an awareness of how you and your organization are evaluated is one of the early steps to success in building trust and credibility with stakeholders. Other specific tips are covered in the section below.

What Effect Does Skill Have on Interpersonal Communication?

Interpersonal communication skills can be learned and improved. While some people may seem to have a natural talent for it, most of us need to practice good listening and talking skills to be effective communicators. Keys to effectiveness include the following:

Key 1—Understand your stakeholders.

These are the people you are talking to, and they include all who perceive themselves to be affected by or concerned about your subject. To be effective communicating with them, you must first identify who they are and learn their concerns and interests, so you can address them.

Success Story

One of the greatest successes in America's preparations to defend against biological weapons has been the smallpox vaccination program DoD implemented in December 2002. The program could have stumbled due to its use of a live-virus vaccine or its mandatory nature. But leaders and healthcare providers were effective in delivering compelling messages, such as "This vaccine prevents smallpox and we will use it carefully." The smallpox vaccination program started off on the right foot. Military leaders applied lessons learned from previous immunization programs. Program briefers at all levels were well prepared ahead of time, so they gave consistently correct scientific information. Leaders also had a lot more interaction with key stakeholders before kicking off the program. There has been little objection to the program, probably because leaders and healthcare workers listened to the troops and devised personalized answers and solutions for them. The program moved forward rapidly with little problem. Lessons learned during DoD's smallpox vaccination program have been shared with civilian public-health officials and adapted for other DoD immunization programs.

- Key 2—Demonstrate you value their perspective. An effective risk communicator understands and values other people's perceptions about risk. It's not good enough to merely say, "I hear what you're saying." You have to go beyond words and truly place a value on what that person is feeling about the situation. Stephen Covey says it best with his habit number 5: "Seek first to understand, then to be understood." 14
- Key 3—Do-and mean-what you say. An effective risk communicator understands that his or her words and actions have an impact on people's perceptions about risk. It's not just what you say that's important-it's also how you say it and what you do when you're not speaking. Your troops watch what you and other leaders "do" and "do not do." If you as a leader are skeptical about military vaccines and apprehensive in the shot line, it will show.
- Key 4—Establish credibility and earn trust. Your troops will make judgments about personal and organizational credibility very early during any interaction. Be aware of this tendency, and take steps to enhance your credibility. If you are trusted and viewed as a credible source of information, most things are possible in the realm of communication. If you are not trusted nor viewed as a credible source of information, communicating about the military immunization program may be extremely difficult for you.
- Key 5—Develop and use messages. Clear communication is based on repetition of powerful and compelling messages. These messages should speak to personal and organizational values, professional dedication, and commitment to collaborative approaches to resolving issues. Military leaders must always ensure messages are factual, prepared in advance, consistent, and comprehensible for your organization.
- Key 6—Practice. Communication is a skill that improves with practice. Good communicators are not born; they are made. Communicators develop through dedication, commitment, and practice. Think of the greatest communicators you know. If you spend time studying their respective roads to the top of their professions, you will undoubtedly find not only successes, but also failures, a commitment to learn from mistakes, and lots of sweat and toil along the way.

Summary

It's not surprising that communicating about military vaccines is challenging, due to varying perceptions of risk versus benefit,

ongoing debates about science and scientific methods, media influence, and other factors. Risk communication research provides insights into what causes varying perceptions and how to talk about subjects that generate emotions like outrage. The most valuable tools you possess as a risk communicator are your trustworthiness and personal credibility. Specific skills can be learned to improve the process of communicating about military vaccines. These include:

- Demonstrating empathy and understanding the perspectives of others,
- Practicing interactive communication (listening, as well as speaking),
- Understanding factors that influence the communications environment,
- Using clear, consistent messages, and
- Understanding and working with credible third parties.

Communication skills are difficult to measure, but critical to success. More importantly, communication skills can be improved upon through practice. Leaders must commit themselves to training, continuing education, and practice to be consistently effective in communicating about military vaccines.



Understanding Stakeholder Concerns

To ensure that the smallpox vaccination program proceeds successfully, the military needs to effectively communicate accurate and timely information about the small-pox vaccine to its troops, health care providers, family members, and other members of the public.

US Army, 2003

A stakeholder is anyone who is affected by or concerned about a program or issue. The obvious stakeholders in the military immunization program are troops receiving immunizations and their family members. Understanding the concerns of troops, family members, and other stakeholders discussed in this chapter will greatly assist you with maintaining an effective dialogue about military vaccines.

Effective communication about vaccines requires more than explaining technical information in plain English. The art and science of communication relies on developing an understanding of who your audience is and what they want to know. A good communicator is able to think about the information needs of their stakeholders and communicate from this perspective. For example:

- A Soldier who is deploying in two weeks wants to know if he can still sleep in the same bed with his wife after being vaccinated for smallpox.
- Young sailors and Marines want instructions on safety issues related to working out in the gym immediately after being vaccinated for smallpox.
- Brigade, wing, ship, or regimental surgeons and family practice physicians on the installation or ship want to be prepared to answer a variety of questions about the vaccines military personnel receive, because they are trusted and accessible sources of information.
- Medics and corpsmen who administer vaccines will want to be confident
 they are equipped with the knowledge and techniques to correctly administer
 vaccines as well as to respond to a wide range of "last-minute" questions by
 troops in the shot line.
- Public Affairs staff will want to know the key program messages and the best sources for technical and medical information in order to respond to questions from reporters.

• Front line leaders will want to know that their troops are protected by immunizations and that they will not be harmed by side effects.

What Do They Care About?

Troops and their families want to know how the immunization process will affect their lives, their jobs, and their families. Why is the vaccine necessary? Is it safe? What are the potential adverse reactions to expect? Your stakeholders may be concerned about health, financial, security, or other issues. Their concerns may be based on known facts, data, or science, what others have told them, or on emotional reactions such as fear. Understanding these concerns and their bases will inform your risk communication strategy.

Whether or not there is a proven scientific basis for concerns about vaccines, effective communicators need to take the time to understand why troops and their families are concerned. It is essential not to be dismissive, even if you believe that there is no basis for concern.

Learn More about Your Stakeholders

Specific ways you may learn more about your troops' issues with military vaccines include the following:

Read the news. Monitor the sources of information your stakeholders tend to rely on for information, including both national and local sources. You need to have a sense of what issues and infor-

mation they are responding to.

Solicit input. Ask your troops and those who are in a position to hear concerns and questions, such as small-unit leaders and medics/corpsmen/med techs, what the current issues are and how people prefer to receive information. Key questions include:

- What are your questions and concerns?
- Where do you go for information?
- Whom do you trust for health-related information?
- How do you prefer to receive information (e.g., verbally, online, handouts)?

Best Practice Tip



Gathering Information

"I often will do a search with Google or Yahoo to see how many hits I get on that topic. And I look for some 'oddball' ones, because I want to get a feel for what people are talking about out there. I'll look for some unusual ones, like homeopathic supplements or substitutes, and bring that information with me when I talk about vaccines, because I know that people are reading about this stuff."



Listen. When you have opportunities to interact with service personnel and their family members, listen to the questions they ask and pay attention to the nonverbal signals they are sending you. Nonverbal signals include tone of voice, eye contact, posture, and movement. Nonverbal communication accounts for approximately 70 to 80 percent of all communications.

Stay current. Information needs and preferences evolve over time and respond to changing circumstances or key events. Concerns can change from "Why do I have to get this vaccine?" to "Why can't my family be vaccinated as well as me?" For example, the influenza vaccine shortage in 2004 prompted more people to desire to get the vaccine. The anthrax attacks of 2001 made the threat seem real. However, the scarcity of clear, unclassified evidence of weapons of mass destruction in Iraq (and fading memories of 2001) may have added to troop confusion about the threat and indirectly led to a perception that the anthrax vaccine is no longer needed.

Identify opinion leaders. Identify leaders who can give you the "pulse" of the community and also become part of your outreach strategy. These may be service men and women, or family members or religious leaders who are well known in their community.

Visit your local immunization clinic. Good, responsive immunization clinics share the following characteristics:

- Hours of operation are suited to customer needs.
- Clinic staff explain benefits and risks of immunization every time.

- Written and other educational materials are readily available.
- Clinic staff are adept at answering questions or helping find answers to questions.
- Each patient is asked about allergies, health status, and previous adverse events before immunization.
- Shots are documented electronically while the troops are still in the clinic (to avoid lost records and redundant shots).
- If a service member has symptoms after immunization, the clinic staff evaluates promptly and thoroughly. For complex cases (rare), the service member gets specialty medical consultations as needed.

Other Key Stakeholders

In addition to personally impacted stakeholders such as troops and their families, there are others who are affected by the military immunization program. It is important to consider who else cares, learn their issues, and reach out to them in an appropriate manner. Consider the following general categories to help you identify other stakeholders you might need to communicate with:

- Stakeholders from organizations with responsibilities or interests intersecting the military immunization program: elected officials, regulatory agencies, and local medical organizations.
- Generally concerned stakeholders include citizens, advocacy groups, and
 other organizations. These people are interested in or concerned about the
 military immunization program, can be reached by electronic and print
 media, and will identify themselves as stakeholders through their actions.
 Advocacy groups are important and should be proactively engaged.

Success Story

One of the biggest changes in DoD's medical program was the introduction of FEDS_HEAL (the Federal Strategic Health Alliance, fedsheal.foh.dhhs.gov). The program was started in response to the need to administer anthrax vaccinations to widely dispersed personnel. Through a partnership among DoD, the Veterans Health Administration and Federal Occupational Health, reservists now have access to nearly 10,000 points of service nationally that allow them to conveniently receive required medical and dental exams, limited dental treatment, and immunizations. Soldiers can be taken care of in or near their home towns. The reserve unit puts in a request, and FEDS_HEAL either sets up individual appointments for Soldiers or sends a team to take care of the exams, shots, and whatever else can be done on site. This has been a tremendous step for DoD, because it frees up medical providers to train on their wartime mission and concentrate on related tasks during drill sessions.

• Media constitute a unique category of stakeholder. While they have their own interests and constraints, the media also serve as vehicles for debate and communication. Consider how reporters will perceive, understand, and interpret what they hear and see. Information provided to the media should be appropriate, understandable, and timely. Specialized training is recommended for anyone who interacts with the media.

Best Practice Tip

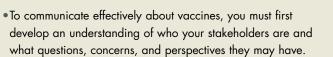


Other Key Stakeholders

Military leaders have identified the following groups as having a high level of interest in military immunization programs:

- medics and corpsmen
- line officers
- child and family health care providers who are trusted sources of information
- contractors and other civilian personnel on site
- union leaders
- members of the local civilian medical community who might treat people with symptoms after vaccination or receive questions from family members
- external groups who see themselves as advocates for troops and family members (e.g., veterans and military service organizations)

Summary





• The best way to get this information is to ask them and to stay informed about what issues are affecting them. Monitor media coverage, advocacy groups, peer-to-peer conversations, and opinion leaders. Visit your local immunization clinic.

Overcoming Communication Challenges

Indeed, a strength (but also, some would have it, a weakness) of the Internet is that almost anyone can put anything online. In doing so, however, they bypass many of the benefits of traditional publication—issuance by an authoritative source, editorial or peer review, evaluation by experts, etc.

D. Scott Brandt, 1996

On any given day an Internet search on military vaccine will bring up results such as:

Web Results 1–5 of about 933,000 for military vaccine. (0.18 seconds)

MilVax

Spokesperson's Training for Military Bio-Defense Vaccines. Register to become the local subject matter expert on the Anthrax Vaccine Immunization Program...www.vaccines.mil/-50k-Jul 10, 2005

The Military Vaccine Resource Directory

The Military Vaccine Resource Directory compiles documented, public information from a wide variety of sources to provide an overview of military vaccines,...www.milvacs.org/-41k

CBS News | Military Vaccine Woes Mount | October 10, 2003 19:07:24 Military Vaccine Woes Mount HARRISBURG, Pa., Oct. 10, 2003... The military denied any possible link to vaccines when NBC War Correspondent David Bloom died...www.cbsnews.com/stories/2003/10/10/eveningnews/main577583.shtml-

CBS News | Military Vaccine Flattens GI, 17 | March 1, 2004 20:38:23 ...This Story Printable Version Printable Version. Military Vaccine Flattens GI, 17 MONTEREY, Tenn., March 1, 2004...Military Mute On Vaccine Danger?...www.cbsnews.com/stories/2004/03/01/eveningnews/main 603284.shtml-

Gulf War Syndrome and **Military Vaccines**: Adverse Reactions...

Military vaccines can be dangerous. Anthrax can maim and kill. Gulf War Syndrome is affecting numerous vets. Adverse vaccine reactions are well-documented. thinktwice.com/military.htm-25k

In a fraction of a second, almost a million sites will be found ranging from the MILVAX Agency Web site to media articles to interest and opposition groups. Although the specific sequence and content of these hits will change frequently, they will almost certainly contain a wide variety of information and opposing viewpoints. This mix of fact, fiction, good science, junk science, and personal stories demonstrates why there are challenges inherent in communicating about the military immunization program. Separating good science from junk science and confirming the authenticity of material posted on the Internet is not something the typical military leader or service member may have time to do. That is why it is vital to use trusted sources of information such as the ones listed in Appendix A. These organizations follow rigorous scientific methods and their research findings are subject to continuous scrutiny, review, and revision by highly qualified peers.

Changing Threat Levels

In the current environment, service members are being vaccinated to counter threats from both bioweapons and Mother Nature (e.g., endemic diseases like yellow fever). Communication about the immunization program needs to reflect the unknowns of the possible bioattacks, as well as the additional fears that they tend to trigger. It is also necessary to discuss vaccine risks versus benefits in the context of changing threat levels. For example, a message may be as simple as "the environment our troops operate in is still dangerous. It remains critical to do everything possible to ensure your protection. This includes continuing the use of immunizations to protect against bioterrorism threats."

Acknowledge changing reality and be flexible. Since 2001, perceptions of the threat from bioterrorism have fluctuated widely in response to reports in the media, events such as the letters containing anthrax spores sent to members of Congress and the press in 2001, and non-events, such as the failure to locate weapons of mass destruction in Iraq. Effective communicators need to pay attention to and be prepared to respond to how these changes influence service members' concerns.

Recognize that certain risks are scarier than others. When a topic is perceived as especially scary, it is feared out of proportion to the actual risk involved. Risks associated with intentional acts and those that are unfamiliar are more unacceptable to people. For example, risks associated with terrorist acts, such as infecting people with a bioweapon, will be viewed as more unacceptable than the same level of risk of being infected from naturally occurring infections. However, this increased level of unacceptability may apply to perceptions about both the mechanism to spread the disease (bioterrorism) and the vaccine to prevent the disease. When a risk is presented as scary or receives

significant news coverage, concerns can go up. Another example is the recent outbreak of Severe Acute Respiratory Syndrome (SARS), which affected a relatively small number of people compared to influenza, but was the object of worldwide concern and media attention.

Stop and Go of Anthrax Vaccine

Policy related to the anthrax vaccine has been subject to numerous changes as a result of court actions. The anthrax immunization program has been halted and restarted several times and has been either mandatory and voluntary at different points. These changes and the rationales behind them have resulted in many communication and coordination challenges. Effective communicators need to be able to give clear and concise answers about *why* policy has changed

Best Practice Tip



When the Questioner is Upset

- Don't take it personally when somebody is agitated, emotional, or shouting a question at you. There is an underlying reason. They are scared or frustrated; they don't know the right decision. And they may not trust what you're saying about military immunizations. In this case, you aren't the target. Instead, you embody "the Government."
- As long as they don't cross the line regarding good order and discipline, try to listen to the question and be calm in your response.

and address questions of safety such as, "If this vaccine is so safe, why have the courts ordered the program to be halted?" A variety of people in the field may be asked questions about policy decisions made in the Pentagon. Health care providers administering shots need to be prepared to address policy questions, as do leaders and public affairs staff.

Rare Adverse Reactions

Severe adverse reactions to vaccines, although rare, do happen. When a severe adverse reaction occurs, it is much more likely to get media coverage than the hundreds of thousands of uneventful immunizations. In addition, a personal story is always going to have more impact than a statistic like "one in a million."

Show compassion. Always remember that your first reaction should be to show that you care about what is happening to the individual service member who is experiencing the adverse reaction. It isn't enough to think compassionate thoughts; you must show it. While it is natural to think of the incident in terms of its impact upon the unit you are responsible for and to consider other causes for the symptoms, you must first demonstrate you care before you can address what to do next.

Be open and honest. The key is to be open and honest about the risks before, during and after. Credibility is enhanced through openness. By preparing service members, their families, military and civilian medical providers, and the media with clear and accurate information about the potential side effects, the impact of isolated incidents will be minimized.

Make sure troops receive good medical care. Not every health problem that happens after immunization is connected to a vaccine in a cause-and-effect way. But the service member who develops the health problem deserves the best medical care we can offer to treat the problem regardless of its cause. Unit leaders and clinicians should ensure that troops get all the care they need. DoD offers a sophisticated medical system with advanced layers of medical specialty care that should be tapped whenever needed.

Help troops understand the difference between medical conditions that occur "after" immunization and medical conditions "caused by" immunization. Vaccine communication is challenging for a variety of reasons, including the dramatic decline of vaccine-preventable diseases. This situation has likely led to greater reluctance (by the public) to accept adverse reactions after vaccination. Another factor is the power of temporal association (relating one condition to something that preceded it) in a person's determination of what caused the condition. The Latin term for this situation is the post hoc, ergo propter hoc fallacy—that what follows immunization was caused by immunization. ¹⁵ Clearly, some adverse events are caused by immunization, while others are not. We rely on good science to methodically and carefully determine true cause-and-effect relationships.

Media Coverage and Public Disputes

The media's impact on how the public understands and evaluates health, safety, and environmental risk cannot be overstated. The majority of information the average citizen or service member gets about what is going on in other parts of the world and in our own communities comes from what they read in the newspapers, hear on the radio, or see on TV or the Internet.

The ongoing public debate about vaccine safety and related topics will continue to have a significant impact on communication about the military immunization program. Service members and their families see articles in magazines, on the Internet, and in other publications that attribute any number of illnesses and medical conditions to the use of vaccines.

One example is the persistent contention that thimerosal, a preservative in some vaccines, causes autism in children. In July 2005, senior scientists from a variety of government agencies, including NIH, FDA, and CDC, held a press conference citing the evidence showing there is no link between vaccines and



autism. Acting out of caution, however, these same groups agreed with FDA's previous decision to discontinue the use of thimerosal in vaccines. The press conference came amidst high-profile criticism of objective studies confirming the safety of vaccines. Although unrelated to bioterrorism or military vaccines, media coverage of debates like this one raise the overall concern about vaccines and affect the level of trust people have in government and military officials.

Stay informed about public debates and opposition group statements covered by the media. This will help you anticipate the types of questions your service members may ask you. Refer to the resources listed in Appendix A for reliable, scientific information regarding these topics.

Talking with Warriors about Health Topics

Success of the military immunization program is tied to ensuring that service members with contraindications to various vaccines are screened out to minimize the incidents and consequences of adverse reactions. The warrior mentality can get in the way of figuring out who shouldn't be immunized.

Some service members will have the perspective "Enough with the forms and the talking. Let me roll up my sleeve, so I can get on with my job of protecting my country," or "None of my buddies seem to have a problem with getting vaccinated, so I don't want to look like a wimp by raising any issues." These attitudes might result in service members rushing through a screening process and receiving immunizations that they shouldn't. It is incumbent on the health care provider and leadership to be prepared to break through the warrior mentality with strong communication and listening skills.

Listen, listen, listen. Listen and be observant of nonverbal communication that might signal that someone isn't paying attention to important information or is giving you clues that you might need to probe for more information.

Be repetitive. Information and questions about contraindications and post-immunization care need to be provided at numerous points in the immunization process to ensure that it is getting through. Repetition also allows opportunities for service members to share key information or ask questions they were uncomfortable asking earlier.

Success Story

A commander at

Fort Bragg was getting his unit
ready for vaccinations. The unit had
a lot of questions. He had his own
people do the research—and they
came back to him and said responsible authorities had concluded several times that the vaccine was safe.
Therefore, he was able to speak
with his Soldiers about the vaccines
being safe based on research by his
own people. This added significant
credibility to his message.

Credibility of the Military

The credibility of the communicator and the information being provided are vital to the success of the program. The bad news is that military sources are sometimes viewed with suspicion even among service members. The good news is that it is possible for individuals to establish personal credibility and rapport with stakeholders. Establishing personal credibility involves taking the time to address issues that are important to your troops. The top four factors for measuring trust and credibility are:

- *Empathy and caring*—The ability to identify with and understand another person's perspective.
- *Competence and expertise*—You have to know what you're doing. Troops don't just expect to receive accurate information from technically competent people; they insist on it.
- Openness and honesty—There is no substitute for telling the truth early in the process, being forthcoming with good news and bad, and taking a transparent approach to information sharing.
- Commitment and dedication—Say and demonstrate that you are committed to troop health and safety; be willing to make the time to continue discussions about vaccines and other risk issues over the long term.

Summary

- Communicating about military vaccines is challenging. Your troops and their families will receive information about the program from a wide variety of sources. Some of these sources will contain factual information and others will not.
- Understanding the types of information your troops and their families are exposed to will help you better prepare to communicate about the military immunization program.
- Stay on top of the issues and be prepared to answer questions and concerns that may come up as a result of what your troops are exposed to.
- As emphasized in previous chapters, your individual credibility will have a significant impact in how the information you provide is received.



Communicating Technical Information About Vaccines

Think like a wise man, but communicate in the language of the people. William Butler Yeats

During a series of telephone surveys and site visits, some common themes emerged on how vital immunization information should be conveyed: "make it simple;" "it should be easy to digest;" "be approachable;" and "talk like a normal person." The goal of simplifying complex and technical information is easy to state in theory, but sometimes difficult to achieve in practice. The following are some basic tips for healthcare providers, military immunization program staff, and public affairs staff to utilize when addressing stakeholders.

Respect This as Their Decision

Even with mandatory programs, your troops ultimately decide whether or not to comply. The military has experienced only a small number of dissenters and refusers, but the numbers have been enough to underscore the above-mentioned point. Discussing the military immunization program can be a potentially controversial and emotional topic for personnel and their families. It is important to acknowledge that it is their decision to receive or not receive an immunization. Despite any medical facts or statistics you may present, troops and family members will ultimately make their decisions based on their own values or sense of risk.

It is as important for you to listen as to inform. Emotion, controversy, and mistrust will not fade in response to science and medical research. Your tone, demeanor and ability to connect with your audience are more important than presenting facts, at least initially. Present pertinent information and facts after you have demonstrated caring and respect for their concerns. Get to the root of why the troop is concerned.

Use Plain English

Using plain English goes beyond the obvious avoidance of intimidating medical jargon and obscure acronyms. Again, tone, tempo, and nonverbal signals are as important as content. A communication best practice is to speak as if you are addressing a family member or friend who is new to the topic—that is, with

respect and using layperson language. Ask if they understand or have questions; don't assume your explanations make sense to someone else.

Sometimes, analogies can be helpful. The following examples were collected as a result of discussions with military immunization experts.

- Each dose of vaccine adds to a body's immunity, like walking up a set of steps. You can linger at a step, but you keep climbing the staircase to immunity as soon as you get the next dose.
- Vaccines are like body armor on the inside, protecting against disease.
- People compare vaccines to shadowboxing or dress rehearsals, to explain how vaccines prepare the body for a later encounter with a dangerous microbe.
- Vaccines give the body time to prepare defenses against harmful invading germs.

Tailor your technical content to meet the needs and desires of the stakeholders. For instance, your approach when talking with a group of healthcare providers who are administering vaccines will be different than when addressing military personnel and their families who may not be familiar with terms such as "systemic side effects" (reactions to vaccines beyond the site of injection) and "cutaneous anthrax" (contracted through the skin).

If you are addressing an audience of various backgrounds with different levels of understanding of medical or military terms, take more time to explain things. Address the people in the room who are

Best Practice Tip



Plain English Description of Vaccines

What is a vaccine?

A vaccine is a kind of medication intended to prevent an infection.

How long have vaccines been around?

The first reliable vaccine was developed by Edward Jenner in 1796, to prevent smallpox. Louis Pasteur developed an anthrax vaccine for animals in 1880 and a rabies vaccine for humans in 1885.

What do safety and efficacy (effectiveness) mean?

FDA defines "safety" as the condition where the benefits of a drug outweigh adverse effects the drug may cause. A safe drug is considered to pose a reasonably low risk of harm, injury, or loss when used appropriately. Because vaccines are typically given to healthy people, without disease, vaccines are held to the highest standards of safety of all medications. That is, vaccines must cause fewer side effects than other medications.

FDA defines "efficacy" as the ability to prevent, treat, diagnose, or otherwise manage a disease or other medical condition. A similar term is effectiveness. An effective vaccine is one that can reduce the risk of infection.

least familiar with the subject matter. Point those who may need more detailed information to additional resources and offer to talk with them individually to answer questions. If you are asked a highly technical question, make sure to rephrase the question in simple terms and provide some context so the rest of the audience is not confused.

Pictures Can Paint 1,000 Words

Photographs can be more effective than words, especially when educating audiences about the risks involved with diseases and infections. During surveys and focus groups, one common concern with communicating about the immunization program was that military personnel may refuse treatment due to a belief that it's not relevant to them ("that wouldn't happen to me") or that the side effects of the immunization outweigh the chances of being infected ("why go through this when it's something I probably don't need"). Showing pictures of the effects of smallpox and anthrax can provide immediate perspective. Hearing that anthrax causes internal bleeding and inflammation of internal organs is much different than seeing those fatal symptoms in detail.

In addition, simple charts, graphs, and graphic illustrations can help you get your message across. This can be especially useful when explaining immunization schedules, such as a multidose immunization schedule.

Some other hints when using other media to deliver information:

- Keep your graphical materials simple, easy to understand, and focused on the main point or message.
- Poorly designed charts overloaded with data and filled with acronyms or jargon do not contribute to an audience's understanding of your message.
- Use pie charts, instead of bar charts or dot charts, for visual appeal and information presentation. Pictures are more acceptable when combined with text.¹⁶
- Don't be afraid to repeat information in various forms of media—key messages may stick with some stakeholders through your spoken words, other people through a photograph, and still others by reading information off a slide.
- Use presentations to communicate key messages and provide context. Keep all presentations brief. Allow approximately two minutes per slide. Use succinct phrasing and no more than seven lines per slide.
- Be prepared to satisfy requests for more technical detail by making handouts available.

The Pros and Cons of Comparisons

One common assumption is that the use of comparisons is the best way to put risk in perspective. This may not always be true.

Comparisons can often appear to trivialize stakeholder concerns and seem manipulative. For instance, some may be offended if invoking the health risks

of a lifestyle choice, such as cigarette smoking, or a risk that is voluntarily assumed, like driving, in the context of an immunization. Relying on comparisons such as these to overcome fears can actually damage your credibility.

Comparisons work best when you're explaining risks to people with whom you've built some level of trust and understanding. For example, if a commander was getting a unit ready for immunizations and used comparisons to convey that a vaccine was safe, this audience would believe the commander's motives are well-intentioned and accept the comparisons in good faith.

Acknowledge Circumstances and Uncertainties

When talking about the history of the military immunization program and the risks associated with vaccines, be candid about the "ups" and "downs" the pro-

Best Practice Tip:



Practical Comparisons

- Fear of vaccines. Influenza kills 36,000 Americans per year, but it's still hard to convince some members of the public to take flu shots due in part to fear of vaccines.
- **Side effects.** Side effects from military immunizations are similar to side effects from other commonly used medications that may be prescribed by your doctor.
- **Exposure.** We are exposed to far more allergens in our natural environment than we are from receiving an immunization.

gram has experienced. Although it is DoD's considered conclusion that these immunizations are necessary and the FDA's repeated findings show that they are safe and effective, there have been legal challenges to the process. Personnel have reported rare but serious side effects. There have also been a few deaths of service members after immunization. Even though the medical evidence was inconclusive, two independent panels of experts concluded that at least one death may have been linked to vaccines. Just one death is enough to cause grave concern among troops, their families, and the public at large.

When addressing these circumstances and uncertainties, it is important to be factual and provide context. For example, with smallpox vaccinations there



have been some cases of myocarditis (heart swelling) after vaccination. There is a true cause-and-effect relationship between smallpox vaccination and myocarditis, especially in young adult men. In contrast, several heart attacks occurred among troops vaccinated for smallpox. But heart attacks occur at the same rate in smallpox-vaccinated and unvaccinated people. This evidence means that there is no cause-and-effect relationship between smallpox vaccination and heart attacks.

Be clear about who should not receive immunizations and why. It's important to note that, although this information should be addressed, it does not need to be the sole focus of your communication efforts. In surveys and focus groups, some personnel believed there was too much emphasis placed on side effects from vaccines rather than on the diseases and infections they prevent. Maintain a responsible balance in presenting information about the potential affects of the vaccine and the diseases they protect troops from.

Use Key Messages

Effective messages are the lifeline of any technical communication program. Although people speak and listen to literally tens of thousands of words per day, they generally forget more than 90% of these words as time passes by. However, the messages that were the most compelling and memorable endure over the long term. That is why our society tends to communicate important matters through messages. The MILVAX Agency develops key messages that

convey the facts related to vaccine safety, vaccine research, and vaccine policy. Learn these messages as part of your process of learning about vaccines.

These Key messages (also called message maps) are a disciplined way of conveying the central points people need to know first, and then adding progressively more detail. We use the word "disciplined" intentionally, because considerable time and effort are often needed to identify the proper key messages. Similar discipline is needed to use key messages consistently.

The use of key messages is a critical tool in communicating with troops about any risk related subject. When responding to questions or engaging in interactive dialogue, use a key message as the conclusion or bottom line. Then back up each key message with three to four supporting facts. Find more about this particular technique in chapter 6.

Key messages about the military immunization program can be found at the following page on the MILVAX Agency Web site:

www.vaccines.mil/default.aspx?cnt=resource/messageMapTeaser. Use these messages as they are written or modify them based on the unique questions and/or concerns you hear from your troops. Regardless of which path you choose on message development, it's always a good idea to test out key messages with colleagues ahead of time. You may think your key message is perfectly clear, but an outside perspective can help identify jargon or confusing or ambiguous statements.

Good key messages have the following characteristics:

- stated clearly in positive language (no jargon)
- delivered in bite sized chunks (a good guide is somewhere around 5 to 35 words per message)
- match the stakeholder's education and interest level (e.g., avoid jargon, provide facts in layperson language, present one fact at a time)
- address specific underlying concerns such as safety, long-term experience, side effects, etc.
- avoid language that suggests the stakeholder has no choice or control
- reinforce through examples, analogies, stories, and repetition

Summary



- Remember what military personnel said about vaccine communication in focus groups and surveys:
 - ▼"make it simple"
 - ▼"it should be easy to digest"
 - ▼"be approachable" and
 - ▼"talk like a normal person."
- Respect this as their decision
 - Ensure your tone, demeanor, and ability to connect with your audience and their decision dominate your communication with them.
 - Medical or scientific facts are secondary to this.
- •Use plain English
 - Avoid jargon and acronyms.
 - ▼Tailor your language to the audience.
- Pictures can paint 1,000 words
 - ▼ Use photographs, simple charts and graphs, tables, and graphic illustrations.
 - Provide simple explanations and context to explain your point.
- Use key messages
 - ▼ Start with the military immunization key messages.
 - ▼Adapt them for your unique situation.
 - Deliver the key messages ("the bottom line") up front, and support them with three to four key facts.



Responding to Difficult Questions

It is very important that DoD be recognized as forthright, honest, and credible. Military Vaccine Agency, May 4, 2005

Answering the Most Difficult Questions

The most important thing to remember when answering any type of question is that all of your answers must always be truthful. In addition, your individual credibility and the way you deliver your responses affects how your message is received, no matter how honest it is. The effectiveness of messages about immunizations, especially during a time when others are challenging aspects of the military's immunization program, depends on how your audience perceives you, as well as what you say. This chapter provides some guidelines and tools for answering difficult questions and supplies specific examples involving military immunization.

Key Points for Communicating with Troops Who Ask Very Difficult Questions

- 1. Allow troops and their family members (if present) to express frustration or vent about issues that trouble them. As long as good order and discipline are maintained, don't interrupt—it can make questioners even more upset and untrusting.
- 2. Sometimes the problem goes deeper than what the person is actually saying. Listen carefully and watch for indications of underlying issues (such as anxiety about deployment or concern about pay).

For example:

- Let me make sure I understand what you mean...
- Please tell me more about...
- 3. You have to show them that you care. As discussed in chapter 2, the ability to express empathy is the most important value in how others perceive you–especially in complex situations involving health or safety risks. Showing empathy is not agreement; it is caring for troops. For example:
 - Many have asked me that question...
 - I see your point...

- Given what's in the news, I see why you're concerned...
- I'm sorry things have been hard for you and your family...
- 4. Tell them the bottom line. As discussed in Chapter 5, use key messages to share information. Use the military immunization core messages on the MILVAX agency Web site as the starting point. For example:
 - The best scientific and medical evidence available conclude that vaccines used in the military's program are safe and effective.
 - Without immunization, you would be more vulnerable to lethal anthrax infection.
 - Smallpox vaccine will prevent infection, and we will use it carefully.
- 5. Provide backup information to support the bottom line. Best practices in communication involve using messages and facts in threes and summarizing the most important messages. A good rule of thumb is to use three facts to support each bottom line conclusion. For example, to support the first bullet in number 4 above, say:
 - The Institute of Medicine's reports on both anthrax and smallpox vaccines support this conclusion.
 - The CDC as well as the FDA support this conclusion.
 - Millions of immunizations have been administered by the military with a very low rate of serious side effects—as good as the rates for vaccines used to immunize school children against disease.
- 6. Tell your troops what measures will continue to be taken to ensure their health, safety, and protection against potential threats. Examples include:
 - The military healthcare system keeps its collective eyes and ears open, watching for unexpected side effects.
 - DoD works with FDA and CDC to conduct ongoing safety surveillance.
 - If you have a health problem, report it to the unit surgeon or medical clinic right away. You deserve all the care you need.
 - Anybody can submit a report to VAERS. We prefer for patients and clinicians to work together on the report, because more detail tends to be submitted that way.



Handling Different Types of Difficult Questions

There are many difficult questions that have been asked about the military immunization program. Applying best communication practices, these questions have been categorized into the following areas.

- Fairness. Troops and their families tend to respond more favorably to risks that are equally shared. However, when they feel they have been treated unfairly or subjected to unequal health risks, their level of concern may be elevated significantly.
- Highly technical. The science behind how vaccines work is complex. Few of your troops will truly understand the technical details. However, they may be very concerned if they are told negative information about vaccines from a source they consider to be technically competent. Remember, the standards for passing along rumors with dubious technical detail fall far short of the standards for making peer-reviewed, scientific conclusions. And once the misinformation occurs, science is not enough to overcome the concerns that result.
- Guarantee. When faced with conflicting information, concerns about health and safety, and the need to comply with a program they may not agree with, troops may ask for guarantees of their safety, future health benefits, or other things of this nature. Guarantee what you can, but avoid the trap of being put into a position of guaranteeing something that you really cannot.

- False premise. Some of the most difficult questions are based on incorrect information or false premises. It is just as important to address the false premise as it is to answer the question. If you ignore or let the false premise stand, you've essentially made it the truth in your troops' eyes.
- **Speculative.** In nearly all instances, speculation about risk-related technical topics is not productive. Resist the urge to speculate and stick to what you know to be true.
- Loaded. The most demanding of all categories is loaded questions. Experience with the current immunization program has shown time and again that when troops are totally frustrated and exasperated about the immunization program, they may load up all the negative things they've heard about the program and snowball it into one question. You cannot answer this type of question with a simple message or a generalized response—take it one step at a time.

Below are examples of real questions posed to military immunization program managers that fit into the categories described above. The answer guidelines mention key areas to address to respond in a productive way that addresses concerns and provides correct information.

Fairness: I've seen a video saying the anthrax immunizations weren't necessary, and the program has been stopped and restarted several times. So, why should I take the vaccine?

- Acknowledge there has been a lot of conflicting information about the anthrax vaccine.
- Respond specifically to the question by explaining why DoD believes the vaccine is important and how the program changes apply to them:
 - With the Global War on Terror and continued intelligence revealing a significant potential of biological weapons attack in certain parts of the world, DoD strongly recommends that troops be vaccinated to protect them in the event of exposure to anthrax or other biological weapons.
 - Several potential adversaries are suspected of researching and developing anthrax as a weapon.
 - Explain the current situation regarding whether an immunization is voluntary or required.
 - DoD vaccines are licensed by the FDA to protect the troops. The FDA determines that benefits outweigh risks associated with these vaccines.
 - Avoid any evaluation of perceptions of what is fair or whether you agree with the service member's concerns. Focus on the facts.

 Emphasize DoD's commitment to the safety and health of all its military personnel. If you are inclined, convey that DoD would not give the vaccine if they didn't believe strongly it would protect troops.

Highly technical: How can you know these vaccines work? I've heard these vaccines aren't effective anyway. There are many doctors and other groups who disagree with the program—so why should I believe the military?

- Speak to the audience at their level of understanding; do not talk down or use disrespectful or dehumanizing terms.
- Complex information takes time to communicate and understand—slow down, repeat key information, and summarize succinctly. Use layperson language.
- Convey facts about the anthrax vaccine:
 - *America's best scientists say the anthrax vaccine works, and it's safe
 - This has been affirmed many times by independent civilian panels, the FDA, the CDC, and the National Academy of Sciences.
 - The U.S. anthrax vaccine has been FDA-licensed to prevent anthrax since 1970.
 - No vaccine is 100 percent effective, but they do reduce risk dramatically.
 - Anthrax is one of the most rigorously studied vaccines in history.
 - The consensus of that research is that the vaccine protects people from anthrax infection and is safe, as safe as other vaccines.
 - ▼See www.anthrax.mil to get detailed facts.
- Convey facts about the smallpox vaccine program.
 - Smallpox vaccine is so effective that it eradicated the natural disease from the planet.
 - ▼In the past, about 1,000 out of every 1,000,000 vaccinated people experienced reactions that were serious, but not life-threatening.
 - ▼ Most of these reactions involved spread of vaccine virus elsewhere in the body.
 - With the first 850,000 military smallpox vaccinations through August 2005, few serious reactions occurred.
 - ▼See www.smallpox.mil to get detailed facts.
- Offer to continue the dialogue after the meeting or provide additional information.
- Remind people that nobody polices the Internet.

Guarantee: Can you guarantee me that I will not have any side effects from the anthrax vaccine?

- Avoid making statements such as, "I cannot guarantee..." or "There are no guarantees in life." They reinforce feelings of lack of control and uncertainty.
- Address the concern by using personal, credible statements. "What I can
 guarantee is that I care about what happens to you. I'm committed to your
 health and safety, and I would not give you this vaccine if I didn't believe it
 was the right thing to do."
- Focus on what is known factually:
 - Acknowledge what the common side effects are and how often they occur.
 - Give the latest available information on side effects for the specific vaccine you are addressing. The optimal situation would involve having a qualified medical person with you to address side effects.
- Explain the reporting process for adverse reactions; encourage troops to report adverse reactions.
- If they need care, they should go to sick call.
- Summarize.

False premise: FDA never licensed the anthrax vaccine until a judge stopped the program and the Pentagon applied pressure to reverse the decision. So why are you still using this vaccine?

- Convey your understanding of the seriousness of their concern.
- Empathize first:
 - *Anyone would be concerned if this information were correct.
 - The FDA's role is to ensure a safe drug and food supply. FDA issues licenses for medications shown to be safe and effective.
- Identify and correct any information that is incorrect.
 - ▼The fact is that anthrax vaccine has been licensed by the FDA since 1970 without interruption.
 - The FDA also concludes that anthrax vaccine is safe, effective, and is being used by the military for its licensed purpose—to prevent infection from anthrax.
- Explain that the service member's loss could endanger other people in the unit who depend on him or her and could endanger their mission. Particular statements regarding unit missions or the ability to accomplish missions are most effective when they come from leaders within the troop's chain of command.
- Summarize.

Speculation: How many people are going to have to be seriously hurt by these vaccines before you stop the program altogether?

- Convey your understanding of the seriousness of their concern.
- Ask questions to identify and address their underlying concerns; in this example, underlying concerns may be about reliability of medical information, effect on family of getting vaccinated, intermixing of facts and rumors, and possible pressure or fears from family members.
- Emphasize the key messages such as "the best medical and public health organizations in this country say these vaccines are safe and effective" and "as with any drug, serious side effects do happen—but they are very rare and often preventable through pre-immunization screening."
- Relay the facts about side effects. Use competent medical authority if present. The vaccine brochures and fact sheets contain most of the information you would need to address this question. Tell them if they want more information, it is posted on the Internet where anybody can see it.

Summarize.

Best Practice Tip



Anticipate Difficult Questions

When preparing to answer questions from troops, families, or others involved in the military immunization program, use the following tips.

- Seek out others who may have recent experience, including physicians, medics, public affairs, and others.
- Review the types of questions reporters have been asking military officials.
- Analyze the content of recent media articles and news shows.
- Explain the situation to your peers.
 Ask them to identify questions they would ask.
- Visit the Q&A section of the MIL-VAX Agency web site, www.vaccines.mil.

Loaded: You ran out of the vaccines a few years ago. The mandatory anthrax vaccination program has started and stopped. I also heard about a link between Gulf War Syndrome and immunizations. And, I heard about a Soldier who died from taking vaccines. Why should I believe it's so important to take these vaccines now? I don't trust this at all.

- Take it one question at a time. Work with the person asking the questions to ensure you address each one.
- Convey your understanding of the seriousness of their concern and the complexity of the situation. Ask questions to identify and address their underlying concerns.

- Concerns about lack of trust in the government or DoD, may be overcome by focusing on your own individual credibility. Troops trust their comrades and their local leaders, even in situations where they may not trust the larger military service as a whole.
- Acknowledge the sequence of the anthrax vaccine slowdown. Explain the reasons behind the vaccine shortage and how and why immunizations resumed in 2002, after FDA approved the plant's renovations.
- Regarding the report of a Soldier's death after immunization, here's a direct
 quote from an Army lessons learned memo: "Unfortunately, the U.S. Army
 lost a valuable Soldier in April 2003, a month after receiving five vaccinations
 during mobilization. Although the evidence was inconclusive, medical
 experts determined that vaccination may have contributed to her death."
- Reemphasize the core messages for the DoD military immunization program—it all boils down to protecting the force, observing the best practices in vaccine pre-screening and administration, and prompt and competent treatment of adverse side effects. Take responsibility for lack of understanding
- Summarize.

Another useful tool in responding to difficult questions is to ask your own clarifying questions to make sure that you understand what is being asked or whether you've answered the question. Some ways to ask for clarification include the following:

- I am not sure I completely understand. Could you tell me a little more about...?
- Before I answer your question, I want to make sure that I understand completely what you are asking. [Restate the question in your own words.]
- Did I answer your question?
- Is this information helpful?

Always take responsibility for a lack of understanding. Implying that the people asking questions are not being clear will make them angry. Assume you have not understood and continue to ask for clarification.

It is OK to Say, "I Don't Know"

Don't be afraid to say, "I don't know," but be prepared to find out the answer and always follow through on promises to get more information to a service member. Admitting you don't know can increase your credibility, if combined with some factual knowledge and clear, efficient follow up with correct information.

The real key to effective communication about difficult issues is to use preparation and planning to avoid too many "I don't knows." The process starts with knowing and understanding your audience and their issues/concerns, and knowing the facts. Be prepared to answer questions that are not in your area of expertise. Compile lists of anticipated questions and responses before interacting with service members. Use the communication tools available online at www.vaccines.mil/ and the print products, such as trifold brochures produced by the MILVAX Agency.

Talk to colleagues who are answering questions from troops and share experiences, information, and any helpful hints. Practice answering difficult questions. The best way to ensure you can respond well is to practice the experience ahead of time of being confronted, challenged, or faced with a service member's strong emotions. Without practice, your own reaction could get in the way of providing correct, helpful information to troops. The more thorough the research and preparation, the less you'll have to say, "I don't know."

Summary

- Follow the general flow of steps for answering difficult questions.
 - Allow the questioner to ventilate or show frustration.
 - Listen intently and watch for clues of underlying issues and concerns.
 - ▼Show them you care.
 - ▼Tell them the bottom line use a key message as a conclusion.
 - ▼Provide supporting facts.
 - Tell them the measures that will be taken to continue to ensure their health and safety.
- Take responsibility for lack of understanding. Implying that the questioner is not being clear will make them angry.
- It's OK to say "I don't know."
 - ▼Prepare beforehand.
 - Be willing to say you don't know and can get the information to the service member in a follow up conversation.
 - ▼Follow up on any commitments you make.
- Summarize key messages and supporting facts
 - Your troops will remember the messages and facts that you emphasize and reinforce (verbally and nonverbally).
 - ▼Repetition assists in cementing understanding.
 - ▼Use examples, analogies, and success stories to reinforce key messages.



Best Practices in Vaccine Communication

The art of communication is the language of leadership. **James Humes**

Be Knowledgeable

It's no coincidence that the best communicators regarding the military immunization program hold key positions in various agencies dealing with military vaccines. They know what they are talking about because they are intimately involved with the program. Knowledge is the basis of effective communication.

You and your team need to be knowledgeable, and your knowledge needs to show. You need to have knowledge of both the medical side and the policy side.

There is a lot to learn about the program—start with this handbook and the military immunization Web site. Know as much as you possibly can and make a commitment to continue your education over the long term. Medical spokespersons should read some of the original studies so they know where the information and guidelines came from. Commanders need to be aware there is a lot of misinformation out there. A good starting point for new leaders is to read the Q&A pages at the www.anthrax.mil and www.smallpox.mil Web sites.

Here's what you need to know:

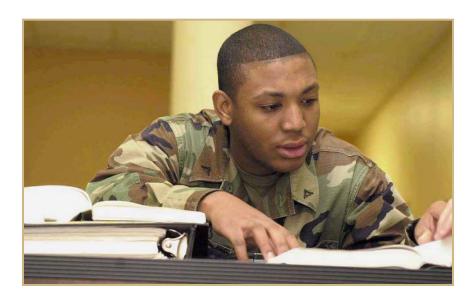
- vaccines and the history of vaccine delivery in the military,
- why we give vaccines,
- where people are coming from so you can understand the underlying meanings in what people may say or do,

Success Story



The anthrax

immunization program began with unit deployments to the Middle East for Operation Desert Thunder. In one Air Force unit, the staff worked tirelessly to gather information, answer questions, and deliver immunizations in accordance with the highest standards of medical care. The unit vaccinated more than 5,000 members against anthrax with no serious side effects or vaccine refusals. They credit their success to education before immunization and a willingness to address all questions and issues in a compassionate manner.



- what's being done to protect people who have a problem with immunizations, and
- lessons learned and where the program is going in the future.

In addition to extensive knowledge of the subject matter, good communicators strive for other important qualities in their communication efforts.

- *Credibility*—You have to be convinced yourself before you can convince others, so ask yourself the hard questions and find the real answers, positive or negative.
- *Consistency*—Say what you need to say and stick to the subject.
- *Simplicity*—Send simple, clear messages that are easily understandable. Work very hard to ensure the message being sent is lean and succinct.

Best Practice Tip



Other Sources

"Confirmation from a non-government source that is credible really seems to reassure people. So if it is a pediatric question, I might look in a pediatric textbook. Similarly with OB-GYN. I frequently look in the infectious disease medical literature. And what I tell people is: 'I didn't just go to the military or government or CDC sources, I also went to medical sources, and I found they said the same thing as the government."

Be Compassionate

Just knowing the science and the policy isn't enough when you reach the point of immunization. Communication is two-way. You can't just spout facts or the latest policy. You have to establish a connection. Ask questions like: "What bothers you about the program? What doesn't make sense to you?" Listen to what they ask and to what they don't know to ask. Let the questions asked guide your response.

Be honest. If you don't know, say so, and promise to get back to the questioner with an answer. If you say you're going to get back to them, do so as soon as possible.

Follow up. Be open, be engaging, be calm, and be approachable. Your nonverbal communication is often as important as the words you say.

Be Good at Delivering Immunizations

When military clinics deliver immunizations, they are engaging in direct patient care. Having a good bedside manner—that is, caring, taking the time to listen, and answering questions knowledgably and in a relaxed manner—are as important as delivering the care. Provide information ahead of time in the form of easy-to-understand materials to read. Acknowledge the patient's concerns and turn over control to them as much as you can. Get the patient to talk by asking:

- Do you have any questions?
- Is there anything about this you are uncomfortable with?
- Is there anything you've heard or read you'd like to ask me questions about?
- Anything else I can do or discuss with you before we do this?

Success Story

"We had a meningitis outbreak at a base and one of the Colonel's daughters died. We got everybody together in the base theater just to talk about it. The public affairs officer and the commander were there, but we decided the physician should speak because he was the medical expert.

We didn't know if he had any risk communication skills, but he was a natural, genuine, soft-spoken person who could connect with every person in that audience. He looked at people; he had eye-to-eye contact; he walked around. The key was his personality and his non-verbal skills (the way he moved his hands and talked from the heart). You knew he could be trusted."

 Review contraindications one last time, ask patients about their medical history. Don't assume this has already been covered.

Earning the confidence of troops and families affected by the immunization program requires:

- Reliable vaccine science.
- Quality in immunizations given, exemptions granted, vaccines used, documents maintained.
- Care, in immunizing and in follow-up, regardless of whether a vaccine caused a problem or not.

Be Ready

The world changes very quickly. Misinformation spreads fast. Junk science travels faster than medical facts. Just witness how fast a rumor or hoax

Best Practice Tip



Connecting with the Front Line

"I train medics and give them the vaccine first. Information gets shared and tested at the lowest levels. Then by the time I get to the battalion level, they are there to vouch for me and the vaccine.

The medic is the last person the soldier sees. Soldiers are more likely to trust their buddies than some officer.

Learn their unit motto, their jargon, and to use it when you talk to them."

spreads across the Internet with e-mail. Every day there are new threats, new diseases, new research, new vaccines, new tests, new studies, new adverse effects, and lots of new questions.

You have to know where people are getting their information. In this new digital world, anyone can put up a Web site or start a "blog," and there are no gatekeepers assuring the accuracy of the claims. People want "zero risk." Our society has become more litigious—always looking for someone to blame. The media is always looking for new angles to keep a story alive. With every new development "instant experts" and "authorities" suddenly appear.

People are hungry for information and facts. They want to know how the military is going to deal with the "what ifs." Timeframes have compressed, and with it peoples' comfort levels with how long it takes to get information. You have to move faster. Especially after an incident or an adverse event, speed and credibility are key—you have to provide people the best information as quickly as possible.

Sailors read publications like the *Navy Times* (and its counterparts for the other services). Each base has hometown news publications and network radio. We need to get information out there that is truthful and factual; that's our role and biggest challenge.

Build relationships with other communicators, with the medical staff, with private sector medical facilities, with the media, even with groups that are working in opposition to the immunization program. Keep a file on the latest concerns people have about military immunizations.

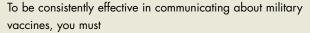
Best Practice Tip



Discover the Source

The thing that is always hardest is the question that comes out of "left field." People will ask the strangest things about how it relates to their particular situation. And having a "canned approach" for dealing with such questions was what set me back on my heels most often. I try to keep up with what's out there and what people are talking about, and sometimes I can identify the source for their concern.

Summary





- **Be knowledgeable**—the best and most effective spokespersons for the military immunization program work hard to keep up with the issues and facts. It takes a team approach to cover all the bases.
- Be compassionate—communication is two-way. You can't just spout facts or the latest policy. You have to establish a connection. Be honest, open, and approachable. Follow up.
- Be good at delivering immunizations—when delivering immunizations, you are engaging in direct patient care. Good bedside manner is as important as delivering the care. Excellence in immunization requires:
 - ▼ reliable science,
 - quality in shots given, exemptions granted, vaccines used, documents maintained,
 - vcare, in vaccinating and in follow-up, and
 - confidence of troops and their families.
- Be ready—the world changes very quickly. Misinformation spreads fast. Junk science travels faster than medical facts. You have to know where people are getting their information. You gain credibility by building relationships with other communicators, with the medical staff, with private sector medical facilities, with the media (if appropriate), even with groups that are working in opposition to the immunization program.

Conclusion

This handbook was designed to help you explain how vaccines keep people healthy. It's all about taking care of troops and their families. DoD senior leadership strongly believes that vaccines are and will continue to be part of a comprehensive force protection strategy.

Communication about risk versus benefits is a key part of this strategy.

As the military immunization program continues, command involvement is key to successful communication. But leaders can't do it alone. Designate somebody to be your point of contact (POC) for the military immunization program and invest in his or her training. One of the best ways to bring a military immunization POC fully up to speed is to send this person to the "Immunization Leaders Course"—a comprehensive multi-day course that addresses all facets of military vaccines. You may also choose to develop a joint presentation with your unit surgeon, work with your local public affairs officer on strategies for addressing media coverage of the program, and/or talk to others who've taken on tough communications issues.

There are plenty of resources out there to help you. When you need help or advice, call the MILVAX Agency at 1-877-GET-VACC or email at *vaccines@otsg.amedd.army.mil.* You also have a MILVAX regional liaison who can help. You can find your regional representative at the MILVAX Web site (www.vaccines.mil/POC/POCfinal.html).

Resources for Military Vaccine Information

Principal Sources for Military Vaccine Information

The most comprehensive source on military vaccines is the MILVAX Agency Web site, www.vaccines.mil. From scientific and technical information, policies and procedures, to vaccine training information, this site should be your first resource. Another significant source of information is the Vaccine Healthcare Centers Network located at www.vhcinfo.org.

Nonmilitary, Third-Party Sites

The most respected third-party information is provided by the Centers for Disease Control and Prevention (CDC, www.cdc.gov), the Food and Drug Administration (FDA, www.fda.gov), the National Institutes of Health (NIH, www.nih.gov), the Institute of Medicine (IOM, www.iom.edu), and the World Health Organization (WHO, www.who.int). These trusted sources are available to provide a significant amount of information about vaccines.

The Science Behind Vaccines

Vaccines are developed after years of research and testing. A basic understanding of how vaccines work and why they work is important to know when communicating about immunizations. The following links and articles provide a brief synopsis of the science behind the vaccines and information about specific vaccines.

The National Institute of Allergy and Infectious Diseases (NIAID) offers a booklet entitled *Understanding Vaccines: What They Are, How They Work.* The book covers what vaccines are, how vaccines prevent disease, and how the vaccines are developed. To obtain a free copy, go to: www.niaid.nih.gov/publications/vaccine/pdf/undvacc.pdf.

The Centers for Disease and Control and Prevention offers information about vaccine development, testing and the approval process on their Web site at: www.cdc.gov/nip/vaccine/develop-approval.htm.

The National Network for Immunization Information provides articles about the science behind specific immunizations. Go to: www.immunizationinfo.org/immunization_science.cfm.

The World Health Organization has provided several documents to explain the safety of vaccines located at:

www.who.int/immunization_safety/safety_quality/en/.

For specific information about the smallpox vaccine, visit: www.smallpox.mil/

Also see IOM's report *The Smallpox Vaccination Program: Public Health in an Age of Terrorism*, www.iom.edu/project.asp?id=4781, www.iom.edu/report.asp?id=25467

For specific information about the anthrax vaccine, visit: www.anthrax.mil/

Also see IOM's report *Anthrax Vaccine: Is it Safe? Does it Work?*, www.nap.edu/catalog/10310.html.

Summary for General Public: www.iom.edu/Object.File/Master/4/149/0.pdf Summary for Policy Makers: www.iom.edu/Object.File/Master/4/150/0.pdf

History of Vaccines

A brief look at the history of vaccines may be helpful in explaining why vaccines are important and how vaccines can prevent disease.

This link provides a brief history of vaccines: www.vaccines.mil/default.aspx?cnt=disease/diseaseTeaser

The following site provides information on how vaccines began and how vaccines were created:

www.accessexcellence.org/AE/AEC/CC/vaccines_how_why.html (Bonnie A. Maybury Okonek and Pamela M. Peters, *Vaccines—How and Why?*).

For information about the military's history with vaccines, the following link to a nine-page document highlights the relationship between vaccines and the military: www.afids.org/AFIDS%20Milit%20Med%20Suppl%202-Vaccines.pdf (Andrew W. Artenstein, History of U.S. military contributions to the study of vaccines against infectious disease, *Military Medicine*, April Supplement, 2005).

Military Immunization Policies and Procedures

The MILVAX Agency Web site provides a comprehensive look at all the vaccine policies for each of the Armed Services. This information is located at: www.vaccines.mil/default.aspx?cnt=resource/policiesTeaser.

Clinical Information and Managing Adverse Events

This chart depicts common side effects after immunization: www.vaccines.mil/documents/298179side_effect.pdf

The brochure at the link below was provided by the Vaccine Healthcare Center and discusses caring for adverse events after immunization: www.vaccines.mil/documents/642aefitrifoldpress2.pdf

The following site provides clinical information for managing adverse events after immunization: www.vaccines.mil/documents/564acg040909.pdf

The Vaccine Healthcare Center (VHC) Network Web site provides information about managing adverse events: www.vhcinfo.org/providers_management.htm

The PDHealth.mil Web site, created by the DoD's Deployment Health Clinical Center (DHCC), contains information about post-deployment health care: www.pdhealth.mil

Alternative Viewpoints

It is helpful to know what influential (but not necessarily scientific or factual) voices are saying about vaccines. A few of those links are provided here as well.

The National Vaccine Information Center (www.909shot.com/)

The Institute for Health Freedom (www.forhealthfreedom.org/)

The Military Vaccine Resource Directory (www.milvacs.org/index.cfm)

The Anthrax Vaccine Network (www.ngwrc.org/anthrax/default.asp)

Contact the Military Vaccine (MILVAX) Agency

Contact information to get in touch with military immunization staff: www.vaccines.mil/default.aspx?cnt=contactUs

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