

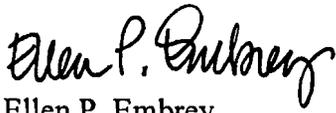
Certification of Minutes¹

The Defense Health Board convened a meeting on 5-6 December, 2006, hosted by the United States Naval Medical Center, Portsmouth, Virginia.

I hereby certify that, to the best of my knowledge, the foregoing meeting records are accurate and complete. The meeting records include:

- The time, date, and place of the committee meeting.
- A list of the persons who were present at the meeting, including committee members and staff, agency employees, and members of the public who presented oral or written statements.
- An accurate description of each matter discussed and the resolution, if any, made by the committee regarding such matter.
- Copies of each report or other document received, issued, or approved by the committee.

Designated Federal Official:



Ellen P. Embrey
Deputy Assistant Secretary of Defense
(Force Health Protection and Readiness)

1/10/07
Date

¹ Minutes of advisory committee and subcommittee meetings must be finalized within 90 calendar days of the meeting(s) covered.

UNITED STATES DEPARTMENT OF DEFENSE

DEFENSE HEALTH BOARD MEETING

Norfolk, Virginia

Tuesday, December 5, 2006

ANDERSON COURT REPORTING
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Alexandria, VA 22314
Phone (703) 519-7180 Fax (703) 519-7190

1 P R O C E E D I N G S

2 DR. POLAND: This is Dr. Greg Poland.
3 Welcome everybody to the inaugural meeting of the
4 Defense Health Board. This is an historic
5 occasion when you think of it.

6 We have come from the background and
7 stand on the shoulders of the men and women who
8 have served on the Armed Forces Epidemiological
9 Board through a long and illustrious history.

10 And my personal intent as I try to help
11 the Board transition during this next year from
12 the AFEB to a larger committee, the Defense Health
13 Board, is to make that a smooth transition and to
14 try during this year to work out all the
15 operational details and the details that are
16 important to make this a smooth-running committee.

17 We're going to, later we're going to
18 show a slide that helps people to understand what
19 the composition of the Board is and how we're
20 related to various task forces and scientific
21 advisory boards, et cetera.

22 But rather than go through that now,

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1 we've got some slides that will make it easier.

2 My personal intent is to take what we've
3 learned on the AFEB and apply that towards the
4 Defense Health Board.

5 We are, and, again, the intent is that
6 we are an independent board, we're an
7 authoritative board, but we're also an accountable
8 board, and I think the line that I would like to
9 see us walk is that we're not perceived as a thorn
10 in anybody's side but rather a light, a light on
11 the pathway as to what direction we go and what
12 kind of information we need.

13 Sometimes people like light, sometimes
14 they don't, but that's what we'll aim to do is to,
15 is to provide light.

16 So with that as an introduction and
17 thank you to all of you who have served on the
18 AFEB and who come today certainly during this
19 holiday season, which is a busy time, thank you
20 for helping make the AFEB what it was, and I ask
21 your indulgence in the same level, if not greater,
22 given our expanded scope, level of energy and

1 input into the Defense Health Board.

2 So with that, Miss Embrey, may I ask you
3 to call the meeting to order.

4 MS. EMBREY: Yes, this is Mrs. Embrey.
5 Thank you, Dr. Poland. Now I will read the
6 official greeting and the call to order. As the
7 designated federal official for the Defense Health
8 Board, a federal advisory committee to the
9 Secretary of Defense which serves as a continuing
10 scientific advisory body to the Assistant
11 Secretary of Defense for Health Affairs and the
12 Surgeons General of the military departments, I
13 hereby call this first meeting of the Defense
14 Health Board to order.

15 I'd also like to thank Rear Admiral
16 Thomas Cullison who welcomed you earlier today for
17 his willingness to host this meeting and the
18 outstanding support that he and his staff have
19 provided to the Board in preparation for today's
20 and tomorrow's meeting.

21 Dr. Poland?

22 DR. POLAND: Thank you, Miss Embrey.

1 One of the traditions of the AFEB that I
2 introduced and would like to continue through the
3 Defense Health Board is a moment of honor and
4 reflection.

5 There are hundreds of thousands of
6 servicemen and women who are away from home,
7 probably scared, anxious, but unwavering in their
8 commitment to what they are doing as well as their
9 family members and friends.

10 So if we could, I'd like to stand for a
11 minute to recognize that.

12 (A moment of silence.)

13 DR. POLAND: Thank you all. What I'd
14 like to do is to go around the room and introduce
15 ourselves. For those -- I'm not sure how we're
16 going to handle -- okay. We do have a microphone
17 on the outside ring there.

18 And maybe if I could start with Miss
19 Embrey and we'll work our way all the way around
20 the Board and then stop with Karen.

21 MS. EMBREY: I'm Ellen Embrey. I'm the
22 Deputy Assistant Secretary of Defense for Force

1 Health Protection and Readiness. I'm also the
2 designated federal official for this Board.

3 DR. BLAZER: I'm Dan Blazer. I'm a
4 psychiatrist and also an epidemiologist. I'm on
5 the faculty at Duke University Medical Center.

6 DR. HALPERIN: Bill Halperin, chair,
7 Department of Preventive Medicine, New Jersey
8 Medical School, and chair, Department of
9 Quantitative Methods, School of Public Health of
10 the University of Medicine and Dentistry of New
11 Jersey.

12 DR. SILVA: Joe Silva, dean emeritus,
13 University of California, Davis, and professor of
14 internal medicine.

15 DR. McNEILL: I'm Mills McNeill from the
16 Mississippi Department of Health.

17 DR. SHAMOO: I'm Adil Shamoo, University
18 of Maryland, School of Medicine. I'm former
19 chairman of biochemistry.

20 DR. MILLER: Mark Miller. I'm the
21 associate director for research for the Fogarty
22 International Center of the National Institutes of

1 Health.

2 DR. PRONK: I'm Nikko Pronk,
3 vice-president and executive director,
4 HealthPartners, Health Behavior Group.

5 COLONEL STANEK: Colonel Scott Stanek.
6 I'm the preventive medicine staff officer, Office
7 of the Surgeon General.

8 COMMANDER FEEKS: I'm Commander Ed Feeks
9 relieving Commander Dave McMillan as preventive
10 medicine officer Headquarters Marine Corps.

11 LIEUTENANT COMMANDER SCHWARTZ: I'm
12 Lieutenant Commander Erica Schwartz, Coast Guard
13 Headquarters preventive medicine officer.

14 LIEUTENANT COLONEL HACHEY: Wayne
15 Hachey, director of preventive medicine, Office
16 for Force Health Protection and Readiness.

17 COMMANDER CARPENTER: David Carpenter,
18 medical attache, Canadian Embassy.

19 LIEUTENANT COLONEL MULLINS: Lieutenant
20 Colonel Andy Mullins. I'm deputy chief of public
21 health at the Air Force Medical Operations Agency.
22 I'm filling in for Colonel Michael Snedecor, the

1 normal member of this Board who cannot be here
2 today.

3 DR. OXMAN: Mike Oxman, professor of
4 medicine and pathology at the University of
5 California, San Diego.

6 DR. GARDNER: Pierce Gardner, professor
7 of medicine and public health at the State
8 University of New York at Stony Brook.

9 DR. LAUDER: Tamara Lauder, physical
10 medicine rehabilitation, Wanatka, Wisconsin.

11 DR. CATTANI: Jacqueline Cattani,
12 professor of global health and director of the
13 Center for Biological Defense at the University of
14 South Florida in Tampa.

15 DR. KAPLAN: Ed Kaplan, professor of
16 pediatrics, University of Minnesota Medical
17 School, Minneapolis.

18 DR. LUEPKER: I'm Russell Luepker, and
19 I'm a professor of epidemiology medicine at the
20 University of Minnesota.

21 DR. BROWN: I'm Mark Brown. I'm
22 representing the Department of Veterans Affairs.

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1 COLONEL BADER: Colonel Christine Bader,
2 special assistant to the NoradNorthcom main
3 surgeon, and I will be moving shortly to OSD to
4 work with the task force for the future of
5 military health care.

6 DR. LEDNAR: Wayne Lednar, medical
7 director, Eastman Kodak.

8 DR. PARKINSON: Mike Parkinson, I'm
9 chief health and medical officer at Lumenos which
10 is a part of WellPoint.

11 COLONEL GIBSON: Roger Gibson. I'm the
12 executive secretary for the Defense Health Board.

13 DR. POLAND: I'm Greg Poland, professor
14 of medicine and infectious diseases at the Mayo
15 Clinic in Rochester, Minnesota.

16 MS. TRIPLETT: Karen Triplett, Carolyn
17 Reyes, CCSI, contract support.

18 LIEUTENANT COMMANDER BROOKS: Lieutenant
19 Commander John Brooks, preventive medicine
20 resident working in Headquarters Marine Corps.

21 CAPTAIN SCHOR: Captain Ken Schor with
22 the Uniformed Services University.

1 MAJOR SMITH: I'm Randy Smith, Joint
2 Staff J4. I'm the Joint Staff preventive medicine
3 staff officer.

4 CAPTAIN LaMAR: Captain Jim LaMar. I'm
5 the director of population health at Navy
6 Environmental Health Center.

7 MR. MITCHELL: Ben Mitchell, Navy
8 Environmental Health Center, division of
9 preventive medicine.

10 COMMANDER BATSEL: Commander Tanis
11 Batsel, chief of preventive medicine, US Northern
12 Command.

13 LIEUTENANT COLONEL VEST: Lieutenant
14 Colonel Kelly Vest, deputy DoD-GEIS.

15 COLONEL ERICKSON: Colonel Loren
16 Erickson. I'm the director of Global Emerging
17 Infections Surveillance (GEIS) and Response System.

18 COLONEL JAFFIN: Jonathan Jaffin, deputy
19 commander, U.S. Army Medical Research and Materiel
20 Command.

21 OFFICER CHOW: Danny Chow, preventive
22 medicine officer here at the Medicine Unit here at

1 Norfolk.

2 CAPTAIN NAITO: Captain Neil Naito,
3 director of public health, Navy Bureau of Medicine
4 and Surgery.

5 MAJOR HOLLAND: Major Francis Holland,
6 Air Force, Population Health Support Division.

7 MR. CASTERLINE: I'm Dan Casterline,
8 national account director at Merck Vaccine
9 Division.

10 MR. GROSS: Jonathan Gross, Navy
11 Environmental Health Center.

12 MR. RABOLD: Ridge Rabold, Armed Forces
13 Institute of Pathology.

14 COLONEL ANDERSON: I'm Colonel Randall
15 Anderson, the director of the Military Vaccine
16 Agency.

17 MS. STAMPS: I'm Kathryn Stamps,
18 epidemiology, Navy Environmental Health Center.

19 MS. GOODIN: Kate Goodin, Navy
20 Environmental Health Center.

21 MS. OTERO: Karen Otero, Navy
22 Environmental Health Center.

1 MS. NADAL: I'm Teri Nadal with the Navy
2 Environmental Health Center.

3 COLONEL BUNNING: Mike Bunning,
4 representing Wilbert Hall, Lackland Air Force
5 Base, commander for basic trainees.

6 MR. CROOPER: Lee Cropper, representing
7 Air Force Institute of Operational Health.

8 MR. DICKEY: I'm Brad Dickey with the
9 Center for Naval Analysis.

10 COMMANDER RUSSELL: And Kevin Russell,
11 head of the respiratory disease laboratory in San
12 Diego, Naval Health Research Center.

13 DR. POLAND: Carolyn, do you want --

14 MS. REYES: Carolyn Reyes with CCSI.

15 DR. POLAND: Thank you. Just a reminder
16 to the Board, this is an open meeting. Press and
17 media may be present. Our deliberations will
18 occur in an open meeting. Administrative
19 deliberations will occur later in a closed
20 executive session.

21 So Colonel Gibson has some
22 administrative remarks and then we'll begin the

1 afternoon session.

2 COLONEL GIBSON: I want to thank Admiral
3 Cullison and his staff for supporting us in this
4 meeting as well as the folks here at Little Creek.
5 They've done a wonderful job and they have a
6 beautiful venue for us. It's turned out quite
7 well. And I hope you all had a -- enjoyed the
8 tour this morning.

9 Please sign the attendance roster
10 outside the room if you haven't done so at this
11 time.

12 Those of you who are not seated at the
13 tables, there are handouts that will be provided
14 in the back of the room.

15 You know where the bathrooms are. They
16 are right outside, right outside the room here.

17 See Carolyn or Karen regarding
18 telephone, fax or e-mail messages, et cetera.

19 We'll have refreshments for this, for
20 this meeting right in back here. Please feel free
21 to use -- please feel free to partake of the food
22 there as you wish.

1 And I'll repeat what Dr. Poland said.
2 This is an open meeting. It's open as required by
3 Federal Advisory Committee statutes and the
4 session is being transcribed. So please speak
5 freely -- or speak clearly.

6 We'll have a Navy SEAL demonstration
7 tomorrow. Not only will they give us a briefing,
8 but we're actually going to go over and watch them
9 do a few things.

10 Everybody is welcome to attend, but I'd
11 like to get a show of hands of the folks who are
12 going to be here tomorrow to do that.

13 DR. POLAND: 4:30 in the morning. I'm
14 kidding.

15 COLONEL GIBSON: Can you get a count
16 here? Dinner tonight is at the Ship's Cabin, and
17 we'll meet in the hotel lobby at seven o'clock to
18 carpool to the restaurant.

19 Dinner is open to all attendees, and I
20 know Karen checked with everybody on the, on the
21 bus regarding how many people were going to come.

22 I want to -- anybody who wasn't with us

1 this morning, please let Karen know if you're
2 coming. That way we have appropriate meals, et
3 cetera.

4 Let's see. Next meeting is going to be
5 March 20 and 21 at Fort Detrick, Maryland. This
6 is our biowarfare counterterrorism meeting. It is
7 going to be hosted by the Armed Forces Institute
8 of -- or Military Intelligence Center and
9 USAMRIID. Hope you all can attend.

10 DR. POLAND: Okay.

11 COLONEL GIBSON: One more thing.
12 General Kiley will be giving a briefing this
13 afternoon on the mental health task force. He's
14 the co-chair. When he comes in the room, please
15 show him the respect we do for flag officers.

16 Thank you.

17 DR. POLAND: Our first presentation and
18 discussion will be on Group A streptococcal
19 infection among military service members.

20 I think as many members are aware, the
21 AFEB has a long history of really premier research
22 and prevention initiatives related to

1 streptococcal disease. In fact, what we know to
2 do on the civilian side came from one of the early
3 commissions that dealt specifically with this
4 problem.

5 The DHB is carrying forward the AFEB's
6 interest in Group A streptococcal infection.

7 Commander Kevin Russell from the Naval
8 Health Research Center, San Diego is currently the
9 lead on the adenovirus vaccine trial at Great
10 Lakes and will brief us on Group A beta strep
11 control in military cohorts along with
12 antimicrobial resistance.

13 While Kevin is coming up, I might say
14 I've had a professional collaboration with him and
15 Commander Ryan at NHRC.

16 The word you would use at Mayo for
17 somebody like Kevin is he's a finisher.

18 The jobs that he has and the quality
19 that he brings to it end up in a finished product
20 that are always high quality and his presentations
21 to the Board have been of great usefulness.

22 So, Kevin, turn it over to you.

1 COMMANDER RUSSELL: Thank you very much.
2 I appreciate that, Dr. Poland.

3 Miss Embrey, distinguished guests, it's
4 a pleasure to be here and it's always a pleasure
5 to present to formerly the Armed Forces
6 Epidemiology Board and now the Defense Health
7 Board.

8 I have a lot to present and some slides
9 that were challenging to put together with the
10 quantity of data that we have.

11 That being said, I certainly don't have
12 all the data here and I don't have all the
13 answers.

14 I'm proud that many of my colleagues in
15 the room, friends in the room, have a part of the
16 picture as well, so I think we can all come
17 together and address many of the issues that the
18 Defense Health Board might have. And, of course,
19 you know that Dr. Kaplan on your board is a
20 world-renowned Group A streptococcologist, and
21 it's an honor to have worked with him over the
22 years.

1 What I'm going to share with you today
2 is a little bit about the history of Group A
3 strep. I think this is so important for members
4 of the Board to have a little bit of understanding
5 of, and this was a bit of a challenge for me,
6 should I go into this at all.

7 I think I should, because I really think
8 the truth is there's no pathogen that is more
9 studied in the US military than Group A
10 streptococcus. And so an understanding of the
11 history I think will help give us a little bit of
12 light to where we might go in the future and where
13 we should go; some of the relevant instructions,
14 what the status of those instructions are, what
15 they say, current chemoprophylaxis regimens is a
16 big issue, who's doing what and who dictates what
17 they are doing, some of the service-specific
18 implemented surveillance initiatives and then what
19 we are doing at the Naval Health Research Center
20 for Group A streptococcus, some recent outbreaks,
21 I'll elucidate a little bit about that and a few
22 fatalities that have recently occurred and then

1 bring together some of the conclusions of our
2 laboratory-based surveillance.

3 Again, there's a lot of information
4 here. I'm going to go through it quickly. I
5 wanted it in front of the Board members for their
6 reference, if need be, and I've actually put the
7 entire references at the bottom of some of the
8 history here.

9 But, again, in the military, long
10 recognized as an important pathogen. World War
11 II. In the forties some very elegant, in my
12 opinion, studies on transmission of Group A strep.
13 No pathogen is the same in the way it is
14 transmitted. Group A strep might be unique from
15 many others. But what they basically determined
16 in some very elegant studies is person-to-person
17 transmission is very important. They had studies
18 using blankets that were heavily contaminated as
19 to how much is the environment in the recruit
20 setting contributing to the continuing problem
21 with Group A strep.

22 Person-to-person was repeatedly found to

1 be very important.

2 Some issues of carriage and importantly
3 here, the contributions of the sick call. It all
4 came back to people being funneled through sick
5 call for other reasons and that being a primary
6 point where it looked like transmission and
7 exposure was occurring.

8 Soon after this, the antibiotic era
9 ensued. Great, we have a way to treat it, Group A
10 streptococcus, and that drastically reduced the
11 sequela that occurred from Group A streptococcus
12 infections and even affected in many of these
13 studies the carrier state. It provided near
14 complete control of illness.

15 But the question was why do we keep
16 having Group A streptococcus in our recruit
17 training camps?

18 Because treatment alone was not
19 effective. You continued to have spread from
20 asymptomatic individuals or individuals, as we
21 find often in the recruit setting, individuals
22 that chose not to seek medical care but were still

1 sick, still infectious. This is a repeating issue
2 with a lot of other pathogens.

3 So more recently it was the
4 recommendation by Thomas and colleagues that
5 streptococcal surveillance programs continue and
6 that data generated from these surveillance
7 programs should influence the prophylaxis
8 decisions and often add to site specific, in a
9 site specific way, and you'll see that has been
10 implemented in many of the different services at
11 the recruit training camps, and the regimen is 1.2
12 million units of Benzathine applied
13 intramuscularly.

14 So the subsequent decades after some of
15 this elegant Group A strep research demonstrated
16 that although treatment got a good handle on the
17 disease and the sequela in that individual, mass
18 prophylaxis was effective in decreasing outbreaks
19 in our recruits and again sequela overall as the
20 population goes.

21 And when those mass prophylaxis efforts
22 stopped, you continued to have outbreaks again.

1 They started over again.

2 A good study by Dr. Greg Gray who used
3 to be a part of your Board and also my predecessor
4 at the Respiratory Disease Laboratory found that a
5 very small percentage of people that were
6 identified as Pen allergic could be the nidus for
7 continuing outbreaks in the recruit setting. As
8 low as 7 percent of individuals that were
9 identified as Pen allergic, therefore did not get
10 the Bicillin injection, could harbor the Group A
11 streptococcus and be the reason for continued
12 outbreaks in the recruit setting.

13 So treatment of the Pen allergic is very
14 important.

15 The rest of this I'm not going to go
16 over in detail, but it's here, and basically it
17 says that history repeats itself. We decide to
18 stop prophylaxis, we have outbreaks again.

19 Basic -- I'm going to go over this
20 particular issue in some later slides. But we had
21 a 2002 outbreak of Group A streptococcus among
22 Marines in San Diego, and that was published.

1 In this population at the time, 30
2 percent of the population was identified as Pen
3 allergic and therefore given Erythromycin as the
4 antibiotic to cover them for Group A strep, and
5 the study showed that there was only 20 percent
6 compliance with that Erythromycin in that 30
7 percent population. So, again, a large population
8 that wasn't being covered.

9 Erythromycin and Azithromycin have also
10 been shown in the studies to be effective.

11 This is a quick slide looking a bit
12 historically at Great Lakes recruit training
13 center, and this brings up an issue that we'll get
14 into a little bit and an issue that the services
15 are struggling with. If we decide to give
16 Bicillin or some other antibiotic at the beginning
17 of recruit training, should we give it again later
18 in training?

19 Right here you see with the orange bar
20 up top that Bicillin was used for incoming
21 recruits. You still had some increases in Group A
22 streptococcus illness. So at the red bar here,

1 they chose to do a second Bicillin injection in
2 late trainers, and you saw the rates then fall.

3 Rates stay low for a while, they stop
4 everything, they start coming up again, and again
5 the need to do that late-training Bicillin
6 injection.

7 A couple quick comments about relevant
8 letters or instructions, correspondences in the
9 past.

10 This Board at AFEB in 1983 made some
11 very astute observations that have really guided
12 the military through the years saying that there
13 should be selective streptococcal monitoring
14 programs continuing in the Navy and Marines, there
15 should be tailored hemoprophylaxis based on that,
16 those monitoring programs, and they mentioned two
17 areas that should be studied, and that again is
18 the desirability of a second dose of Bicillin and
19 this issue of skin infections with Group A
20 streptococcus as whether or not that's a case for
21 Bicillin in and of itself.

22 And I might just add that early on it

1 became a bit of a paradigm shift. Early on, the
2 use of mass prophylaxis was to decrease sequela.
3 It was really a transition by Gunzenhauser I
4 believe and colleagues that said, "Hey, we don't
5 have much sequela anymore. Is it useful just for
6 strep pharyngitis?" And it was decided it was
7 because the sequela again are relatively rare.

8 There is a tri-service instruction that
9 is currently near, if it's not there already at
10 press, for immunizations and chemoprophylaxis, and
11 it just basically says some general things when it
12 comes to Group A streptococcus prophylaxis, that
13 it may be required to terminate disease
14 transmission and consider the Benzathine injection
15 and that there should be a customized approach.
16 Each service should develop their own. So that
17 has led to the question of, well, what is each
18 services's guidance?

19 There's a BUMED instruction originally
20 dated 1991. It's currently undergoing some very
21 intensive and renewed efforts to update this
22 instruction.

1 The current guidance says that we should
2 in the recruit training sites culture everyone
3 with a sore throat.

4 That's been difficult and not largely
5 observed, culturing everyone with a sore throat,
6 because it is so common in our recruit training.
7 Group A strep -- adenovirus, as you know, has a
8 primary symptom of strep throat, and that's a --
9 the primary pathogen in our recruit training. So
10 culturing everyone might not be reasonable.

11 And that the action points for decision
12 about antibiotic prophylaxis should be based on
13 surveillance at the sites.

14 And one largely used definition for when
15 you should seriously consider it is 10 cases per
16 1,000 recruits per week.

17 I do know that in many services, that is
18 absolutely not a firm number. They use their
19 local preventive medicine assets to determine
20 whether or not they should start, and if there are
21 severe skin infections or severe outcomes at a
22 lower rate, they will certainly consider it.

1 The current suggested revisions talk
2 about treating Marine Corps and Navy differently.
3 That's the last version I saw.

4 Just talking with Captain LaMar today, I
5 think that some of those issues have even changed.

6 The other big change is rather than
7 culturing everyone here is, quote, follow a
8 validated clinical prediction scoring system to
9 determine who to culture and who to treat,
10 including following, including following
11 morphology of the Group A streptococcus that is
12 grown.

13 Those four criteria are here, and you
14 grade it from 1 to 4 points to decide when to
15 test, when to treat, as you read there.

16 And I think this might be a very
17 positive change to the instruction. I am
18 interested in the Board's input on this, and I
19 think other people in the audience are as well.

20 I might challenge that even though it
21 might be a validated prediction system in a
22 civilian world, is it a validated prediction

1 system in the recruits that I think are a
2 different population than our civilian
3 populations?

4 This is a tough slide, and I regret that
5 your handout is not in color. So please take
6 notes from this slide because there is so much
7 information here. There's so much information
8 that my staff has been collecting to try and get a
9 handle globally throughout the DoD, and you can
10 only appreciate it in its colors.

11 So let me go through this briefly. The
12 top line here for each of the sites is what type
13 of prophylaxis is performed or what type of -- how
14 do you approach at that site prophylaxis for Group
15 A strep?

16 So the light green is they automatically
17 give an accession dose. When they get to recruit
18 training, they automatically give a dose of
19 Bicillin.

20 The dark green here says that they do
21 surveillance. You heard those instructions where
22 surveillance should be the crutch, and that's the

1 guidance that's been given for many different
2 organizations through the year.

3 There are some sites, as you can see if
4 we just again concentrate on that first line, that
5 do it seasonally. Lackland Air Force Base has
6 largely done that for many years, going back here
7 to 1998. MCRD (Marine Corps Recruit Depot) Parris
8 Island has largely done that through the years.

9 And this San Diego is a bit unique here
10 surrounded by the solid black, and you see here in
11 the middle of the prophylaxis mode to your right
12 that means an automatic second dose.

13 The Marines in San Diego are the only
14 ones that give an automatic second dose.

15 For the Board members' information,
16 Marine training is twelve weeks, Air Force is
17 about six and Army and Navy is about eight. So
18 the timing that the Bicillin injection will
19 provide protection three to four weeks is an
20 important issue of this whether or not a second
21 dose is given.

22 This can be updated. At this point now

1 there's another square we could put underneath the
2 end of this here in San Diego where they have
3 started giving the Bicillin and Azithromycin to
4 incoming recruits because of some recent outbreak
5 problems there.

6 Now, the second line here is what
7 antibiotic is given if they do do automatic
8 accession dose. In general, I mentioned that it's
9 Bicillin, and that's the light lavender here.

10 Some exceptions here include towards the
11 end of Great Lakes and Lackland when the Bicillin
12 has been in short supply, as you all are aware,
13 right up here the period where we have had
14 problems with Bicillin supply. During those
15 periods Great Lakes has chosen the oral Penicillin
16 250 BID, and recently, recently San Diego has
17 moved to, as I mentioned, they got Bicillin
18 recently and they are giving that to all new
19 recruits but they are giving Azithromycin. They
20 caught up with all of the recruits on board with a
21 500 Q (weekly) week dose of the Azithromycin oral.

22 The last here is if you have Pen

1 allergic individuals, what are they giving them?

2 What do they do?

3 So you see here at most of the Army
4 sites, there is no treatment for the Pen allergic.

5 At Great Lakes for the Pen allergic,
6 they use Erythromycin. Great Lakes Erythromycin
7 -- remember that. It will come back as we look at
8 some data -- 250 BID (twice a day).

9 Lackland has used Erythromycin for
10 several years. In more recent times as the Pen
11 allergic -- to Pen allergic individuals, they give
12 Levaquin.

13 Parris Island again during the periods
14 they are giving prophylaxis, they give the
15 Erythromycin.

16 And MCRD San Diego is unique in giving
17 to the Pen allergic always Azithromycin, again the
18 500 Q week dose.

19 What is not shown here is the waxes and
20 waning. This is general policy over time at these
21 sites. Because so much of this is driven by
22 surveillance, that certainly has changed, and to

1 get a handle on that retrospectively for much time
2 at all is difficult. There are just spattering of
3 publications and things like that.

4 But I think this is very useful again
5 for the Board to consider generally what is done
6 throughout the DoD, and there's a lot of
7 information there, so thank you for letting me
8 take a little bit of time there.

9 Questions about this particular slide?
10 There's so much information here, I don't want to
11 pass it too quickly.

12 Okay. I'm going to jump real quickly to
13 a couple different types of data that's shared by
14 the different services, and this is more
15 service-generated data. Each site has more
16 detailed data that they share.

17 Here Great Lakes you'll see during the
18 period now that actually the pink is the, is 2006,
19 and this is strep pharyngitis per 1,000 recruits.
20 You remember the kind of cutoff was 10 per 1,000.
21 And you see here this year when the Bicillin has
22 not been available and they have been using the

1 oral Pen VK, some rates that are concerning at
2 Great Lakes. They are not using the Bicillin yet,
3 although they are supposed to start that probably
4 the first of the year and then continue to use the
5 Pen VK. And there are compliance issues just like
6 you've heard from me with Erythromycin is really
7 getting people to take this.

8 Some Army data. There are two different
9 indexes here. The pink is the acute respiratory
10 disease and the jagged blue is the SASI (Southeast
11 Asian Serials Index) index.

12 The SASI index is calculated by taking
13 the rates of Group A strep positive swabs and
14 multiplying that by the rates of ARD (Acute
15 Respiratory Disease).

16 So in general, the SASI rate for saying
17 there's a concerning situation here is 25 and here
18 on this axis is the 1.5 which is the traditional
19 rate for ARD, quote, outbreak. I'm going to point
20 out several places here samples that we have
21 analyzed in our outbreak investigations at the
22 Naval Health Research Center.

1 This period here encompassing both those
2 peaks we have samples from and I'll talk about the
3 results of, Fort Leonard Wood right in here, Fort
4 Sill this period here. And unfortunately I got it
5 after I handed this presentation in, but there's
6 similar charts for the Marines, one in San Diego I
7 mentioned that they recently started the Bicillin
8 and Azithromycin throughout their recruit
9 training. And you see basically in the Marines in
10 San Diego a curve that goes up like this with
11 Group A strep positive cultures and then drops
12 completely down to baseline now that they've
13 started prophylaxis of all incoming recruits and
14 catching up with all recruits on base.

15 So what did the Naval Health Research
16 Center do?

17 We instituted surveillance for Group A
18 strep in 1998. It's a systematic sample of Group
19 A strep positive samples that are collected from
20 laboratories at nine different military training
21 sites.

22 I need to point out quickly the big

1 weaknesses to that.

2 I do not have staff on the ground to
3 collect these samples and ship them to me like we
4 have on the ground at each of the recruit training
5 sites to collect our febrile respiratory illness
6 or ARD data and samples. We rely on the
7 relationship that we establish with the
8 laboratories at the hospitals that serve the
9 recruit training sites. We rely on maintaining
10 those relationships and getting them to save
11 samples and ship them to us.

12 We send everything to them, we pay for
13 the shipments, but it still requires time on their
14 part, and that's hard to maintain over time. So
15 at any one site it seems to wax and wane. That's
16 the big disadvantage.

17 I think the big advantage is we
18 definitely have a collection that is DoDwide,
19 geographically dispersed, temporally dispersed
20 over time, and we can follow trends to the samples
21 we do get in.

22 But what is very difficult for us to say

1 with the data we get is the true rates of
2 streptococcal illness, I don't have that.

3 What I do know is NEHC (Navy
4 Environmental Health Center) is looking at
5 that very actively right now and has some
6 good data looking at Group A strep, laboratory
7 diagnoses, whether it's the rapids test or the
8 culture, and they are looking at that because of
9 the instruction that's under revision to make sure
10 it's as accurate as possible and addressing the
11 needs of the Navy Marines. But, again, what it does
12 tell us is the samples we get and what's happening
13 with Group A strep in our population.

14 I want to stress from the slides I'm
15 showing that when I'm talking about collapsed data
16 or data altogether, I'm not including the outbreak
17 specimens we received. I didn't want to overbias
18 the data with a whole lot of, say, M3 from the
19 2000 EMM type (a gene associated with virulence)
20 of Group A strep from the 2002 outbreak in San Diego,
21 for example. I pointed out some of the outbreaks
22 we do get samples of and I talk about that separately.

1 So as I mentioned here, the samples we
2 collect with the routine surveillance, looking at
3 antibiotic susceptibility as well as EMM type,
4 which is a marker for virulence, it's a very
5 useful tool from a molecular epidemiology
6 perspective to follow the strains that are
7 circulating in our population and then the
8 outbreak response.

9 This quickly just gives you an idea of
10 the geographic spread. The streptococcus pyogenes
11 is the green square there of the samples that we
12 do get in.

13 A quick -- to bring to your attention
14 real quickly what we're looking at here is nearly
15 2100 isolates and the characteristics of those
16 isolates.

17 Back in 2003, we published on isolates
18 that we received up to that time through 2001,
19 692. Those 692 are included in the data I'm
20 showing you right now. It's just many more, about
21 two, three times as much or so.

22 I want to point out to you this number

1 right here at that time, and what we reported was
2 among those isolates, there was 6.4 percent
3 resistance to Erythromycin overall, and that that
4 macrolide resistance was associated with
5 geographic site, Lackland, and that it was also
6 associated very strongly with EMM type 75.

7 This is a quick look at the isolates we
8 received, a simple number of isolates received and
9 analyzed over time from the different sites. This
10 is collapsed through the 1998 through 2006 period.

11 Now, the paucity of samples in some
12 sites does not necessarily represent poor
13 collaboration, although it might. It often will
14 also represent or demonstrates the fact that they
15 might not have a lot of Group A strep problems.

16 So, again, looking across the board, we
17 look at all of the different antibiotics and the
18 resistance patterns, 100 percent of these 2,077
19 isolates were -- antibiotic resistance was
20 performed on them.

21 And what we see now looking over this
22 whole time, again including that early period that

1 had 6.4 percent, is around 11.6 percent
2 Erythromycin resistance.

3 So we become concerned. Are we having
4 increasing problems with Erythromycin within our
5 populations?

6 It's a question we need to ask, a
7 question that often comes up when people decide
8 what to use as a secondary antibiotic.

9 We have to look at this more closely,
10 though, to really get to that answer.

11 Let's look at that over time. Is it
12 increasing over time?

13 So here you have the different --
14 Tetracycline is the second most common resistance
15 we've seen.

16 But what you see here is some big-time
17 issues with increasing Erythromycin resistance
18 through 2004, but in recent years very little.

19 So in 2004 we'd be seeing this nice
20 upward trend and say, "Oh, my goodness, what are
21 we doing? The use of Erythromycin in these
22 training sites, are we introducing this macrolide

1 resistance?" Good question.

2 But here seeing it so low makes one
3 think, hum, it didn't stick around. That's
4 interesting.

5 We need to tease this out more, though,
6 because it's possible that at some sites it is
7 influenced. Not all sites use Erythromycin.

8 So we want to get to this a little bit
9 more. Let's look at each site. So this is each
10 site just grouped again. And you see Lackland, as
11 I mentioned, has about 20 percent. Fort Leonard
12 Wood, important. They have current issues. MCRD
13 Parris Island, some of these sites. So I want to
14 look closer at those sites over time.

15 First a quick look at the EMM types
16 because I get kind of an association between the
17 EMM and antibiotic resistance as well.

18 A little bit of a busy slide but again a
19 lot of information.

20 The trends I want you to see is this
21 right here is EMM type 75. It's proven to be very
22 important, and you'll see why.

1 And the other one I want to point out to
2 you is the light lavender, this here. This is EMM
3 type 5.

4 So in the scheme of this whole period,
5 EMM 5, for example, isn't a whole light. You do
6 see quite a bit of the EMM 75.

7 For your information, the 3 was the
8 outbreak in San Diego of Group A, B-Hemolytic
9 Streptococci bacteria GAS-associated pneumonias.

10 Okay. So I mentioned what I want to do,
11 though, is now look at those sites that had a big
12 problem with Erythromycin resistance and break it
13 down over time. Is this Erythromycin resistance
14 increasing?

15 What you have here is a slide of Parris
16 Island over time and the strains of Group A strep
17 that we see there, basically the EMM strain.

18 The pink here is not determined yet I
19 think because, one, we have 100 percent antibiotic
20 resistance performed on these samples and, two,
21 you can see some good trends with those that we do
22 have EMM type that our conclusions can still be

1 pretty sound at this point.

2 So here what you have is simply the EMM
3 types, and right here what we have added to that
4 same slide is resistance to Erythromycin.

5 The resistance is represented by the
6 line. I want to bring to your attention here that
7 the dark blue, EMM type 75, is very often
8 resistant, and among those that are not typed, I
9 think there's a good reasonable assumption that a
10 good percentage of those are EMM 75.

11 Those that we chose to do the EMM typing
12 with were randomly selected.

13 Yes.

14 MS. EMBREY: Ellen Embrey. Could you
15 explain what EMM is?

16 COMMANDER RUSSELL: Sure. Traditionally
17 something called the M protein was used to do a
18 lot of this work. But the EMM is a gene that is
19 associated, can be associated with virulence of
20 the Group A streptococcus in itself.

21 So this is doing PCR (Polymerase Chain
22 Reaction) of the EMM gene and sequencing it and

1 then looking at -- there's, there's a very large
2 database maintained that helps you take that
3 sequence and determine the M type from that.

4 Dr. Kaplan might have some input here.
5 But there's -- there certainly is an association
6 between that and the M protein, not the EMM, but
7 the M protein was based on antibody antigen
8 interactions of the, of the bacteria which we're
9 now shifting to molecular methods.

10 MS. EMBREY: Thank you.

11 DR. KAPLAN: Ed Kaplan. Just -- Kevin
12 has said this correctly, but formerly we serotyped
13 these strains with serological typing.

14 By sequencing the gene now, we can do
15 the same thing a lot faster, a lot cheaper and a
16 lot more accurately. So it's another way of
17 characterizing.

18 There are now approximately 130 plus EMM
19 types among Group A strep.

20 MS. EMBREY: Okay.

21 COMMANDER RUSSELL: So the association
22 again between Erythromycin resistance and EMM type

1 75 is noted here on this slide in 2002, 2003 and
2 2004 and largely with EMM type 75.

3 That was an observation that we made in
4 the publication from data here back.

5 Although at Parris Island they hadn't
6 seen that yet, overall, that was the observation
7 made then.

8 Let's look at Lackland Air Force Base.
9 Lackland again is the place that we previously
10 demonstrated an association between site and
11 Erythromycin resistance.

12 What is happening now? There are
13 isolates we've received from Lackland, and here's
14 adding the Erythromycin resistance.

15 Guess what's gone from Lackland?
16 There's not much EMM 75 there in Lackland anymore.
17 And, by golly, they don't have much Erythromycin
18 resistance anymore either. You see the EMM and
19 the Erythromycin resistance again back here that
20 heavily contributed to our observations in our
21 previous publication.

22 Fort Leonard Wood, again the different

1 EMM strains and then adding the Erythromycin
2 resistance to that again, seeing it very heavily
3 associated with EMM 75.

4 Let's jump to the EMM types and look at
5 Erythromycin or macrolide resistance, and you see
6 the 75 very -- about 60 percent of all isolates we
7 get that are EMM 75 are Erythromycin-resistant.

8 A little bit here in 5 and a couple
9 other, but largely with EMM 75.

10 I'm going to jump now, if you don't
11 mind, to recent outbreaks.

12 And, again, there are people in the
13 audience that have spent a lot more time really
14 doing the epidemiology behind these outbreaks, and
15 if I misrepresent something, I very much welcome
16 you to jump in. We try and get samples from
17 outbreaks so we can follow what strains are
18 causing problems in our military populations.

19 At MCRD San Diego just recently in
20 November 2006, five recruits were identified with
21 retropharyngeal abscesses. Two of these showed
22 Group A strep from those abscesses.

1 We obtained an isolate from one of
2 those, and it is EMM type 118 just fresh off the
3 press.

4 Fort Leonard Wood in October, short on
5 Bicillin. They were not using an alternative
6 prophylaxis at that time. They had an invasive
7 GAS report in August of 2006 and then several
8 cases that came after that.

9 We got a variety of these samples, and
10 all of this outbreak at Fort Leonard Wood just
11 recently in October are EMM type 5. There's a
12 spattering of some others, but largely EMM type 5
13 that we saw in that outbreak.

14 It is Pen sensitive. The EMM that we're
15 seeing in all of these outbreaks are Pen
16 sensitive. They are not Erythromycin-resistant
17 strains.

18 Fort Knox, August 2006, receive more
19 samples. They did some kind of carriage. Saw
20 quite a burden of carriage there, some
21 hospitalizations with Group A strep, and they did
22 some target prophylaxis at that time. But, again,

1 an analysis was EMM type 5, Pen sensitive.

2 Fort Jackson, November 2005, a bit of an
3 outbreak. We got some additional samples.
4 Nothing terribly serious at that time. But,
5 again, a noticeable surge in cases, EMM type 5,
6 Pen sensitive.

7 Fort Leonard Wood, October through
8 February, quite a period as you saw. I showed you
9 on that surveillance map. Got samples throughout
10 that period, EMM predominated, Pen sensitive.

11 MCRD Parris Island, September through
12 November 2005, again, EMM 5, Pen sensitive.

13 Talking about recent outbreaks, I have
14 to go back to the one that I mentioned several
15 times in San Diego. This we published on. Dr.
16 Kaplan is a co-author on that, and we certainly
17 appreciate his expertise through all of this.

18 But what I want to point out here is
19 first dose of Penicillin was given at this point,
20 and these, the light gray-shaded columns are those
21 pneumonias that were associated with Group A
22 strep, and you see them start to come up just

1 after 20 days from receiving the Bicillin
2 injection.

3 So the question that has occurred
4 because of this is how long is that Bicillin
5 really providing protection?

6 Historic reports I believe Dr. Kaplan's
7 going to talk about, very historically we really
8 think four weeks, some studies in the military go
9 more down to three, and this certainly suggests
10 more down to three.

11 Interesting here that, again, in the
12 Marines I told you twelve weeks of training, San
13 Diego, they do give the most -- the most
14 conservative of all training sites do give a
15 second dose. So at the time they are giving a
16 second dose here and there was a second blip of
17 GAS pneumonias in that population.

18 Again, in this population they had
19 identified with very loose determination of
20 Penicillin resistance -- or Penicillin allergies,
21 excuse me, 30 percent. So 30 percent were given
22 Erythromycin with only 20 percent compliance with

1 that medication.

2 Some recent fatal cases. The very
3 recent one, which I'm sure very many of you are
4 aware of, happened at the advanced training
5 course north of San Diego, Camp Pendleton, just
6 out of recruit training about a week but not in
7 recruit training anymore. Outside that
8 twelve-week period.

9 He was tested post-mortem and found to
10 have Group A streptococcus in his blood growing
11 out of his blood.

12 There was a lot of hysteria and concern
13 that came as a result of this saying that it's
14 because MCRD San Diego wasn't using anything in
15 place of the Bicillin injection during the
16 shortage of the Bicillin and pointing fingers at
17 MCRD San Diego for the cause of this death.

18 Many of us quickly said that it's
19 unreasonable to do that because the Bicillin
20 injection would not provide coverage to this
21 period.

22 Whether or not you would have affected

1 the carriage state, maybe this person with not
2 being exposed is certainly a different question.
3 There's only person I know that could answer that
4 question, and it's not me.

5 In Texas in March of 2006 coincidentally
6 there were two different deaths that were
7 associated with Group A strep. One was in the Air
8 Force and one was in the Army. Neither one of
9 these were recruits or near recruit training.

10 One of them had Group A streptococcus
11 that was cultured out of purulent material from
12 around the lung and had consolidation and the
13 other had a meningitis type picture. Both of
14 these two deaths were EMM type 5 Pen sensitive.

15 I wanted to quickly just point out as a
16 surveillance from a laboratory perspective the
17 Naval Health Research Center.

18 We've recently with DARPA(Defense
19 Advanced Research Projects Agency) funding and now
20 GEIS support as well as some other support are using
21 what formerly was called the tiger, but it's the
22 T-5000 that is a very powerful tool in our laboratory.

1 We renovated a facility at our lab, and
2 you see that there's a lot of EMM data missing in
3 what I have, and that's because over the last
4 months we've been validating the streptococcus
5 pyogenes plates that are used.

6 What is this? This is a high-throughput
7 methodology for doing PCR conserved regions of
8 genomes, conserved regions, so it's the same
9 throughout bacteria. You then spray it into a
10 mass spectrometer.

11 The mass spectrometer determines the
12 molecular weight of that amplicon with such
13 precision, that you know its base composition.
14 You don't know the sequence, but you know its base
15 composition. And when you do that a few times to
16 conserve regions, it's almost always pathogen
17 specific, not only pathogen specific, but it gives
18 you a lot of information about the strain.

19 So in this case we published in PNAS
20 (Proceedings of the National Academy of Sciences).
21 It tells you the EMM type. In the case of influenza
22 which is very hot these days, it tells you the

1 strain. It tells you the H and N type and the
2 strain. It's most closely associated with
3 Wellington, just like sequencing would do.

4 So my point here is although we have not
5 been able to keep up with all the samples, when it
6 comes to molecular testing, I'm optimistic in the
7 future we will and will have a complete picture
8 because of some advanced diagnostics that have
9 high-throughput capability.

10 So some quick conclusions. There has
11 been an increase in GAS morbidity among trainees
12 since the loss of the Bicillin injection and the
13 shortages in supply of the Bicillin.

14 Overall we have a macrolide Erythromycin
15 resistance of 11.6 percent and that that is most
16 commonly seen and highly statistically associated
17 with EMM type 75. But these data, samples
18 collected across the DoD, do not demonstrate any
19 temporal or geographic trends in resistance of
20 Group A strep.

21 There's increased prevalence of EMM type
22 5 associated with outbreaks throughout the last

1 couple of years, but they are largely Pen
2 sensitive.

3 And I want to make one more conclusion
4 based on that data is the one site where we have
5 -- did have quite a lot of Erythromycin use at
6 Lackland, it has not resulted in
7 Erythromycin-resistant strains, one becoming
8 responsible for outbreaks or remaining. That's
9 one observation I think we can make. Always
10 concerned about what are we doing with
11 Erythromycin or macrolide resistance by using it
12 in our populations.

13 Thank you for your time. Happy to
14 entertain questions.

15 (Applause)

16 DR. POLAND: This is Dr. Poland. We're
17 going to ask Dr. Kaplan to make a few remarks, but
18 his slides need to be loaded.

19 While that's happening, we have a few
20 minutes where questions can go to Commander
21 Russell.

22 DR. McNEILL: Mills McNeill. Have you

1 observed any correlation in the rate of new
2 infections of streptococcus associated with loss
3 of adenovirus vaccine? Is there any correlation
4 there that you've been able to detect in terms of
5 --

6 COMMANDER RUSSELL: Whether or not the
7 lack of the vaccine resulting in increased
8 adenovirus rates have resulted in increased Group
9 A strep rates with the idea that you're -- the
10 body is compromised because of adenovirus
11 infections, are you more vulnerable to Group A
12 strep infections?

13 Excellent question. And the issue of
14 coinfections is something that we are constantly
15 asking. The big outbreak in around the time there
16 at San Diego, we looked at the issue of
17 coinfections, and I really wanted to write up a
18 nice paper saying that coinfections were
19 associated with more severe morbidity, but it
20 didn't bear out.

21 I had as many coinfections among the
22 febrile but not severe individuals as I did among

1 those that were hospitalized, surprisingly to me.

2 So at that time again I have not seen
3 that that adenovirus, increasing adenovirus
4 morbidity has resulted in increasing Group A strep
5 morbidity.

6 And I think the graphs over time that
7 all the services maintain bear that out.

8 We use Bicillin or some other mode to
9 keep it low.

10 The question is do we use that around
11 the clock, do we use that seasonally? When and
12 how should we use that? Should we leave that up
13 to the services?

14 DR. McNEILL: While as the preventive
15 medicine physician at Fort Jackson a number of
16 years ago, I won't say quite how many, I never
17 understood why we were one of the posts that did
18 not use the Bicillin prophylaxis, and this was
19 still in the adenovirus vaccine era. And I
20 strongly wanted to use Bicillin prophylaxis in our
21 trainees, but it wasn't the policy, end quote.

22 So I for one feel that there should be

1 some standardization.

2 And having served ARD war duty, I can
3 truthfully tell you it puts a tremendous burden on
4 the hospitals and it also puts a tremendous burden
5 on the trainees.

6 So I think this is something we need to
7 look at and try to develop some uniform policy
8 regarding.

9 COMMANDER RUSSELL: This Board
10 influenced the policies that are in use to some
11 extent now. We have the opportunity again.

12 DR. McNEILL: I stated my...

13 COMMANDER RUSSELL: Yes, sir.

14 DR. LEDNAR: Wayne Lednar. You
15 mentioned about adenovirus coinfection. And I
16 assume, but let me ask, is that true as well about
17 meningococcal coinfection? Are you using the term
18 coinfection and colonization synonymously?

19 COMMANDER RUSSELL: I don't know. The
20 meningococcal issue is a very important one. I
21 have done testing across the board when I've
22 looked at the coinfection issues.

1 It is not a pathogen that is easy to
2 study, I'll be blunt with you at this point.

3 We are exploring very vigorously how to
4 improve our capabilities because capabilities for
5 neisseria meningitidis that used to be in the DoD
6 are being lost now.

7 So should someone pick it up and should
8 someone look at it?

9 We think yes because of issues that are
10 currently occurring in our military populations
11 with the change in the neisseria meningitis
12 vaccine that is being given, whether or not it is
13 just as effective.

14 We engaged NEHC just recently on this to
15 ask the question what is the burden of any
16 neisseria meningitidis in our populations from a
17 culture perspective, and they are actively looking
18 at that with us. So hopefully we'll get a better
19 handle on it in the future than we have now.
20 Sorry.

21 DR. POLAND: Pierce?

22 DR. GARDNER: Pierce Gardner. Smoking

1 has been associated with colonization and disease
2 for both pneumococcus and meningococcus.

3 I wondered if we have any data about
4 percentage of recruits that smoke and whether you
5 could detect any differences in disease rates
6 among smokers and nonsmokers.

7 COMMANDER RUSSELL: We have some data on
8 smoking in recruits as they arrive because of the
9 recruit assessment program. But no recruit in any
10 service is allowed to smoke. So their history of
11 smoking might be associated. I've never looked at
12 that.

13 Good question. Has anyone ever looked
14 at that?

15 COLONEL BUNNING: Mike Bunning. A
16 couple things that I wanted to address. The
17 unintended consequences I do endorse as a method
18 of prophylaxis using Bicillin.

19 But we have a couple unintended
20 consequences that come out of that. Number one is
21 yeast infections in the female population which
22 are fairly significant in those first week or so

1 after the injection.

2 The other one is that we have a sole
3 source manufacturer of this product right now that
4 has really caused a problem for us in manpower,
5 and being able to gen up and gen down manpower is
6 not an easy proposition.

7 So when we go to Zithromax, that really
8 impacts the pharmacy and our ability to package
9 those drugs and get them out, and then we have to
10 develop a new staff.

11 And oh, by the way, if you didn't know,
12 recruits are not allowed to have medication. So
13 it has to be distributed to them.

14 So there's a lot in this equation. The
15 injection's by far the best way to go, but it has
16 other, other components as well.

17 Thank you.

18 COMMANDER BATSEL: Commander Tanis
19 Betsel from NORTHCOM.

20 Kevin, could you please briefly address
21 with the T-5000 the time cost, employability,
22 availability aspects particularly in my case for

1 identifying strains of influenza?

2 COMMANDER RUSSELL: It is not the answer
3 that we're all looking for right now for influenza
4 surveillance.

5 You saw two large decks there. It is a
6 large equipment that costs around \$1 million.

7 So the initial outlay could be
8 expensive. The fantastic capabilities of this
9 that are rapidly being used is going to the CDC
10 (Centers for Disease Control), USAMMDA (United
11 States Army Medical Materiel Development Activity,
12 a variety of different places are acquiring this now
13 and many health care facilities are acquiring this.

14 The great benefit of this is its
15 broad-spectrum look, and you don't have to know
16 what you're looking for with some of the
17 applications. And I'll emphasize some of the
18 applications. That doesn't apply to viruses where
19 you don't have well-conserved regions across the
20 board in the genome.

21 Cost. Again, with a broad-spectrum look
22 at the plates, it's going to be around \$100 a
23 sample, I think. But the cost isn't

1 well-determined yet because it's not being
2 marketed commercially yet.

3 COMMANDER BATSEL: And the time
4 required?

5 COMMANDER RUSSELL: You can process --
6 we're getting ready to publish an influenza paper
7 that processes 300 samples overnight within 12
8 hours, and that again is giving you not only H and
9 N type but strain. So that's very strong.

10 DR. POLAND: Maybe one more comment.

11 DR. PRONK: Nikko Pronk. I was
12 following up on the smoking question.

13 From a behavioral perspective, you
14 indicated there are still, that there are still
15 treatment regimens that are often ineffective
16 because of care-seeking behavior or appearance.

17 How big do you think is the gap between
18 optimal and current treatment rates because of
19 that?

20 COMMANDER RUSSELL: I think that is a
21 moot point when you talk about mass prophylaxis.

22 That was an important question when you

1 were just treating cases that came to health care.

2 So right now where the, where the status
3 quo at all recruit training centers is looking at
4 as many of the sore throats as we can and
5 following the Group A strep rates with mass
6 prophylaxis, it's not a question anymore as far as
7 their contribution, in my opinion.

8 DR. POLAND: Okay. We're going to move
9 on. We're about a half hour behind schedule.

10 I am going to ask the service reps to
11 make a comment after Dr. Kaplan finishes, so just
12 a heads up there, a status report on Group A.

13 So Dr. Kaplan is a member of the Board.
14 He's from some other medical school in Minnesota.

15 (Laughter)

16 DR. POLAND: Go ahead.

17 DR. KAPLAN: I'd like to thank my
18 country cousin for the opportunity to speak.

19 Thank you. I was asked to present a
20 little bit of data which I think may address some
21 of the questions that Commander Russell posed
22 before you, and I'd like to thank him because I

1 think he's pointed out some of the real issues
2 that are practical issues, and I might as well go
3 out on a limb and start by rather than using the
4 title that I have up here, change the title to
5 deja vu all over again.

6 This organism is a highly transmissible
7 organism and it has a capacity to spread rapidly
8 and widely among susceptible populations.

9 And I think the military fits the
10 definition of that.

11 I'm going to skip through some of these
12 slides in the interest of time because I think
13 Kevin has alluded to them, but there are some
14 points that need to be made for the deliberation
15 of this Board.

16 Everyone in here knows that the spectrum
17 of a strep infection is a broad one, and we've
18 seen in Kevin's talk the spectrum going all the
19 way from pharyngitis to death, and I think it
20 doesn't need -- nothing else needs to be said.

21 Let's look at the epidemiology over a
22 time as related to the military and think about

1 issues that we have to keep in mind.

2 Quickly, we have to think about the
3 organism, and Kevin has alluded to that. What is
4 the organism, what is its virulence, and what is
5 the potential for its spread?

6 We have to think about the human host,
7 and we'll touch on that in just a second, about
8 the susceptibility -- remember I said in
9 susceptible human host, and then finally the
10 environment.

11 And as has been shown for 50 years, the
12 environment in the military is an ideal one for
13 potential spread of this organism.

14 They have been a continuing medical
15 problem in the military. And as examples, the
16 Commission on Streptococcal and Staphylococcal
17 Infections of the AFEB has been -- has toyed with
18 this problem for years before the Commission was
19 disbanded in 1972.

20 There were 27,000 cases of acute
21 rheumatic fever in the Navy alone during World War
22 II as an example of the magnitude or potential

1 magnitude in the problem.

2 There's a very famous and I'll show you
3 in a moment the Great Lakes -- or the Bainbridge
4 outbreak of acute nephritis. Skin infections in
5 Vietnam posed a major health problem in the
6 military. And as Commander Russell has just
7 pointed out to you, there are continuing outbreaks
8 in recruit bases even today without a uniform
9 policy among the services.

10 The sentinel studies done at the Warren
11 Air Force Base in the late forties and early
12 fifties during the time of the Korean Conflict
13 were examples of information, of our ability to
14 gain information about this, and I'll go through
15 it very quickly.

16 This was the famous barracks studies
17 showing the distance of beds in barracks and the
18 risk of spread of the organism as was studied by
19 Dr. Rammelkamp, Wannamaker, Denny and all fifty
20 years ago.

21 But we seem to forget that as recently
22 as 1988, there was a major problem in the military.

1 And I put here two copies of the MMWR
2 (Morbidity and Mortality Weekly Report) that
3 pointed out the acute rheumatic fever again at
4 Fort Leonard Wood and again at San Diego.

5 And if you look at that, and I'm not
6 going to take the time to read that for you, this
7 is from that. It pointed out the problem in the
8 Army and the Navy during this 1988 outbreak.
9 There were some 14 cases of rheumatic fever.

10 And at that time I was told by DoD that
11 since it was service-related, it was estimated to
12 cost the military approximately \$1 million per
13 patient, and that was 1988. So that's almost 20
14 years ago.

15 Deja vu again at the Naval Training
16 Center in San Diego, again in 1988 with pneumonia.
17 The attack rate went from 0.75 to 80 per 100,000
18 during that period of time.

19 So it keeps showing up, and it has since
20 we've been able to track it.

21 This is the paper describing that outbreak
22 in the JAMA (Journal of the American Medical

1 Association) in 1989 which gives you an idea of
2 the number of cases of pharyngitis and the temporal
3 relationship to rheumatic fever. I would also point
4 out to you that type 5 is one of the most
5 rheumatogenic strains that has been described over
6 the years, and reminds you of Commander Russell's
7 description of the spread of this organism or --
8 rather, the presence of this organism in a number
9 of places in the military. And this is what
10 happened at Leonard Wood in 1988.

11 So we have a highly rheumatogenic strain
12 circulating in the military. Whether or not we
13 have cases, I don't think we can say with
14 certainty.

15 These organisms are spread across the
16 United States, and without going into a very busy
17 slide, what it simply shows you is that the types
18 are spread regionally throughout the United
19 States.

20 Now, why is that important that
21 different regions seem to have different
22 propensity for having a high prevalence of

1 different strains?

2 Well, it's really the epidemiology of,
3 of streptococci.

4 For example, in this population here,
5 one can see in some studies that we did some 30
6 years ago how an organism, in this case type 6,
7 which is also a rheumatogenic strain, comes into a
8 population very quickly and very quickly
9 disappears.

10 In contrast, others, like in type 31, it
11 hangs around for a long time.

12 Keep this, although these are civilian
13 populations, keep this in mind as we think about
14 what's going on in, in the military.

15 Because if you look at multiple types
16 and their ability to spread through a population,
17 as is seen here, and then at the bottom you look
18 at the number of sore throats that occur, you can
19 see that as new organisms are coming into the
20 population as done by a prospective study, the
21 number of sore throats and systematic disease
22 increases.

1 Now, why is that important? Well, it's
2 important because there are multiple strains that
3 have the propensity to spread in a susceptible
4 population.

5 And if you'll allow me to suggest that
6 military recruit training bases are very much like
7 junior high schools, I'll point out an
8 epidemiologic fact which I think is responsible
9 for this.

10 In the military training bases, people
11 come from all over the United States, as you can
12 see in green on this slide, and they are all put
13 into the same environment, very close contact and
14 the people coming from the Northwest have never
15 seen the strains that come from the Southeast and
16 on and on.

17 So people are exposed to strains that
18 they've never been exposed to.

19 The same is true, if you think about it,
20 with middle schools.

21 Middle schools are fed in any given city
22 by multiple grammar schools, and the same thing

1 happens.

2 In fact, if you look at epi curves, you
3 see in children a peak around 7 or 9 but another
4 around 12 or 13.

5 And I think that these two situations
6 are analogous, and that means it's not going to be
7 anything that can be easily taken care of because
8 it's not going to stop, and history proves that to
9 us.

10 And when we get a very nice juicy mucoid
11 strain like this and we put it into a population,
12 you can see not only the fact that there is an
13 outbreak, but there may be one caused by one type
14 and one right after in another.

15 So what I'm trying to make the point is
16 that these organisms come into a susceptible
17 population, I can't think of a better one than
18 recruit bases.

19 And I might add, as many of you know,
20 this is not peculiar to the United States, but has
21 been reported from military recruit bases around
22 the world.

1 Now, if we think about it in the
2 military, how are we going to address this issue?

3 And the question is, what do we do with
4 prophylaxis?

5 Well, you've heard today that there is
6 no uniform policy, as best I can figure out,
7 either with the drug or with how it's given.

8 And I think this needs to be carefully
9 considered by the Board in terms of making
10 recommendations.

11 We all remember the studies done at Fort
12 Warren 50 years ago which showed that treatment
13 prevents rheumatic fever, the control studies for
14 which the Lasker Award was given to Dr.
15 Rammelkamp, Wannamaker, Denny, et al.

16 52 years ago Floyd Denny wrote only one
17 of 143 patients studied developed a positive
18 culture for streptococci during a ten-month study
19 and there were no rheumatic fever recurrences when
20 Benzathine Penicillin was used.

21 And so we've had a shortage as they've
22 been brought about.

1 Wyeth who used to make this almost
2 exclusively in the United States sold it to
3 Monarch Pharmaceuticals who had some problems, and
4 according to what Colonel Gibson has told me, in
5 the last week the FDA (Food and Drug Administration)
6 has finally approved their manufacturing facility in
7 East Tennessee, so that hopefully most of this
8 shortage will disappear. These are the original data
9 from Gene Stollerman in 1952 showing the prolonged
10 effect of Benzathine Penicillin over a three- or
11 four-week period of time where it's -- the
12 concentration is above the MIC (Minimal inhibitory
13 concentration) for this organism.

14 And I thought in the interest of history,
15 I would point out that there are more than one
16 preparation of Bicillin. The one we're talking
17 about here should be the LA Bicillin, not the CR.

18 And the difference in how these behave,
19 in the interest of history, is a paper by Pierce
20 Gardner who will maybe recognize this if he's
21 still awake during this whole thing.

22 But the Bicillin is -- sorry. The

1 Bicillin is shown at the bottom of this and shows
2 that they do keep levels, and Gene pointed out in
3 his original paper, for up to 28 days.

4 And, in fact, it's been shown clearly in
5 a paper by Wood in 1962 in the Annals of Internal
6 Medicine that parental Benzathine Penicillin is
7 better than an oral preparation, as you can see
8 briefly on this, on this slide.

9 And it's been showed that you can break
10 off an epidemic in the military, as shown in this
11 JAMA paper in 1965 from the Great Lakes Naval
12 Training Center, and you can see with the red
13 arrow where Bicillin treatment was instituted and
14 the epidemic tended to fall off.

15 There are four pressing issues as I see
16 it regarding the use of Penicillin G in services:
17 Availability, and perhaps that has been partially
18 addressed at this point; the uniform quality of
19 available preparations. They are all not the
20 same, and I'll speak to that in just a second;
21 what is the correct dose for the military? Jim
22 Bass in 1996 pointed out that within military

1 recruits, 1,200,000 left the troops largely
2 unprotected toward the second to the fourth week.
3 I tried to get that paper before I came, and I
4 could get the title but not the paper,
5 unfortunately; and then as has been pointed out
6 this afternoon, the military acceptance of
7 Bicillin as the drug of choice.

8 Bicillin is made all over the world. As
9 I point out, it is not the same. Here's an
10 example of a study published 14 years ago showing
11 that two different preparations, blood levels were
12 quite different and the duration of adequate blood
13 levels was also quite different.

14 So that while Bicillin is available
15 around the world, all that glitters is not gold,
16 as people say.

17 Wyeth made Bicillin, sold Bicillin made
18 in three or four different places. One was
19 Mexico, one was the US, and just for comparison,
20 this is a Russian form of Bicillin that was, that
21 was available. And there is variation, and this
22 needs to be taken into consideration.

1 In a study that we did some years ago,
2 we found that at 28 days after injection, only 44
3 percent of individuals had detectable levels of
4 Penicillin and only 36 percent had levels of at
5 least 0.02. That should be micrograms per
6 milliliter.

7 And you can see from this curve how the
8 percent of serum samples with detectible
9 Penicillin levels fell over a 28-day period of
10 time.

11 And so this raises the question as to is
12 the dose that is being given, 1.2 million, is this
13 an adequate dose? And this is something that has
14 to be taken up and considered.

15 In the study that we did in Australia,
16 we used 1.2, 1.8 and 2.4 million units. And as
17 you can see from this graph, the more you give,
18 the longer, the higher the levels are.

19 And I think this is at least worth
20 considering when we think about this.

21 Now, does it work in terms of
22 prophylaxis? Well, now we're going to stretch it

1 as a final slide or so here. This is a study done
2 in Chinese school children in 1989. And basically
3 what they did was to take two schools, and in one,
4 the children were cultured monthly and everybody
5 who had a positive culture, symptomatic or not,
6 was given a shot of Bicillin.

7 In the other, everybody who was cultured
8 positive or not -- if they were positive, I should
9 say, were sent to their local source of medical
10 care.

11 And what this shows is that while the
12 prevalence shown on the top line started at the
13 same place, quickly the test group with Bicillin
14 shown in green fell down below the prevalence of
15 those who got catch-as-catch-can medical care.

16 And also although the difference is not
17 as striking, the same was true for the incidence
18 of new cases of pharyngitis in the two groups.

19 So while this is entirely different from
20 recruits, it does lend some credibility to the
21 worthiness of prophylaxis in high-risk
22 populations.

1 And I would leave that for you to think
2 about and to consider.

3 So for consideration for the Board, we
4 need to think about whether or not there is --
5 should be a uniform policy of control and
6 reporting system among the services, and I think a
7 discussion regarding uniform prophylaxis among the
8 services certainly would not be a waste of time.

9 So the take-home message is that this
10 organism remains uncontrolled and perhaps
11 uncontrollable at the new millennium.

12 We certainly have evidence presented
13 here today that it is still prevalent and that
14 there are still, I think, worrisome deaths
15 occurring in the military under those
16 circumstances.

17 And this causes us to stay up at night
18 sometime and think about what, what we should do
19 about this.

20 And the latter part, the right-hand side
21 of the slide will be after the meeting is over
22 today with Dr. Poland's permission.

1 Thank you.

2 (Applause)

3 DR. POLAND: I wonder if we could hear
4 from the service reps next and get an update on
5 what's happening with Group A strep and their
6 areas of responsibility.

7 COLONEL STANEK: This is Colonel Stanek.
8 First I wanted to thank Commander Russell and
9 Kaplan for those two excellent presentations. I
10 think the presentation by Commander Russell gives
11 a very unique and insightful look at the data,
12 antibiotic resistance and certainly stimulated a
13 few things that I'm going to go back and look at.

14 As -- actually pretty well what they
15 discussed summarizes what has been going on in the
16 Army.

17 Most recently has been the issue of the
18 shortage of Bicillin. And as was mentioned, we
19 are now -- we know that the company has received
20 its approval, its manufacturing plan has been
21 approved and there has been a distribution plan
22 made out to distribute Bicillin to the different

1 training sites.

2 So I expect, I believe this month they
3 will start using Bicillin again at the sites.

4 I think one of the key issues has to do
5 with the alternate antibiotics which once the
6 supply of Bicillin becomes consistent, then it may
7 not be that much of an issue. But having an
8 identified solution for what an alternate and
9 secondary or tertiary drug of choice would be is
10 something that we need to look at.

11 There are problems, as were mentioned,
12 with letting the basic trainees have medicines and
13 having to give medicine. They need to take a pill
14 every day or couple times a day is a lot more
15 difficult than sticking a needle in their arms
16 once and creates issues for the instructors and
17 everything.

18 But I think probably one thing that we
19 definitely need to take another look at, a real
20 hard look at is the plan for how at least the Army
21 deals with the Pen allergic individuals.

22 According to the chart, the Army does not treat

1 those individuals, and I think we need to look and
2 make some sort of decision as to how we're going
3 to handle those and what an alternate choice would
4 be.

5 DR. POLAND: Any current outbreaks?

6 COLONEL STANEK: We recently had an
7 increased number of cases of necrotizing fasciitis
8 out at Leonard Wood.

9 Interestingly, those cases, the
10 respiratory rates were actually below what our
11 index would be.

12 I don't have the final report on that
13 EPICON (Epidemiological Consultation) investigation
14 that they did. But suffice it to say that Bicillin was
15 not being used at that particular point in time
16 because we didn't have it.

17 So I think we need to look at the final
18 report from that investigation and then, as was
19 alluded to, discussing with the other services if
20 we're going to have a uniform policy or even among
21 installations within the services.

22 DR. POLAND: So at least at the current

1 time, this is Dr. Poland, absent a shortage or
2 lack of Bicillin, it would be used but once in the
3 eight-week training period, is that right, for
4 recruits?

5 COLONEL STANEK: I believe -- I'm sorry.
6 Say it again?

7 DR. POLAND: They get one, the plan is
8 that they will get one dose, but they get one in
9 the eight-week recruit training period.

10 COLONEL STANEK: Yes, when we have the
11 Bicillin available, that's correct.

12 DR. POLAND: The Air Force? We're heard
13 from the Navy.

14 LIEUTENANT COLONEL MULLINS: This is
15 Lieutenant Mullins filling in for Colonel
16 Snedecor.

17 As far as some data from Lackland, I
18 don't have exact numbers with me, but apparently
19 we've not had any outbreaks or any blips or
20 elevated levels of Group A cases.

21 We're using Azithromycin as the
22 prophylactic drug because of the shortage of

1 Bicillin. I believe in January if it is available
2 again, we'll start using Bicillin again.

3 And what I can do is when I get some
4 more numbers that are more exact, I can forward
5 those to Colonel Gibson so he can put them in the
6 minutes.

7 Colonel Bunning brought up a good issue
8 that the Board when considering policy or dosage
9 or should it increase dose, just other collateral
10 issues of increasing yeast infections in female
11 recruits and other things for consideration and as
12 we go forward, think about a policy or a different
13 level of dosage, so...

14 DR. POLAND: Dr. Poland. It will be
15 interesting to have the actual data on the yeast
16 infections. Maybe Commander Schwartz from the
17 Coast Guard?

18 LIEUTENANT COMMANDER SCHWARTZ: Hi.
19 This is Erica Schwartz.

20 Coast Guard policy is that we don't have
21 a policy on Bicillin. We have not had a policy
22 and historically we have not seen outbreaks.

1 DR. POLAND: Okay. Discussion?

2 CAPTAIN NAITO: Captain Neil Naito,
3 director of Public Health, Navy Bureau of Medicine
4 and Surgery.

5 So just a little different take from
6 what Commander Russell gave from the, you know,
7 30,000, you know, foot level because I was
8 involved with getting information on both, quote
9 unquote, outbreaks, both at MCRD Parris Island and
10 also in San Diego.

11 So one of the things of note is that by
12 the definition we've been using of ten cases per
13 thousand recruits, both of these situations would
14 not meet that definition of active prophylaxis.

15 So that's one of the interesting
16 problems that -- is that the small clusters,
17 however, do present a problem because in the case
18 of MCRD, five retropharyngeal abscesses
19 potentially were very serious.

20 And, again, there the thing -- the
21 problem at MCRD Parris Island was that, again,
22 with the Bicillin shortage, there was a plan for

1 active surveillance but because of changes of
2 personnel, the changing in, you know, going from
3 just giving prophylaxis to active surveillance,
4 although it was written in the plan, it was
5 difficult to switch gears and go with that
6 implementation.

7 So, again, the prophylaxis does have its
8 advantages in that it does attack the small
9 clusters which potentially -- five retropharyngeal
10 abscesses, one of them was fairly serious,
11 potentially compromised the airway, et cetera, et
12 cetera.

13 So, again, that's one of the interesting
14 things that these small clusters, they do present
15 a clear, you know, problem.

16 So, again, one of the things with the
17 prophylaxis, even with the ones where we have a
18 very good active surveillance program such as at
19 San Diego, you start prophylaxis, the problem
20 again is personnel change, and so programs
21 potentially, you know, could have problems there.

22 So that's one of the issues that needs

1 to be considered by the Board.

2 One of the other also big considerations
3 for the Board is that, prophylaxis is that it does
4 -- again, sometimes the adherence to other
5 important measures such as hand-washing, those
6 types of issues need to be considered as well.
7 Sometimes the adherence is not as good as it
8 should be.

9 Again, past experience and emphasis has
10 been placed on that, but, again, as personnel move
11 on, emphasis could become variable again until
12 something else happens.

13 That's from the Navy perspective.

14 DR. POLAND: Okay. Are there any other
15 comments?

16 Go ahead.

17 DR. PARKINSON: Mike Parkinson. I guess
18 just to refresh my mind, historically is it true,
19 yes or no, that the number one cause of recruit
20 training-related deaths is Group A beta-hemolytic
21 strep, yes or no?

22 If that is true, and I think it is, over

1 five, ten, fifteen, twenty years, it certainly is
2 probably true historically for whatever cause,
3 then you raise the bar and make a better argument
4 to the line that a standardized approach to the
5 number one cause across all three services of
6 recruit training deaths needs to be uniform.

7 If that statement is not true, then
8 putting aside our medical backgrounds, we could
9 say, Well, it's rational to have three different
10 approaches because it's got to be based on the
11 fact that San Antonio's in Texas and the fact that
12 Great Lakes is in Chicago in the winter and they
13 always seem to be different and the historical
14 rates in the Air Force are less.

15 But if it's true in all three services
16 and DoD in aggregate that the number one cause of
17 recruit deaths in 50 years has been Group A
18 beta-hemolytic strep, then it would seem to me
19 that a standardized approach, regardless of the
20 nuances for the last five, ten, fifteen, thirty,
21 fifty years, should be taken.

22 And I'll just leave that there, because

1 if you look at the epi triad: Agent, host,
2 environment, we know a lot more about the agents
3 through advances in technology and the EMM-typing
4 and the sophistication now in genetics on top of
5 EMM-typing, people are people, they still come
6 from all over the United States, as Dr. Kaplan
7 said, which is exactly correct, and the
8 environment, I hope we maximize the environmental
9 systems and the circulation of air and the spacing
10 of the cots and the rooms which we've all seen.

11 We've done about as much in most of
12 those sectors as I think we can, and that puts you
13 back to an effective prophylactic regimen that
14 most of the time for most people should work in a
15 best practice mode, not 16 different variations.

16 But that's the only thing. I think it's
17 a compelling way to think about it, perhaps might
18 be useful.

19 DR. POLAND: Okay.

20 DR. KAPLAN: Ed Kaplan. I just wanted
21 to know how many cases of necrotizing fasciitis
22 you had at Leonard Wood?

1 COLONEL STANEK: This is Colonel Stanek.
2 There were three cases, but they were, if I
3 remember correctly, be careful here because I'm
4 trying to remember exactly what the time frame,
5 they were not all at the same time. They were
6 spread out over I think five months. I'd have to
7 go back.

8 DR. KAPLAN: Any deaths among those
9 three?

10 COLONEL STANEK: No, I don't think so.

11 DR. KAPLAN: Okay.

12 DR. POLAND: Joe?

13 DR. SILVA: Joe Silva. Two wonderful
14 presentations. And I agree with some of the
15 comments being offered that a standardized
16 approach probably should be looked at to be
17 developed.

18 But I also would urge for some wisdom to
19 be applied here, and that is just hearing about
20 the women that receive the Bicillin, how many of
21 the women recruits come down with streptococcal
22 infections?

1 There may be things intrinsic to the way
2 they live, their barracks are arranged, their
3 sense of cleanliness, whatever, that you may want
4 to engage in a prophylactic regimen.

5 But I think the military has to be on
6 guard, because coming down the pike are
7 community-acquired staff aureus, and these are bad
8 folks.

9 But that thing has picked up some mobile
10 elements, and it's knocking people off in the
11 community.

12 And I don't see why the military camps
13 will not see even more, and they have seen some.

14 So there may be. I guess what I'm
15 asking for is at the local level, a greater degree
16 of sophistication when these horrendous cases
17 occur, jump on them and do a full analysis, sort
18 of like we would do in a hospital for infection
19 control.

20 I know in one of our hospitals ten years
21 ago we had an outbreak of streptococcal wound
22 infections. Took a lot of work, but we found out

1 a nurse, a scrub nurse was carrying streptococci
2 and apparently shed enough there that it did enter
3 the wounds.

4 Curing her streptococci, the wounds went
5 away, the infection.

6 So there may be a need for enhanced,
7 more microscopic review of these cases when they
8 occur, these sentinel cases, and jump on them.

9 Thank you.

10 DR. POLAND: Bill?

11 DR. HALPERIN: Bill Halperin. Clearly
12 there's a prodigious amount of information
13 presented in the two presentations, but it's
14 largely presented in a way that's not familiar to
15 a chronic disease epidemiologist.

16 It seems that there are two questions on
17 board. One is, does use of prophylaxis bring an
18 epidemic to control once the epidemic is already
19 underway, and clearly in the data there are a
20 couple of examples where it does bring an epidemic
21 to control.

22 What's not clear and maybe it's within

1 the historical wisdom of the group, memory of the
2 group, is whether anybody has ever not intervened
3 in an epidemic and what would happen then. Would
4 they run out of steam or would they keep going?

5 Now, I'm not proposing that that is an
6 experiment that one would ever want to do, but I
7 think looking at the data, one could ask from the
8 natural occurrence of things that have happened
9 whether there's any information on that. That's
10 question number one.

11 Now, question number two is a little bit
12 different, which is clearly, I don't know which
13 slide it is, but there are obviously lots and lots
14 of training sites and lots and lots of different
15 ways of different policies that are implemented.

16 So the question would be in instances
17 where there has been prophylaxis, what is the
18 occurrence of, quote, epidemics versus in the
19 circumstances where there hasn't been prophylaxis,
20 what is the occurrence of epidemics?

21 And, I mean, I'm sure the wisdom of the
22 group would have a number so that one could

1 compare essentially the risks where there is
2 prophylaxis versus the risks where there isn't,
3 but not one by one by one by one, but on, you
4 know, the rate of epidemics versus the rate of no
5 epidemics or the incidence density of infections
6 where there is prophylaxis versus the incidence
7 density where there isn't.

8 But I think these are two separate
9 questions that beg to know what's the rate where
10 there is prophylaxis, what's the rate where there
11 isn't prophylaxis.

12 And I'm sure people who are more
13 familiar with this understand it, but I can't tell
14 what the answers to those things are from the data
15 that's presented.

16 DR. POLAND: Okay. One last comment.
17 We need to move on to the next...

18 DR. KAPLAN: The experiment had been
19 unwittingly done, the answer to your first
20 question. There has not been mass prophylaxis
21 given in Salt Lake City since 1985 and there have
22 been more than 600 cases of acute rheumatic fever

1 in that community since that time, and it's
2 continuing and, in fact, bimodal at that point.

3 And then the other one is not, is not an
4 adequate answer to your question, but if you saw
5 on that Great Lakes slide that I showed you, the
6 attack rate was something like .75 per 100,000.
7 When it got into the middle of that nephritis
8 outbreak, it went up to 80 per 100,000.

9 So the question I can't answer is
10 whether there was prophylaxis.

11 All we can say is there was no strep.
12 So you have to infer that that's what we...

13 DR. POLAND: Okay, thank you. Our next
14 speaker this afternoon is Lieutenant General Kevin
15 Kiley, the Army Surgeon General and co-chair of a
16 Congressionally directed DoD task force on mental
17 health.

18 The Board members are aware that this
19 task force is a subcommittee of the Defense Health
20 Board.

21 Dr. Kiley will update us on the mental
22 health task force activities.

1 General Kiley, honored to have you with
2 us, and the floor is yours.

3 GENERAL KILEY: Please sit down, sit
4 down. Thanks very much. Thanks to all of you,
5 and I appreciate the opportunity to jump ahead
6 here of a couple of presenters.

7 I'm here to just give you a real quick
8 update on how the task force is doing. And,
9 frankly, the bottom line up front is they are
10 doing an absolutely outstanding job.

11 Tom Burke and the administrative staff
12 have done a great job of supporting us.

13 Shelly MacDermid in particular, is my
14 co-chair, has just done trojan work in terms of
15 continuing to collect data to drive the
16 organization in terms of both the small details
17 and the broad vision for the task force.

18 And then we made a decision a little bit
19 earlier, I'm not sure if Shelly briefed that to
20 you back in September I think when you were in
21 Annapolis, but Colonel Dave Orman is full-time
22 detailed to the task force now, and he's been the

1 chief of psychiatry at Tripler, is my former
2 consultant in psychiatry, former program director.
3 And he's now volunteered and has been doing a lot,
4 a lot of the traveling -- and this briefing is
5 more travel log than it is anything in terms of
6 the results, although we may talk a little about
7 that. I'm a little hesitant in, both in public
8 forum and also because we're still in the
9 formative stages to start talking about findings.

10 But Dave and Dick McCormick have done a
11 magnificent job of getting around to a whole host
12 of places to work our way through what we think we
13 need to do for this task force.

14 This is, the purpose of this brief is to
15 just update you from September through December.

16 We have used several different ways to
17 gather information. Frankly, philosophically,
18 we're taking all interested parties and all their
19 information, anything they'd like to tell us.
20 We've had meetings. I'll show you a list of
21 those. We've had direct testimony from
22 individuals and from representatives.

1 As an example, we were in San Francisco.
2 We had the mental health officer for California
3 National Guard come and talk to us.

4 We've clearly had and continue to have
5 and we'll have scheduled here in a couple weeks in
6 Washington subject matter experts to brief us in
7 their areas of expertise.

8 And then the task force is doing
9 literature reviews, generally gaining a large body
10 of knowledge and also data.

11 And as we've gone through the executive
12 session discussions about notional findings,
13 notional recommendations, and I want to use those
14 terms advisedly right now, our concern is that,
15 you know, one does not a series make. We want to
16 make sure that if we think we see a trend or there
17 is an issue in the system somewhere, be it with
18 the VA (Veterans Affairs), with the military, with the private
19 community, that it's not, it's not a series of one
20 where we've got data to back up our position.

21 So we're working our way through those.
22 A lot of that discussion goes on in our executive

1 sessions. We did meet at Fort Hood as a full task
2 force in these meetings, these ones you've seen at
3 San Diego and then we spent a couple days out in
4 California both at the Palo Alto VA and San
5 Francisco VA. We've got all but usually one or
6 two members. Then we're going to meet again here
7 in Washington in December for three full days.

8 And then in January with the task force,
9 we'll meet again in Fort Lewis.

10 We also work by e-mail, as you might
11 expect. And task force members and subcommittees
12 meet by telephone on a regular basis discussing
13 issues and findings.

14 The site visits are not the entire task
15 force. They're usually one, two, sometimes three
16 members.

17 One of the great values of Colonel Dave
18 Orman is that he can tell the emperor when he has
19 no clothes.

20 In this case, he's intentionally
21 volunteered me not to go to any of these site
22 visits because his concern is a three-star general

1 walking in to sit down with some captains and
2 colonels and talk about something is intimidating.

3 On the other hand, he and Dick in
4 particular are very disarming, very perceptive in
5 a very positive way and have done a nice job of
6 getting around to visit and talk with garrison,
7 hospital, community-based services at these
8 installations, spent a lot of time out at Tripler.
9 And somebody had to go to Hawaii, and I went out
10 to Hawaii and enjoyed it out there.

11 They've also taken overseas trips.
12 They've been to Okinawa and Korea and done visits
13 both at Osan and one-to-one in Seoul.

14 So I'm confident that we're touching all
15 the bases. We're not focused just on Army or just
16 Marines and Army, but we've got -- we're talking
17 to communities and leaders across all the
18 services.

19 We were at Pendleton. In fact, I went
20 to Pendleton, talked to the two-star there. He
21 was, he was not intimidated by the three-star
22 general.

1 Spent a lot of time at Fort Bragg, at
2 Polk, we've been to some of these Air Force Bases.

3 Again, I say two, three people off the
4 team go, spend a day or two, sometimes longer, and
5 then report back on their findings.

6 We've got a whole host of future visits.
7 We've actually got Deb Fryar headed over to Europe
8 to meet -- she's been invited over as a task force
9 member to meet with a conference that's going on
10 over there. She's pretty excited about that. I
11 think we're going to get some good feedback.

12 When we started out, I think there was a
13 sense from the task force that if we went to a
14 couple of places, we could get a sense.

15 And I came back to the task force and
16 said, "Look, I think we need to see a lot of
17 places," because when all is said and done and
18 we're, we're being reviewed and graded on our
19 effort, you know, if there's something that's been
20 going on at Fort Carson or something's been going
21 on at Fort Bragg and if there's been something
22 with the Marines and we haven't visited a whole

1 host of those places, then people are going to
2 look at it and say, "You really haven't done the
3 due diligence."

4 And I'm very satisfied that we're going
5 to a whole host of places. You can see we're
6 going to be in Europe in late January, early
7 February.

8 And then we're going to wind up here.
9 We figure by about the end of February, we'll have
10 touched most of the places that we need to, and
11 then the rest of the hard work will be getting the
12 data together and beginning to form this report
13 with its recommendations.

14 And the direct testimony, there's been
15 some very interesting experiences in the town hall
16 format. We've held that at Fort Hood and San
17 Diego. I missed that part of it. I was there for
18 the first part but missed the town hall for San
19 Diego.

20 Then we had a town hall in San Francisco
21 that was very good.

22 We've obviously found that the more you

1 publicize this thing, particularly in cities like
2 San Diego and San Francisco, the more, the more
3 attendance there is.

4 And we did publicize it at Fort Hood,
5 and there didn't seem to be quite the same
6 interest.

7 So we met in personal vignettes and
8 we've met and we've gotten representation from
9 special interest groups, and we've got more of
10 them lined up to include groups like Veterans of
11 Foreign Wars, Iraq War Veterans, MOAA (Military
12 Officers Association of America), et cetera,
13 a whole host we're lining up. And then people
14 can submit on a website testimonies if they want.

15 So we're using every and all means that
16 we can to garner information.

17 We've also taken briefings from these
18 groups at the installations that we visit.

19 We have some DoD-level briefings coming
20 up in, in December in Washington, D.C. to include
21 Army National Guard, Army Reserve, we've got
22 TRICARE coming to talk to us about TRICARE support

1 in mental health and then veterans and military
2 support.

3 Inside our deep, dark secret executive
4 sessions, we've had some interesting discussions,
5 first defining mental health, looking at a vision
6 for military mental health, and then we've had
7 some discussion about defining the scope of mental
8 health for the military.

9 First, I think folks were focused on the
10 active duty issues, some of that revolving around
11 PTSD (Post-Traumatic Stress Disorder) and PDHAs
12 (Post-Deployment Health Assessment) and PDHRAs
13 (Post-Deployment Health Reassessment). But I think
14 we've expanded it to begin to address also issues of
15 public health and mental health issues and also
16 family members' concerns, the issues and
17 challenges of family members.

18 Then we'll begin the hard work. We're
19 getting close to a first draft. We've said,
20 "Look, let's get some stuff down on paper so we
21 can start to track on that," and Tom is working
22 those. We should be looking at a first draft of

1 that report, really still pending, you know,
2 observations and recommendations and backup data
3 that we haven't placed in there yet. And then
4 these are just some more of the briefings that we
5 want to -- again, referencing some of the family
6 members' issues, child and adolescent health support.

7 The MHAT teams are mental health
8 advisory teams that have actually deployed into
9 Iraq and Afghanistan by request of the MNF-I (Multi-
10 National Force-Iraq) Command, General Casey. I
11 mean, we've had four go in, three have come back and
12 they are in the process -- two already have released
13 their report. Done one every year. And that three is
14 back. It's getting ready to release its report up
15 through DoD. It's been through the Army. These
16 are Army teams. And MHAT-IV is also back, and
17 it's starting to work its way through the briefing
18 cycles.

19 And this is really about going into the
20 theater, talking to the soldiers, giving them
21 surveys both as individuals and as groups,
22 collating that data and beginning to look at
23 things like stress, anxiety, PTSD, and whether a

1 soldier's answered yes or no to those symptoms,
2 complexes.

3 So as I said, we're going to have a
4 couple meetings. We predicted the February,
5 March, April time frame we'll be doing the hard
6 work of preparing the report.

7 We're still committed to a readout
8 through DoD and then over to Congress in the May
9 time frame.

10 Senator Boxer met with us in San Diego
11 for about an hour. We had a very good meeting
12 with her.

13 Her intent was to give the task force
14 her and the Congress' intent of this task force.
15 And it was a very productive meeting and open
16 dialogue.

17 And subsequent to that, I heard again
18 from her personally that she was just very, very
19 pleased with the way the task force was going and
20 they really have done a great job.

21 So you can see the final actions are
22 analyze our findings and develop and then begin

1 the process of briefing, most likely starting with
2 this group and then moving up, moving up to SECDEF
3 (Secretary of Defense) or whoever else at the
4 senior levels wants to hear it.

5 And, frankly, that's about it. I will
6 say, I don't want this in writing, but I'll say
7 some of the discussions that we're having now and
8 looking at some of the issues are, as you would
9 expect, access to health care, issues of stigma
10 associated with seeking health care and is that an
11 issue and what kind of recommendations are we
12 going to make for that, even the issues of
13 concerns about security clearances, et cetera.

14 So we're looking at all that. We're
15 looking at the issues associated with the
16 confluence or lack of confluence depending on the
17 circumstances of disparate mental health agencies
18 on an installation and the surrounding community
19 and also some differences between services in
20 terms of the amount of mental health services that
21 are available and provided and how that's
22 coordinated, for example, in the Hawaii Island

1 network, how are the three services -- or four
2 services, depending -- except, of course, the Navy
3 cares for the Marines.

4 No stunning revelations. No, "Oh, my
5 gosh, we didn't know this. Holy mackerel, wait
6 till they hear about this." None of that.

7 We've got a couple interesting places to
8 go, frankly. I think we're looking forward to
9 going, I know I am, to Fort Carson because there
10 have been some issues out there.

11 I'm looking forward to the briefings by
12 military veterans groups that want to come forward
13 and talk to us that feel like they have to, they
14 have to carry a message, and I'm very interested
15 in what they'll have to say and in some open
16 dialogue.

17 We continue to be very interested in the
18 town hall meetings.

19 So I guess my bottom line to you is the
20 group is doing a very good job. They are
21 well-supported, well-resourced. We're not lacking
22 for anything other than enough hours in a day and

1 days in a week.

2 And we've got everybody that initially
3 signed up is still on board and working with us,
4 and I think, I think we're in good shape so far.

5 So subject to your questions, frankly
6 that fulfills the administrative requirement to
7 come down and give you an update, but I'll be
8 happy to take on any questions or make notes,
9 frankly, if you'd like me to look at something
10 that comes to your mind.

11 DR. POLAND: Thank you, General Kiley.
12 The Board appreciates the regular updates and
13 briefs you all have provided.

14 I do have a couple of questions. One,
15 is there the opportunity when the site visits are
16 done for the Board members to hear from service
17 family members?

18 GENERAL KILEY: Absolutely. It took us
19 a little bit of time to break the code of how to
20 describe what we were doing.

21 Our executive sessions are closed, then
22 we've had open sessions with invited speakers, and

1 then we've had these town hall sessions.

2 In the town hall sessions, we've clearly
3 had a whole host of family members come up.

4 I can remember we had a mother come up
5 who said her son who had been a dependent son with
6 significant autism had been a real challenge for
7 the family and for the mental health community to
8 support them.

9 We had a very moving presentation by a
10 mother of a young soldier who had done a year in
11 Iraq, was back at Benning and proceeded to kill
12 himself simply by putting a gun to his head. And
13 she was very composed in telling this and talked,
14 talked lovingly about her son, you know, just
15 other than the fact that suicide may or may not be
16 a piece of this whole mental health, and are we
17 addressing this.

18 We've had individuals get up and give
19 their personal testimonies and soldiers that have
20 been injured in combat.

21 We had one guy in San Francisco who is a
22 Vietnam veteran still working his way through

1 PTSD, et cetera.

2 So yes, it has been wide open. In fact,
3 we run out of testimony before we run out of time.
4 In Fort Hood, we were supposed to close the
5 session, and a policeman who had -- a policeman
6 from Killeen who was a nurse with the, one of our
7 combat support hospitals wanted to testify. So we
8 kept the open session open for a while. He got
9 there and talked to us for a while and gave us
10 some very good feedback.

11 So there's no limit and we'll stay
12 around till everybody else goes home.

13 DR. POLAND: My second question is will
14 the level of evaluation be able to look at
15 possible sort of dose-effect relationships?

16 In other words, it's one thing and
17 there's a set of issues surrounding, say, a single
18 deployment, perhaps another set of issues around
19 being deployed four or five times.

20 Are you -- is there enough material, so
21 to speak, to be able to look at that level?

22 GENERAL KILEY: Yeah, I think there's

1 tons of it, frankly, most of it coming out from
2 the MHATs which we'll have incorporated into our
3 report.

4 But the data is very clear that the
5 level of stress goes up understandably with
6 repetitive deployments.

7 And so when you talk to -- and now our
8 MHATs have started to look at -- and this MHAT-III
9 will show us again that multiple deployers have a
10 slightly higher incidence of anxiety, depression,
11 PTSD types than single deployers, but they all
12 have stress to some extent, as you might expect.

13 So yes, there's getting to be a large
14 body of knowledge focused on the soldiers in
15 theater in this MHAT process.

16 Of course, Dr. Hoge has done a different
17 kind of study.

18 That's frankly been part of the
19 confusing piece about this, particularly for the
20 lay public and the press as they attempt to cobble
21 together a piece about mental health and, you
22 know, what's the military doing about it.

1 Chuck Hoge looked at anonymous surveys
2 designated by a unit.

3 So the First Brigade of the 82nd
4 Airborne at this date time group, as they say,
5 filled out a survey anonymously. And they asked,
6 you know, "Were you depressed? Were you angry?
7 Were you using alcohol?" and they got some
8 numbers.

9 And then they followed the First Brigade
10 of the 82nd Airborne every 6 months for 18 months,
11 24 months, and they go back to the First Brigade,
12 they hand out anonymous surveys, and they survey
13 them again.

14 Well, it may or may not be the same
15 soldiers. The MHAT, the MHAT has done it by name
16 and social security and then the PDHA and PDHRA,
17 the post-deployment screens which are much less
18 detailed than either Hoge's review or the MHAT
19 teams, and there have been a couple different lead
20 persons: Ed Crandall led MHAT-III and Colonel
21 Castro has MHAT-IV, Virgil Patterson had I and II,
22 but their questionnaires are much more specific

1 and much more detailed.

2 And it's our intent to have all that
3 data in this as part of that to kind of roll that
4 up.

5 DR. SHAMOO: Dr. Shamoo. Are you going
6 to look at the extent of training for the medical
7 personnel -- and I don't mean psychologists and
8 psychiatrists only -- overall to their early
9 contact with the enlisted man and whether that's
10 affecting how one looks at the mental illness?

11 Because that's when they are going to
12 come in contact.

13 And medical schools, with all due
14 respect to them, and I have taught in medical
15 school for 35 years, it's not sufficient, and a
16 lot of them who become nonpsychiatrists or
17 nonpsychologists, they have very little training
18 and education in how to deal with issues of mental
19 illness. And I'm talking from very extensive
20 experience in dealing with mental illness, and I'm
21 not a psychologist or a psychiatrist.

22 GENERAL KILEY: That's a very, very good

1 question. There's about four, five different
2 answers, all of which point toward the final
3 answer, yes.

4 There are at almost every level an
5 increasing awareness that we have got to get ahead
6 on mental illness and mental wellness, frankly.

7 There are strategies in dealing with
8 soldiers before they deploy in terms of better
9 instruction in how to recognize and prevent, quote
10 unquote, suicide and suicide prevention.

11 There are, there's a course we have
12 just, we're just about to launch at Fort Sam
13 Houston that they're all the mental health
14 providers. And we had at one time more than 200
15 over in theater. But we give them a one-week
16 intense course on how to do what they're supposed
17 to do in theater in terms of reducing stress and
18 managing PTSD symptoms in troops.

19 On the clinical health care side, we're
20 doing a couple of things.

21 At Tripler, we're just about to put
22 mental health specialists in our primary care base

1 so that they can do a couple things. They can
2 educate primary care providers as well as becoming
3 access portal for soldiers and family members to
4 directly access.

5 We've got a project that a guy by the
6 name of Chuck Engle out of Walter Reed has been
7 doing with Duke University. He calls it
8 respect.mil, and he ran a pilot at Fort Bragg
9 where he took a large group of primary care
10 providers, physicians assistants and family
11 practitioners in the community of Fort Bragg and
12 gave them extensive training in the diagnosis and
13 the therapy of specifically PTSD presumably to
14 address the issue that most soldiers, 90 percent
15 of the soldiers will access their primary health
16 care provider, i.e, sick call, go see their doctor
17 or their PA (Physician's Assistant). Rarely will
18 they go to the mental health unless they are
19 really pressed or directed to do that.

20 So what we're attempting to do and we're
21 in the process of implementing this all across the
22 Army and Chuck is coming to talk to the task force

1 in two weeks, is implement this across all the
2 Army bases which really empowers primary care
3 providers to not just make the diagnosis but to
4 begin to treat.

5 The next thing is, and I just got an
6 e-mail from my good friend Dave Orman, my
7 consultant, who said we're not doing a very good
8 job inside of our residency training programs,
9 even in psychiatry we're not doing enough training
10 about PTSD, how to recognize it, how to treat it
11 across the broad spectrum.

12 So, I mean, I think -- I have not had
13 this discussion with the task force, to be honest
14 with you.

15 But as you see, I'm using this task
16 force, frankly, as a vehicle to kind of leverage a
17 lot of this not punitively but supportively that
18 we can really start to step forward and say to the
19 soldier -- because we know this. The Third
20 Infantry Division is going back for its third
21 one-year rotation, and that's hard duty. They're
22 still signing on, but that's hard duty on them and

1 it's hard duty on their families, and we need to
2 stay ahead of this thing.

3 And, I mean, I think, frankly, and this
4 is, again, this is not task force, this is just me
5 talking, I think we need to worry about suicide.
6 We need to worry about whether we're missing
7 something.

8 You can, you can talk about the
9 diagnosis, you can do psychological autopsies, you
10 can say that, yeah, our Army suicides are young,
11 white males. In home base, it's often
12 alcohol-related, it's usually related to
13 relationship problems and/or disciplinary
14 problems. Of course, in theater they are all
15 walking around with a loaded weapon. And so they
16 are getting e-mails every day from their spouses,
17 their friends, sometimes girlfriends and
18 boyfriends, and sometimes from their friend who
19 says, "Hey, I just saw your..." you can fill in
20 the rest, and they go right on to the...

21 So one end of the spectrum is suicide
22 and the other is what are we training our combat

1 medics, the 68 whiskeys, what are we training our
2 LVNs (Licensed Vocational Nurses) and nurses?

3 And I think we're in the process of
4 beginning a full court precedence, because down
5 the road having talked to the VA, at the risk of
6 taking too much time here, they are under the
7 impression, we don't disagree, that it takes a
8 while to start to see the fallout of the stress,
9 labor, PTSD or whatever after deployments and
10 after combat operations. And so you may be
11 looking at a bow wave coming at us over the next
12 couple of years.

13 And the VA has got representation on the
14 task force, and they clearly have got an issue
15 coming at them, too.

16 DR. BLAZER: Dan Blazer. I'm a member
17 of the task force as well.

18 Colonel Kiley -- General Kiley, excuse
19 me, is certainly reviewed very well. And I think
20 the task force actually faces three, probably
21 more, but at least three major challenges. I
22 think number one is that this task force has done

1 an incredible amount of work and we literally are
2 drowning in data right now.

3 Coming out of that data with meaningful
4 and fairly specific and probably somewhat limited
5 recommendations will be a challenge.

6 We have, I think we will have the data.
7 As General Kiley said, there isn't going to be any
8 surprises in this at all, and I don't think
9 anything that could come up later would be a
10 surprise as well.

11 Second thing is that this is receiving
12 increased attention in the media.

13 And whatever comes out of this task
14 force I'm sure is going to be paid attention to.
15 There's an NPR (National Public Radio) series
16 running just this week on mental health issues in
17 the military. And we're not writing this report for
18 the media, obviously, but on the other hand, this is
19 something that many, many eyes are paying attention to.

20 And the third which I've kind of had
21 concern about and I think will continue to be a
22 challenge all the way through is that these

1 disorders, as General Kiley said right at the end,
2 go on for a long time, so that even though there's
3 a divide between active duty and the VA in terms
4 of these soldiers, there is no divide.

5 GENERAL KILEY: Right.

6 DR. BLAZER: This goes on for them. And
7 trying to effect a way that they can receive some
8 type of care that's probably going to go on for
9 the ones who have the most chronic conditions for
10 years is going to be a very good challenge.

11 I think Mark is going to show you some
12 data later.

13 They are already beginning to experience
14 a load of these individuals that they are going to
15 be looking at for a long, long time. So I think
16 we need to keep that in mind.

17 GENERAL KILEY: I absolutely agree with
18 everything you said. And I think the task force
19 is -- I think we recognize that, too.

20 Frankly, the only other thing I could
21 say about all this is my sense that Congress is
22 just standing ready and poised to provide us --

1 and by us, I mean, the Executive Branch, including
2 DoD and the VA -- whatever they want and not
3 necessarily at the expense of something else, too.

4 So I'm hoping that we're going to have
5 specific, not too limited recommendations that
6 will really maybe change the way we actually
7 address this issue nationally from a public health
8 perspective as well as recognizing that this is
9 going to be a long haul.

10 If we're out of Iraq in the next six
11 months or 18 months, it will be years and years.

12 And I do think that we're, we're light
13 years ahead of where we were coming out of
14 Vietnam. I think there's fair recognition of
15 that.

16 I think the VA is, Mike Christman and
17 Jerry Cross, the leadership over there, are
18 leaning far forward, just kind of waiting for us
19 to tell them what they need to do.

20 They've already identified PTSD clinics
21 and they've got some magnificent work going on in
22 a couple of the VAs.

1 DR. POLAND: One more comment from Russ
2 and then Miss Embrey and then we will close.

3 DR. LUEPKER: Russell Luepker. I'm
4 impressed with the thoughtfulness and extent of
5 what you're collecting. Just one question. Are
6 you collecting events? For example, do you know
7 the prevalence of suicide, acute hospitalization
8 for psychiatric illnesses? What is the magnitude
9 of the problem?

10 GENERAL KILEY: We have that data in the
11 Army, Navy, Air Force and Marines. We have a lot
12 of the data.

13 The task force has not sat down quite
14 yet and said, "Okay. What's the data point for
15 suicides in young males?"

16 We know that's one of the issues. The
17 task force is -- from my view, they don't need to
18 do that work. That work's already been done. We
19 can give you death rates, suicide rates per
20 hundred thousand by services in Iraq, back in the
21 United States. That's all public data, frankly.

22 So I'm sure as we address this issue of

1 suicide, there will be a call for that data, but
2 that's very simple to get. That's not a problem.

3 In terms of admissions to psychiatric
4 hospitals, discharges from the service for
5 psychiatric... we can get all that, too. That's
6 all recorded and annotated.

7 So the task force doesn't need to do the
8 work other than simply ask the question, and in
9 very short order we'll have that.

10 And we are very sensitive to backing up
11 anything and everything we say with data as best
12 as we can because there's a tendency, as you all
13 well know, to be so struck by an episode or an
14 issue, that you really want to make that a finding
15 and then try to extrapolate, and if there is not
16 data to support it, it's -- it can be problematic.

17 MS. EMBREY: General Kiley, I just
18 wanted to thank you publicly for the work that
19 you've done for the Army in this area since you
20 took leadership in the Army as a Surgeon General.

21 I think that you would not say so, but
22 you have done a lot to reset the warriors' mind as

1 they return. You've set up very innovative
2 programs for the force. And I know it's going to
3 be hard for you to be objective about that as you
4 chair the task force, but you deserve a lot of
5 credit for that, and I thank you.

6 GENERAL KILEY: Well, thank you. That's
7 nice for you to say.

8 (Applause)

9 GENERAL KILEY: That's very kind. But,
10 you know, I just mentioned some of the great
11 people on the task force that are working. And,
12 you know, the Army's not alone.

13 I do think we're in the face of the sea
14 change, and that's what I'm frankly most excited
15 about and was extremely excited when Bill
16 Winkenwerder asked me to chair this thing. It's
17 got me generating some frequent flyer miles, but
18 it's well worth it.

19 I'll end with this anecdote that's been
20 driving this.

21 When I was in Europe many years ago as a
22 surgeon over there, we were working our way

1 through force structure environment. And the Army
2 has these teams called combat stress control teams
3 made up of psychiatrists, psychologists,
4 occupational therapists and a list of technicians,
5 and we've got a ton of them in Iraq now, three
6 hots and a cot, back into battle and you're going
7 to be okay, and it's really done marvels.

8 But back in the '97 time frame we were
9 trying to convince the senior leader, long since
10 retired, you don't know him, and we were showing
11 him force structure and said, "And we need this
12 22-man combat stress control team."

13 This General looked at me -- I was a
14 one-star at the time -- he looked at me and he
15 said, "General, I don't need a combat stress
16 control team. I'm just going to train my troops
17 so they are battle-hardened and ready to go. They
18 won't need any mental health."

19 And I looked at him, and I didn't have
20 anything to say. What part of the body of
21 knowledge do we understand about the soldier's
22 heart and combat stress, shellshock don't you

1 understand? It was just flabbergasting to me.

2 We have come a long way from that point.
3 We've got generals now that want to lead from the
4 front of this.

5 We've done some post-deployment
6 screening where we've sent the battalion commander
7 in first to talk to the mental health counselors
8 as part of the demobilization process, and then
9 everybody else follows in right behind them.

10 So I don't have the time to go through a
11 lot of these things that are not necessarily part
12 of the task force except for briefing.

13 But I think there's a lot of change
14 coming, and I'm just honored to be part of this
15 real exciting time, and I appreciate the time of
16 the Board here.

17 Let me come down and talk to you for a
18 couple of minutes and say thank you.

19 DR. POLAND: Thank you, General Kiley.
20 We'll take a ten-minute break now.

21 (Applause)

22 (Recess)

1 DR. POLAND: Okay. Our next speaker
2 this afternoon is Lieutenant Colonel Hachey from
3 the Office for Force Health Protection and
4 Readiness, Policies and Programs. He'll provide a
5 brief on DoD's pandemic influenza preparedness.

6 Saw you yesterday. Good to see you
7 again today.

8 LIEUTENANT COLONEL HACHEY: Thank you
9 for continuing these ongoing briefings. Since
10 it's only been about a month and a half since the
11 last briefing, this briefing will be brief.

12 The agenda for my briefing will start
13 out with this is an overview of what the current
14 disease status is, what the progress in the
15 national pandemic strategy implementation plan
16 taskings are, an appropriately small slide
17 describing budget, antivirals, vaccine and
18 probably the newest news is some recent develop
19 with our Watchboard.

20 As far as H5N1 status, as of 29
21 November, there have been 256 cases with 154
22 deaths, and Indonesia continues to be the hot spot

1 with now 55 cases and 45 deaths this year.

2 With the Department of State in the
3 lead, there is an international effort with
4 substantial DoD input and engagement as far as
5 fixing this particular hotbed of avian influenza.

6 Since actually both the last briefing,
7 the briefing before, there's been really no
8 significant change in the epidemiology.

9 Clade 2 still is the predominant clade.
10 Clusters are continuing to occur. Again, they are
11 a little larger than they were a year ago, but no
12 significant increase over the past six to nine
13 months.

14 The age distribution is unchanged. And
15 there's no evidence of significant mutation. The
16 next three slides were actually blatantly stolen
17 from the WHO (World Health Organization). The
18 first one describes the age distribution.

19 As you can see, it's still primarily the
20 youngsters who are getting avian influenza, and
21 it's uncertain whether this represents an age or
22 exposure-dependent risk factor.

1 The next chart illustrates the onset of
2 symptoms and hospitalization as far as the
3 timeline.

4 And, again, you can see that a good
5 share of the folks are presenting beyond the
6 recommended optimal window for antiviral therapy.
7 So fairly late in the course.

8 And the last chart depicts the onset of
9 symptoms and death, with death occurring for the
10 most part again about a week out after the onset
11 of disease.

12 And the cause for disease still remains
13 primarily an ARDS kind of picture.

14 The next slide depicts our DoD tasks and
15 the national implementation plan.

16 Now, DoD has about 114 total tasks which
17 represents about a third of all the tasks in the
18 national implementation plan. Of that, DoD's in
19 the lead for 31 and is supporting in 83.

20 Health Affairs has the lion's share of
21 these tasks with 73 of which 20 were in the lead
22 and 53 in support.

1 It's nice that we are on schedule for
2 all of our DoD lead tasks. We've met all of our
3 six-month suspense taskings and we're on track
4 with the 18-month suspense taskings.

5 We are also fully integrated in the
6 interagency process as far as other significant
7 tasks in that implementation plan.

8 And three, just as an example, are
9 national antiviral prioritization list or
10 strategy, a vaccine prioritization strategy and
11 risk communication, both platforms and materials.

12 The overall DoD strategy continues to be
13 one of a layered approach, combining social
14 distancing which is tailored to local
15 requirements, infection control, pharmacologic
16 measures to include vaccine and antivirals, all
17 reinforced with a robust communication plan
18 targeted both at providers and beneficiaries.

19 Now, I'm not Lizzie Borden. You can't
20 get blood from a stone, which leads us to some
21 budgetary issues.

22 There is no supplemental funding for

1 next year, and at this point in time limited
2 funding for the FY08-09 time schedule.

3 This will probably limit our, our more
4 robust goals as far as pandemic planning but has
5 not put them to a halt.

6 This leads us to antivirals. Just as in
7 the national implementation plan, Tamiflu does
8 remain the, both the primary and the drug of
9 choice for the treatment of a potential pandemic.

10 As far as the DoD stockpile, we now have
11 2.6 million treatment courses in our larger
12 stockpile that, as you remember, is divided into
13 three geographic areas.

14 We're also establishing an additional
15 470,000 treatment courses that are going to be
16 placed at the MTFs (Military Treatment Facilities)
17 which represents about 10% of the population at risk.

18 Following the delivery of all of our
19 ordered Tamiflu, the larger DoD stockpile will
20 have about almost 3 million treatment courses
21 available for either prophylaxis or for treatment.

22 We've revised our Tamiflu release

1 policy, and this includes a post-exposure
2 strategy.

3 Also has a use matrix based on variable
4 disease severity and supply.

5 And if the layered approach is, in fact,
6 successful, which the modeling suggests that they
7 might be, this may provide more antivirals for use
8 in community containment measures.

9 The vaccine, we currently hold 1.7
10 million doses of Clade 1 Vietnamese 1203 vaccine.
11 Of that, 103 million have been bottled.

12 The good news is the previous vaccine
13 degradation rate that was somewhat concerning
14 about six months ago has stabilized and that 1.7
15 million doses appear to be remaining constant at
16 least at this point in time.

17 Some significant unknowns are the amount
18 available to DoD from the current and future
19 vaccine production lots, and those negotiations
20 are ongoing. Also, given funding limitations,
21 just how much vaccine we'll be able to buy.

22 We are conducting a risk analysis

1 through modeling to determine the potential impact
2 on DoD with variable vaccine effectiveness and
3 vaccine penetrants within the DoD community.

4 The last issue is communication. The
5 MHS (Military Health System) Watchboard is
6 transitioning now to the official DoD site, and
7 this will incorporate nonmedical DoD activities
8 as well as the previous MHS content.

9 The address is listed here which hasn't
10 changed but the access has. It is now open
11 access.

12 And it now has a direct link to and from
13 pandemicflu.gov. --

14 MS. EMBREY: Could you go backward
15 again? We're writing it down.

16 DR. POLAND: The Web address.

17 MS. EMBREY: There you go.

18 DR. POLAND: Thank you.

19 LIEUTENANT COLONEL HACHEY: Okay. So,
20 again, we now are directly linked with
21 pandemicflu.gov both to and from. We're expanding
22 our risk communication libraries. This includes

1 Web access for beneficiaries, but probably more
2 importantly, access to risk communication
3 libraries for the providers to download and modify
4 to suit to their local requirements.

5 It also has a provider link which
6 includes clinical guidelines, policy and guidance
7 and will be a format that we can change the
8 guidance with recent developments and clinical
9 knowledge.

10 Future content will include a question
11 and answer library that will be expanded and also
12 the ability for beneficiaries to post questions.

13 And targeted a little later is a PHEO's
14 (Public Health Emergency Officer) corner which
15 will have PHEO specific information and a forum
16 for them to interact.

17 MS. EMBREY: You might want to tell them
18 what a PHEO is.

19 LIEUTENANT COLONEL HACHEY: Public
20 Health Emergency Officer.

21 The last series of slides just gives you
22 an idea of what the Watchboard looks like now.

23 So people can either click on here for

1 service members, there for health care planners or
2 providers, here for a menu that is more specific
3 for DoD leadership. You can also get there also
4 by just clicking on these areas, or if you don't
5 like those, you can use menu at the top.

6 So almost no matter where you put your
7 mouse on this sheet, you'll get to the area that
8 you want.

9 This is what the service members and
10 civilians and family I guess home page looks like.
11 It includes fact sheets, tri-folds and fliers that
12 are available, and this will be expanding as we
13 develop more materials and organizations submit
14 their, their materials to the, to the Watchboard.

15 This is the home page for health care
16 planners and providers. Here they can again
17 access DoD policies and guidelines, communications
18 and outreach programs, DoD plans, H5 laboratory
19 testing sites, disease reporting and notification
20 requirements, find out what's happening with avian
21 flu through WHO websites and response and
22 containment measures.

1 As far as DoD leadership, again, links
2 to agencies like MILVAX (Military Vaccine Agency),
3 NORTHCOM (Northern Command), PACOM (Pacific
4 Command). The Department of Defense education
5 activity also has a pandemic flu website giving
6 guidance to their population, both educators and
7 their end users.

8 If you're interested in a history of the
9 Watchboard, that's also there.

10 Frequently asked questions. And a
11 glossary of terms for folks to refer to. And I
12 did promise I'd be brief.

13 DR. POLAND: Okay. We're sort of packed
14 at the edges here.

15 DR. LEDNAR: Wayne Lednar. Thank you
16 for that update on the virology and the
17 positioning of antivirals. The question I have is
18 one of what are we, what are we thinking about
19 when this happens in terms of health care
20 delivery, operations and continuity of being able
21 to do that. And I'm wondering if DoD has run a
22 scenario for its health care delivery,
23 anticipating issues of a 30 percent absenteeism,

1 that government health authorities have closed the
2 DoD schools and the daycare centers on post, to
3 the extent that you have many single parent
4 families, what's going to be the response for that
5 service member being able to get to work or sick,
6 getting care and care for their family.

7 So I'm wondering how some of this is
8 turning into plans for action in terms of health
9 care operational continuity.

10 LIEUTENANT COLONEL HACHEY: Actually,
11 we're on our way and almost there in some areas.

12 For example, the Office of Personnel
13 Management does have a pandemic flu plan that does
14 include issues like dual training, telecommuting,
15 what are they going to do with a significant
16 decrease in absentee -- significant increase in
17 absenteeism.

18 There has been a number of local
19 commands that have started exercising, and I
20 believe the target date is April of this year.
21 There's a DoD level exercise looking at what the
22 impact of that significant absenteeism rate will

1 have on DoD operations.

2 DR. LEDNAR: One aspect of experience
3 I'd share is how our information technology
4 experts have looked at it is we've often heard
5 about how telecommuting and sort of working
6 virtually is a way to work.

7 Our assessment is that to the extent
8 that you require significant broadband capability,
9 the ability to use telecommuting is very much
10 exaggerated as a way to continue operating
11 effectively.

12 So if anyone's got a great sense of
13 relief, this is going to do it. Even if we could
14 get enough laptops and connections, probably not
15 going to be the case in practice.

16 MS. EMBREY: This is Ellen Embrey. I
17 think the joint staff wants to make a comment, but
18 I want you to know that inside the Department, we
19 were specifically very concerned about what to
20 tell the personnel, the military and the civilian
21 personnel community across the Department about
22 working from home and actually exercising that.

1 And there's going to be an exercise
2 within the next two months internal to the OSD
3 staff, the very senior levels of the Department,
4 to see a no-notice -- you know, during a week, 30
5 percent of the people will be told stay home and
6 work from home and see how it works.

7 So we are exercising that and we'll be
8 able to report back on how well that works, and we
9 anticipate the same issue that you just mentioned.

10 DR. POLAND: Would you mind just saying
11 your name and a brief introduction so we can
12 capture it.

13 DR. WALKER: David Walker from the
14 University of Texas Medical Branch.

15 DR. POLAND: Thank you. Welcome. Okay.

16 DR. KAPLAN: Ed Kaplan. You said you
17 have a budgetary limit of \$100 million for the
18 next year. What would you do different if you had
19 a budget that doubled like that? In other words,
20 how would you move ahead differently than you're
21 being -- than you're having to do at the present
22 time?

1 I think the Board would be interested in
2 what we could do to further this if we had a
3 printing press in the basement.

4 LIEUTENANT COLONEL HACHEY: Now, the
5 important caveat is what would I do as opposed to
6 what would DoD do.

7 DR. KAPLAN: What could be done, how
8 about that?

9 LIEUTENANT COLONEL HACHEY: I think some
10 options, one would be to procure more vaccine if
11 it was available.

12 The supply capacity or the production
13 capacity is probably a great limiting step right
14 now.

15 But in projecting further down the road
16 as capacity increases, then getting more
17 pre-pandemic vaccine at least to use as a, either
18 a partial protection or a good primer would be one
19 area where the, where money could be spent.

20 Increasing our surveillance
21 capabilities, having more local diagnostic
22 capabilities with PCR.

1 Another example -- another place where
2 we could spend more money is more antivirals so we
3 could really center in on community containment as
4 well as preserving operational effectiveness.

5 DR. KAPLAN: So that would be your wish
6 list, to coin a term?

7 LIEUTENANT COLONEL HACHEY: That would
8 be my wish list.

9 DR. KAPLAN: Thank you.

10 DR. POLAND: Dr. Smith, did you want to
11 make comments?

12 MAJOR SMITH: Sir, this is Randy Smith.
13 Also, truth in advertising, I'm not a doctor.

14 DR. POLAND: I apologize.

15 MAJOR SMITH: I didn't want to claim
16 credit for something I didn't have.

17 But to answer your question, sir,
18 earlier to supplement what Colonel Hachey had
19 said, there's extensive planning efforts underway.
20 I believe I briefed two AFEB meetings ago on this
21 particular issue. There is a Department of
22 Defense signed pandemic influenza plan that was

1 signed in August, and there are five geographical
2 combatant commands, COM plans that contain the
3 operational details of how to respond to a
4 pandemic event.

5 There's been a lot of activity in this
6 area, and there's been a series of tabletop
7 exercises and a series of theater engagement
8 activities from the geographical combatant
9 commands: NORTHCOM, EUCOM (European Command),
10 PACOM and to a degree CENTCOM (Central Command)
11 have done tabletop exercises on this to date.

12 We've also done something, and I don't
13 want to obligate Commander Batsel, but I do know
14 that US Northern Command has been appointed as the
15 global synchronizer of this pandemic planning
16 activity.

17 So to answer your question, sir, about
18 the plans and operational side of the house, there
19 has been a lot of activity on this. There's a lot
20 occurring at the combatant command level. And the
21 theater combatant commands also have a great deal
22 of interest in theater engagement and training and

1 exercising to supplement the prophylaxis and the
2 vaccine purchases if money does become available.

3 Thank you.

4 DR. POLAND: Thank you.

5 COLONEL ERICKSON: Colonel Loren
6 Erickson. I just want to make a couple comments
7 for consideration by the Board. You know,
8 respectfully submitted, a lot of the national
9 plans right now are very vaccine-centric. The
10 lessons learned from beating back SARS (Severe
11 Acute Respiratory Syndrome) was that, in fact,
12 we didn't have antivirals in a big stockpile,
13 and we didn't -- in fact, we didn't have
14 diagnostics early on. But we didn't have a
15 vaccine. And yet, you know, bread and butter
16 public health officials using the standard
17 methodologies of surveillance, early detection,
18 isolation of cases, quarantine, home quarantine,
19 closing of schools, et cetera, was highly effective.

20 Right now we've got a lot of vaccine for
21 a clade that is no longer circulating. And, you
22 know, to me that's an issue.

1 So I will tell you that some of our
2 current activities of surveillance were started
3 with FY06 money, and without an FY07
4 appropriation, we're having to put a certain
5 number of things in sort of a slow burn.

6 And I encourage the Board to consider
7 perhaps making some recommendations as relates to
8 prioritization of where the money should go,
9 because I think that there's a certain tunnel
10 vision right now that just looks at a vaccine.

11 DR. POLAND: All right.

12 COMMANDER BATSEL: Commander Batsel from
13 NORTHCOM.

14 I'd like to reiterate the importance of
15 looking at pandemic influenza as an environment
16 that encompasses so much more than medical. So
17 that if we use our resources only for medical
18 purposes up front, we still remain unprepared.

19 We need to consider the planning across
20 agencies, across geographical regions and
21 throughout the DoD, and for that, significant
22 funds are required.

1 We're looking at potential impacts on
2 our government continuity, on the continuity of
3 other governments in other countries. And
4 globally the impact is enormous.

5 So if we're looking at just stockpiling,
6 we're going down the wrong trail, in my opinion.

7 DR. POLAND: Mike?

8 DR. OXMAN: Mike Oxman. Medical
9 personnel are going to be primary targets in short
10 supply. And can you mention what plans are for
11 prophylaxis for Tamiflu prophylaxis at this point
12 for medical personnel?

13 LIEUTENANT COLONEL HACHEY: With the new
14 and revised antiviral release policy or strategy,
15 in that matrix it does have a niche for health
16 care providers who are actually providing direct
17 patient care to patients who are likely to expose
18 them that they should be considered at least for
19 either operational prophylaxis or post-exposure
20 prophylaxis or post-exposure treatment.

21 So that they are included in the, in the
22 matrix.

1 What we don't know is how much, how much
2 antivirals we're actually going to need.

3 Will the current dosing recommendations
4 still hold or will people act like mice and you
5 have to double it?

6 So hopefully we'll continue backup, and
7 the current dose will be more than, more than
8 suitable.

9 But we don't know that. We don't know
10 what the attack rate's going to be.

11 So if we want to at least be able to
12 treat those who are ill with disease, that will
13 provide less for prophylaxis and if our
14 operational requirements are greater as far as
15 protecting those folks who are on the front line
16 and exposed to virus.

17 So there are a number of moving parts as
18 far as who actually will get how much antivirals.

19 But in our prioritization matrix, health
20 care workers again in that particular niche are
21 high on the list.

22 DR. POLAND: Any other comments? Okay.

1 Thank you. I'll make -- this is Dr. Poland. I'll
2 make a few comments on behalf of the select
3 subcommittee. We have continued to be busy. We
4 met for a day yesterday in Washington, D.C. and
5 invited the various manufacturers to come and
6 brief us on where they were with their research
7 and development efforts so that we had a better
8 understanding of what was happening on the vaccine
9 side of things, by way of background, some sort of
10 fill-in things to what Wayne said.

11 It is interesting to me that a lot of
12 people sort of get their sense of the importance
13 of this by their recollection of media reports.
14 And the media, of course, is on to other things.
15 But the pace of deaths is happening about double
16 what it was last year.

17 The virus is an estimated one or two
18 amino acid mutations away from being able to
19 attach from animal, that is, two six to two three,
20 human receptors. We've begun to see some isolated
21 resistance to Tamiflu with certain strains of
22 H5N1.

1 It takes about one amino acid mutation
2 for that resistance to occur.

3 So there's a lot still happening and a
4 lot of knowledge yet to learn about the virus.

5 The Board has previously written
6 recommendations on the research needs that need to
7 occur, we've written recommendations on the use of
8 mask generally defined, and we have written some
9 recommendations on the use of vaccine in
10 particular, sort of a hold policy on the Clade 1,
11 1203 vaccine that's available.

12 There haven't really been any documented
13 Clade 1 infections in the last six months or so.
14 Maybe a little longer now.

15 So this is a moving target, a very
16 dynamic environment, lots of evolving Clades and
17 quasi species of this virus, and it's unclear what
18 will happen other than the need for vigilance and
19 preparedness.

20 The one other thing I might say, we have
21 been, of course, keeping our eye on H5N1, but H7,
22 H9, even H2 are also viruses that could

1 potentially be pandemic.

2 So what I can summarize from what we
3 heard yesterday is there are a variety of
4 different vaccine approaches. I counted looking
5 at live versus inactivated versus whole, versus
6 split and various adjuvants, at least ten or more
7 approaches being vigorously approved. All of them
8 have timelines.

9 I don't think the timeline is
10 confidential information, was it?

11 All of them have time --

12 COLONEL GIBSON: No.

13 DR. POLAND: Okay. Let me just make a
14 general statement that all of them are timelines
15 that are going to be, you know, three to five or
16 more years out in terms of an approved vaccine.

17 So it's a very difficult area of
18 uncertainty in terms of what do you buy, what do
19 you stockpile, et cetera.

20 It's a little more complicated than SARS
21 was in the sense of with SARS, you have the
22 advantage of a very long incubation period where

1 you could quarantine people, and that was the
2 successful -- in fact, the only thing that one was
3 able to bring.

4 Not so with influenza and particularly
5 pandemic influenza.

6 However, it is clear that there were
7 communities in 1918 that took preparedness and,
8 let me just broadly call them, community
9 mitigation efforts very seriously and communities
10 that did not had very different morbidity and
11 mortality experiences, and that data is still
12 being collected and analyzed and published.

13 So subject to any questions people have
14 about what the select subcommittee has done,
15 that's really all I was going to say, unless any
16 of the other subcommittee members have anything
17 they want to add.

18 Mike?

19 DR. OXMAN: Mike Oxman. I'd like to
20 speak for myself, and I think the data has
21 accumulated to make it clear that the vaccine that
22 we purchased is not going to be effective, is not

1 likely to be effective against a pandemic flu
2 that's likely to occur and isn't going to be
3 useful for priming.

4 On the other hand, the live attenuated
5 vaccine FluMist has -- and I have no stock in any
6 of these companies -- looks like, first of all, it
7 offers promise and, secondly, that it could be
8 ramped up for production if we could get rid of
9 this enormous weight of pre-decided acquisition of
10 split virus vaccine which is also what we heard
11 yesterday. Most of HHS (Health and Human Services)
12 money that's been committed to corporations, most of
13 it has been for ramping up production capacity of
14 split virus vaccine.

15 COLONEL GIBSON: This is Colonel Gibson.
16 I do have to make a comment for the record.

17 The Defense Health Board is not in the
18 procurement business and does not make
19 recommendations on procuring specific brand name
20 products.

21 DR. POLAND: Greg Poland. I might just
22 add one thing. It was a late-breaker abstract

1 that was presented at IDSA on trainers' work where
2 they had done an early trial with an H5N1 vaccine
3 I believe it was in 1998, and they got one or two
4 doses, and then this past year gave them a second
5 or third dose. I can't remember what it was.

6 And indeed, though they were different
7 Clade vaccines, found significant boost effect
8 related to that.

9 So was somewhat unexpected. It was a
10 small study presented at an abstract. But there
11 is a lot to learn about this. I mean, I think
12 anybody that has studied influenza would agree
13 there's only one truth about influenza virus, it's
14 inherently unpredictable.

15 Pierce, did you want --

16 DR. GARDNER: Pierce Gardner. On a
17 slightly more positive note from listening to the
18 various manufacturers, that they all seem to be
19 making significant progress in ramping up.

20 So that we were hearing numbers like 50
21 million doses in a month could be produced and
22 those kind of numbers in two to three years. So

1 that that's, that's not bad.

2 And I think that I do believe that we,
3 our subcommittee probably needs to meet and make
4 some recommendations along Mike's line, not
5 necessarily name a brand, but to name a type of
6 process that we think is going to be much more
7 likely to be productive, and I think that came out
8 of yesterday's meeting, myself. I think that we
9 could be more specific in that regard.

10 I have another question with regard to
11 the Tamiflu stocks which we now have in some
12 numbers, that really reflects the idea what if we
13 have a year of seasonal flu that's very -- where
14 the vaccine is very poorly matched.

15 Are we willing to go and dip into that
16 stock or are we saving it for the avian crisis
17 only?

18 MS. EMBREY: This is Ellen Embrey. It
19 depends, I think is the answer. I think that that
20 will be a judgment at the time of the
21 circumstance, and we'll make that judgment based
22 on force protection requirements.

1 I wanted to comment on what the
2 Department has done with your recommendations.

3 Specifically, there was a recommendation
4 that we use a chaos theory model as a potential
5 way to inform us for planning purposes.

6 And we have, in fact, investigated and
7 are engaging in that and doing that.

8 With respect to your mask
9 recommendations, we incorporated that in our
10 strategy for acquiring different kinds of masks
11 based on your recommendation.

12 We did not issue any formal policy yet,
13 although we purchase along those lines primarily
14 because we are working with HHS and wanted to make
15 sure there was federal government unity on how we
16 moved forward with that.

17 With respect to the vaccine, we bought
18 what we bought in case something happened in the
19 interim.

20 Our current strategy for vaccine is that
21 we with the funding that's available, we would buy
22 half again what we need each year and use the

1 previous year, so we'd have a mix of the old and
2 the new.

3 And this year's vaccine is being
4 produced against the Clade 2.

5 So what is available for us to purchase
6 this month, next month and in March is actually
7 based on the Clade 2.

8 So we will have, we'll still have the
9 majority of Clade 1 available to us, but we will
10 continuously each year, we have an annual strategy
11 to buy vaccine each year of the latest Clade that
12 is being produced by the manufacturers. So it's
13 not just one, we're not just buying one,
14 obviously.

15 Funding is an issue. It's an issue for
16 the Department of Defense and for the federal
17 government.

18 The President decided that he would not
19 request a supplemental for the federal government
20 because this is his program, and so he's directed
21 each agency to find the money to do this.

22 So the Department is in the process of

1 finding the money to do it. They just haven't
2 found it yet, but they are looking.

3 We are assured that it will be made
4 available to us.

5 DR. POLAND: This is Dr. Poland. On
6 behalf of the Board, we'll cut our salaries in
7 half.

8 DR. OXMAN: And Dr. Silver is going to
9 keep his wallet...

10 DR. POLAND: My last comment to make is
11 on behalf of IDSA, Infectious Disease Society of
12 America.

13 Last week I met with Vice-President
14 Cheney's advisers and the director of biodefense
15 policy and did have the opportunity, we don't
16 lobby for DoD, but did have the opportunity to
17 talk to them about some of the challenges, as I
18 know have had -- discussions have occurred at much
19 higher levels than myself.

20 But I think one of the recommendations
21 from the Board, and I think it's important to say
22 this, was that DoD, this was a recommendation six

1 months ago, be increasingly seen as a player at
2 the table in these interagency talks, and that has
3 begun to happen, though I think there's room for
4 us to be further involved, and Wayne and others
5 may want to make some comments on that.

6 But I think that message was also heard
7 clearly and a lot of improvements have occurred in
8 that domain.

9 Wayne, did you want to add to that?

10 LIEUTENANT COLONEL HACHEY: Actually,
11 just a comment. Wayne Hachey.

12 I wanted to make a couple comments. One
13 is that we heard that we have an overreliance on
14 pharmaceuticals and vaccine.

15 In fact, DoD has a layered approach. In
16 1918 we clearly learned that public health
17 measures help but they are not going to stop the
18 pandemic.

19 The current modeling suggests that if
20 you have public health measures layered with
21 targeted pharmacologic measures, that then you
22 may, in fact, drop the R-zero to a manageable

1 level where you can either blunt or in fact stop
2 the pandemic.

3 And that is our approach, that it's a
4 layered approach which includes antivirals and
5 includes vaccine but also includes a strong
6 emphasis on public health measures.

7 So I don't want the impression that we
8 have somewhat of a tunnel vision as far as
9 antiviral procurement. That is just part of that
10 layered approach, and the same thing applies to
11 the vaccine.

12 The other thing, the current vaccine,
13 the 1203, might not be so bad.

14 I mean, if you use the hemoglutin and
15 ambition data, then it does look like it's really
16 a crappy vaccine.

17 But if you look at the ferret data --

18 MS. EMBREY: The furry animal.

19 LIEUTENANT COLONEL HACHEY: Looks like a
20 weasel.

21 -- and survival is your end point, then
22 this Clade 1 vaccine with the Clade 2 challenge

1 may actually not be such a bad vaccine.

2 So it really depends on that
3 extrapolation from either HI (Hemagglutination
4 Inhibition) data or from animal data and which
5 one's going to be right, and I guess we won't
6 know that until the H9 pandemic actually starts.

7 DR. POLAND: Please.

8 LIEUTENANT COLONEL HACHEY: The last
9 thing is that DoD is fairly well-engaged at both
10 the Joint Staff level, at Homeland Defense level
11 and at Health Affairs with the interagency process
12 on really multiple fronts.

13 That includes interactions with the
14 State Department, particularly dealing with our
15 international efforts and specifically with
16 Indonesia as well as planning, again, vaccine
17 prioritization, antiviral prioritizations, working
18 with the Department of Transportation and so on.

19 So we are fairly -- not fairly, but
20 we're well-embedded in the overall national
21 planning efforts.

22 DR. POLAND: Thank you. Any other

1 comments? Okay. Our next speaker is Miss Embrey.
2 And she's going to brief us with the latest
3 information regarding the unified medical command.

4 So the floor is yours.

5 MS. EMBREY: If it's okay with you, I
6 would like to just sit here. I prefer sitting.

7 I want to make sure everyone understands
8 that this is not a joint or unified medical
9 governance issue. It is a way ahead in terms of
10 improving our efficiency, effectiveness and
11 standardization and to improve unity of effort
12 across the Military Health System.

13 Next slide. A year ago the Secretary of
14 Defense issued a decision that said he wanted an
15 implementation plan for achieving a Joint Medical
16 Command for implementation in the FY08 to 12
17 program.

18 So over the -- since that time, there
19 has been considerable effort within the Department
20 to evaluate how a Joint Medical Command might be
21 structured to achieve efficiencies in the system
22 across the services and OSD.

1 There were several groups, senior
2 leadership was engaged at all levels both at the
3 OSD level, the Joint Staff level and in each of
4 the services, and there was also a separate study
5 done by the Defense Business Board which looked at
6 it not necessarily from a clinical perspective but
7 a pure economic perspective. If you want to be --
8 if you want to do this from a business
9 perspective, this is how you should do it.

10 That was roundly rejected by many, and
11 as a result, a different approach was taken.

12 P and R, which stands for Personnel and
13 Readiness, which is the Under Secretary's office,
14 Dr. Chu, and Dr. Winkenwerder, worked with the
15 Surgeons General from various recommendations
16 coming from several working groups, and it worked
17 iteratively with each of the Surgeons General to
18 come up with a concept or principles that could be
19 applied to achieve efficiencies and unity of
20 effort to posture us for success in the future.

21 Next slide. That concept was briefed to
22 the Deputy Secretary about two weeks ago, and he

1 approved the concept. And what you see in this
2 briefing is what was approved, but only in
3 concept. The devil, of course, is in the details,
4 and there is going to have to be a whole series of
5 efforts to actually translate these concepts into
6 organizational constructs that people can live
7 with. So it won't be easy.

8 But the first, the first step is that
9 the objective of this is to improve efficiencies,
10 to reduce and eliminate redundancies where
11 redundancy exists and can be accommodated without
12 changing culture or anything else.

13 The second is to provide common
14 functions, unity of effort across the system where
15 it doesn't matter what service you're in.

16 There was a separate effort from this,
17 this evaluation process to look at quadrennial
18 defense review objectives to improve and to push
19 down to the lowest operating level authority and
20 flexibility for the local military treatment
21 facilities to manage and become more efficient but
22 using a common infrastructure, common standards,

1 common ways of doing business.

2 So this concept would support that
3 infrastructure of standardization but allow for
4 local flexibility.

5 This concept would have to preserve each
6 service's ability to operate in their suit and to
7 be unique culturally and be part of that service
8 culture, but they would have to adapt to common
9 standards, much like the discussion you had this
10 morning, a common approach, if you will, for
11 dealing with Group A streptococcus, is that...
12 Okay, GAS. Hum. I thought that was a different
13 definition.

14 Anyway, the other part of the concept
15 that was approved, unity of command and unity of
16 effort under joint operations. This was a very,
17 very important principle, but it's very difficult
18 to achieve that principle and achieve the
19 principle of the bullet above it, which is to also
20 preserve service unique culture.

21 So there will be, I think, a lot of
22 dynamics as we move into the details of this

1 implementation between those bullets.

2 Unity of command under joint operations,
3 which is an objective of the Department, and
4 providing and preserving service unique culture.
5 That will be the crux of our difficulties.

6 Facilitating consolidation of medical
7 headquarters under BRAC (Base Realignment and
8 Closure) law. Under the BRAC law, we're required to
9 create a single joint medical headquarters for the
10 Army, Navy, Air Force medical community. So all
11 of the Surgeons General will be collocated in one
12 place and operate with unity of effort.

13 So the bullet above that one supports
14 that. The coming up with the unity of command and
15 under joint operations is the outcome of having a
16 consolidated headquarters. I don't think you're
17 going to be able to get one without the other.

18 The next point, they wanted to have a
19 joint environment in which to develop leaders so
20 that they would have for the future unity of
21 effort.

22 So this required a focus and attention

1 to joint training and education.

2 The last two concepts were added by the
3 Under Secretary and the Assistant Secretary for
4 Health Affairs who believed that there was still a
5 requirement for them to oversee and manage the
6 defense health program centrally from the Office
7 of the Secretary of Defense.

8 So that did not change. And, lastly,
9 what was agreed upon in these points was that this
10 is a starting point for a future Joint Medical
11 Command.

12 We aren't there yet. We could not get
13 the agreement. And so we are doing what we can do
14 which will prepare us for achieving that in the
15 future.

16 Next slide. So what was decided? There
17 will be a joint command in the National Capitol
18 area region and in the San Antonio area, a single
19 unified, you know, commander for all services that
20 are functioning in that area coordinated in those
21 two areas.

22 There will also be a joint command for

1 medical education and training in San Antonio.

2 There will also be joint commands for
3 other multi-service markets planned for the
4 future, but that's not been identified at this
5 point.

6 They are going to accelerate the
7 collocation of all the Surgeons General
8 headquarters offices as required in law. Their
9 objective is to try to get there by 2009 rather
10 than later.

11 They did decide to combine all medical
12 research and development under the Army Medical
13 Research Materiel Command with Army as the
14 executive function. They'll be in charge of it
15 all and running it through the system.

16 This next point, the joint military
17 health directorate, this is quite controversial.
18 You will see that listed under this are what I
19 would call the seed corn functions, if you will,
20 of shared services necessary to have a unified
21 medical command. Everyone needs to have a human
22 capital structure that is uniform across the

1 services.

2 So accessing people in the same way,
3 compensating them, incentivizing them in the same
4 way through the system is quite important.

5 Same thing with recruit, same thing with
6 budget and finance. Right now each service has
7 separate ones.

8 So this joint military health
9 directorate is actually an execution, a bringing
10 together of these core capabilities that will
11 facilitate efficiency and effectiveness across the
12 system in core areas.

13 This is controversial and it will be
14 very difficult to do. But the Deputy Secretary is
15 the one that wants this one, so we're going to
16 work on that.

17 Next, refocusing the TRICARE health plan
18 on insurance, network and benefit and
19 beneficiaries issues.

20 The TRICARE Management Agency right now
21 exists and provides a wide variety of support
22 services, and it's going to be refocused on health

1 -- the purchase care and health plan insurance,
2 regulation and delivery.

3 So those are the things that were
4 approved conceptually.

5 What remains unchanged is the Assistant
6 Secretary of Defense for Health Affairs'
7 responsibilities for centrally budgeting and
8 overseeing its execution across the system,
9 developing the health policies that apply to the
10 MHS, looking at how the system should function and
11 manage itself to achieve objectives developed
12 jointly with the surgeons, how we communicate to
13 our beneficiaries and to our customers and clients
14 and Congress and any other stakeholder, that will
15 also remain a Health Affairs responsibility
16 primarily and developing a unified legislative
17 strategy for the MHS is also being retained at the
18 OSD (Office of the Secretary of Defense) level.

19 The Uniformed Services University
20 remains an ASD(HA) (Assistant Secretary of Defense,
21 Health Affairs) function. It had been being managed
22 under the -- through the Navy. It was recently

1 reassigned to the ASD(HA), and it will be retained
2 under the ASD(HA)'s authority under this realignment.

3 Next slide. As I said, the Deputy
4 Secretary approved this conceptually. The
5 Surgeons and the Joint Staff are going to have to
6 be working together with the Assistant Secretary
7 and the Under Secretary to make sure that we have
8 final agreement on how the details of this
9 realignment, if you will, will be executed.

10 And there's the timeline. Of import is
11 the end state is to have a collocated medical
12 headquarters in place by 2009, and by then we will
13 have learned to perform with unity of effort, and
14 hopefully by then we'll have figured out that it's
15 not as hard as we thought and that we could move a
16 little faster.

17 Next slide. That's all. Any questions?
18 Good. Thank you.

19 (Applause)

20 DR. POLAND: Okay.

21 COLONEL GIBSON: One comment. Just one
22 comment. This is Colonel Gibson.

1 As your role in the Defense Health
2 Board, your mission has expanded markedly into
3 the, into issues related to health care, health
4 care delivery. So -- and this is a major, major
5 shift change, a paradigm shift within the
6 Department.

7 So please take these words that Miss
8 Embrey provided, think about them, digest them
9 because I am quite sure they will come back to
10 you, and you're going to be asked for
11 recommendations and other comments relative to
12 these types of plans.

13 DR. LEDNAR: Wayne Lednar. I just share
14 one little smidge of experience from one
15 community. This is just a passing fleet compared
16 to what the DoD challenge is.

17 But in a health system effort to try to
18 come together, taking two separate health
19 entities, the early efforts to use kind of the
20 administrative back office procurement functions,
21 purchase in a unified way to attain health savings
22 did nothing to bring the cultures together. And

1 it wasn't until the clinical operations and the
2 lead -- the leadership became a combined one that
3 there was any real material effort towards being a
4 single entity.

5 So while we can get some savings from
6 some of the back-office procurement, that isn't
7 really getting at the ultimate goal.

8 MS. EMBREY: I'll take that back. Thank
9 you.

10 DR. POLAND: Okay.

11 DR. HALPERIN: Bill Halperin. I'm not
12 -- it was valuable information. I'm not sure
13 whether we're being asked for opinions. We're
14 not. Good.

15 DR. POLAND: Well, maybe to clarify,
16 there will be a task force that will be formed on
17 the Future of DoD health care, and so we'll hear
18 more about that, and that's the place where we'll
19 give input.

20 DR. HALPERIN: In the future.

21 DR. POLAND: Yes.

22 DR. HALPERIN: Bill Halperin. When this

1 happens nothing like this can happen without
2 considerations of pros and cons, obviously, and as
3 it develops, it's good to be on the lookout for
4 the cons that people might have predicted and, and
5 also the pros that ought to be applauded.

6 And I was just going to suggest that in
7 our future meetings, it might be valuable to have
8 sort of a discussion of what those pros and cons
9 are so we really are more informed about what we
10 ought to be concerned about.

11 MS. EMBREY: As I told you in the
12 background, we weren't asked if we wanted to do
13 this; we were told by the Deputy to come up with a
14 plan to do this. And I believe that the community
15 has done, I think they've leaned as far forward as
16 they can to agree to do what they believe will
17 yield positive results in terms of efficiencies
18 and effectiveness.

19 But like anything else, when you do
20 something halfway, there's a pro and con to that.

21 So this may be what we can do, but it
22 may not be what we want it to be. It could be a

1 lot better or could be a lot worse. And we may
2 end up with a -- you know, learning as we go.

3 So you will be observers in this
4 process. And I think with your experience and
5 with your expanded mission, you will be having as
6 a task, another subordinate task force in the
7 future for military health care. That task force
8 is being asked to evaluate how well we are doing
9 what we are doing and if we are structured in a
10 way that will actually improve our success for our
11 future objectives. And you may find that our
12 solution isn't optimum for that or you may not.

13 DR. SHAMOO: Adil Shamoo. Your
14 presentation answered some of my concerns,
15 previous concerns. It is a two-part question. At
16 present, I preface it by saying at present what we
17 do, we hear a presentation, we deal with one
18 issue, and then we deal with another issue.

19 And I'm assuming that since this is much
20 broader responsibility, we're going to deal with
21 broader issues.

22 And two questions that come to mind is,

1 I would like to see, I don't know if that's in our
2 purview, the overall mix of health protection
3 picture and how anything we are considering each
4 time we're considering new things, how that is
5 going to impact the health, you know, force health
6 protection picture.

7 So we keep moving those puzzles in some
8 way that we are not disturbing, we do something
9 well here but it is disturbing some other
10 component by only talking about one issue, and who
11 is going to keep track of that.

12 MS. EMBREY: As the deputy for Force
13 Health Protection and Readiness, I guess that's my
14 job, which is why I am so happy to be here,
15 seriously.

16 On the other hand, the mission for the
17 Department is more than just protection. It's
18 delivering care and preparing to deliver that care
19 anywhere in the world. It's got a heavy training
20 burden and delivering care not only for and
21 prepared for what we do for our fighting force but
22 also for our beneficiaries, which gets us into

1 broad, general delivering care just like everybody
2 else in the world.

3 So we've got some interesting challenges
4 that makes us different, as you all know, and as
5 you move forward with your broader scope, I think
6 it would be instructive to agree upon a structured
7 way to look at the Department and to look at its
8 broad Military Health System objectives and then
9 maybe have a way in which to look at the synergy
10 between those components as we function, because
11 it's all driven by a same top line.

12 And right now the Department exists, the
13 Military Health System is funded primarily by the
14 defense health program, but it does have a
15 significant infusion of dollars from the services
16 line.

17 And we've never had broad visibility of
18 the full monty of resources as they are applied to
19 the Department's Military Health System. And with
20 the broader mission, I think that we might have a
21 clarity on that.

22 DR. SHAMOO: Okay.

1 DR. POLAND: Mike?

2 DR. PARKINSON: Mike Parkinson. At the
3 risk of being premature as everything old is new
4 again, there was a group called the Council of
5 Colonels, as we were called in '98, '99, that was
6 charged by General Blank and then General Rodeman
7 to create over two years what was called the
8 Military Health System Optimization Plan which was
9 written.

10 It was actually seen as a best practice
11 model by Millbank and published by Millbank
12 Foundation as a population-based needs assessment
13 in eight critical steps that could be used today,
14 I would posit, as a strategy to combine readiness
15 in force health protection with highly effective
16 and efficient health care delivery.

17 The theme that I see here a little bit
18 -- and, again, it may be premature, but we're
19 getting to the cocktail hour -- is this let's
20 separate again the purchasing function of what we
21 do in TRICARE, which is just kind of buying health
22 insurance, versus what we do in the MHS, when

1 really where you're going here, what you're saying
2 is no, there is a population needs assessment that
3 has a readiness face to it and which has an
4 evidence-based, highly effective, efficient
5 delivery system to it. We can either make it or
6 we can buy it.

7 But when we're running 25 million,
8 billion, whatever it is, the red that we are
9 running in the MHS, you can't be an accountable
10 steward of government taxpayer money with saying
11 it's okay to be inefficient on one side and to buy
12 inefficiently on the other at the same time.

13 And the theme -- it's going to be
14 interesting to follow this as it goes through, but
15 at some time I'd like to know what was so onerous
16 about the DBB (Defense Business Practice
17 Implementation Board) approach that it was immediately
18 rejected. That's an interesting data point.

19 But the other thing is there better be a
20 close connection between the care we purchase and
21 the care we deliver as a taxpayer, because I don't
22 want to pay for care that's from Humana that I
23 should be delivering right down the street in a

1 facility we saw today.

2 And so that balance is something that I
3 understand from the Uniformed Services we want to
4 basically keep somewhat distinct.

5 But there's a two-year project that was
6 under then Secretary, Acting Secretary Ed Martin
7 and others to say let's get the strategy right.
8 The governance will follow. But what is the
9 paradigm, what's the model you want to use to
10 optimize the use of resources for outcomes. Then
11 let's back up and say, "Okay. Now, do we govern
12 that?" as opposed to who gets the boxes and who
13 reports to whatever.

14 And that historical document ain't that
15 old and the world hasn't changed that much.

16 And I might suggest in the process that
17 get dusted off and looked at as a template,
18 because a lot of good, thoughtful work, including
19 Don Arthur who was then a colonel, wrote that
20 thing.

21 DR. POLAND: Mike, you might have just
22 bought yourself another committee assignment.

1 Thank you. I want to move on to Mark
2 Brown, DHB's ex-officio member representing the
3 Department of Health Affairs who is going to
4 provide an update on OIF/OEF (Operation Iraqi
5 Freedom/Operation Enduring Freedom) veteran VA
6 health utilization. This, of course, has been an
7 item of interest for the AFEB, and it will continue
8 under the DHB.

9 DR. BROWN: Thanks for having me give
10 this update on this report. I gave it once more
11 about two years ago to the Board.

12 I should start off by saying I'm acutely
13 aware of the responsibility of being the last
14 speaker of the day and standing between all of us
15 and that cocktail hour.

16 Greg asked me if I could finish in 30
17 seconds, so I'll do my best.

18 DR. POLAND: The slides, by the way, are
19 on your tab 6.

20 DR. BROWN: Basically the Department of
21 Veterans Affairs, we feel a responsibility every
22 time the country goes to war to start monitoring
23 the health of returning veterans. We just sort of

1 see it as part of doing business. We know we're
2 going to get questions from veterans service
3 organizations and from Congress and from the media
4 about how veterans are doing, what kinds of health
5 problems they have. We also have to do planning,
6 internal planning to provide the right care, right
7 mix of care, make sure that we have the
8 specialties in place and so forth for any combat
9 veterans that are returning. We've been doing
10 this certainly since the Vietnam War and the 19 --
11 the current wars in Iraq and Afghanistan of course
12 were no exception.

13 We produced this report -- let's see.
14 How do I make this work. Here we go.

15 The report that I'm going to talk about
16 is basically very simple. We take data provided
17 to us by the Department of Defense. It is
18 basically a roster of every single separated
19 veteran, every single service member who served in
20 Iraq or Afghan, in a current conflict, separated
21 from military service and is therefore eligible
22 for VA benefits. And we take that roster then and

1 tabulate it, and I'll talk about some of the
2 results that we get from that.

3 And then we can match it up
4 electronically with our own inpatient/outpatient
5 data. All our inpatient/outpatient records are
6 electronic now. And every time the patient or the
7 veteran comes to VA for health care, they leave an
8 electronic record that records what their
9 diagnoses were, what their meds were and some
10 other basic data, and by matching that up, we can
11 tell you what types of health care issues, what
12 kinds of diagnoses these veterans are receiving.

13 So conceptually it's very simple. It's
14 taken us an enormous amount of work, like working
15 with our counterparts in Army Defense, to try and
16 get this data messaged into a format where this
17 works.

18 And we work very closely with the
19 Defense Manpower Data Center with -- if they
20 weren't helping us, this would really be an
21 impossible exercise.

22 The last update literally came out about

1 just one week ago. We do these updates now
2 quarterly. It's done by our environmental
3 epidemiology service within the Department of
4 Veterans Affairs.

5 Now, I should say that this issue came
6 up of how the media interprets information that
7 goes out to them. And we've been acutely aware of
8 how this information might be interpreted.

9 We really started generating it
10 primarily for internal purposes. We use it, as I
11 say, as a matter of kind of health surveillance,
12 looking for trends in health in returning
13 veterans.

14 We also use it, and I'll talk a little
15 about this, in terms of outreach. We get, we also
16 get addresses, names and addresses of these new
17 veterans so we can mail them information about our
18 programs, for example.

19 But once you start publishing something
20 like this and once it goes out into the real
21 world, into the rest of the world, it, of course,
22 takes on a life of its own. And we've had a lot

1 of soul-searching and a lot of thinking about how
2 to try and put all the caveats into one of these
3 reports.

4 And I think the main caveat is that this
5 is not an epidemiological study. It's a kind of a
6 health, very crude health surveillance.

7 But somehow sometimes some of the
8 members of the media don't quite get that, so you
9 see this report get quoted in ways that we don't
10 really think is appropriate necessarily.

11 And also what we've found is that no
12 matter how many caveats you add, you can't add
13 enough. You can't -- if somebody chooses to
14 misinterpret something or report it in a, in a way
15 that seems kind of goofy to us, we can't really
16 stop them.

17 But here are some of the standard
18 caveats that we include and you'll hear some --
19 I'll talk about some more of them.

20 This only considers our roster of
21 OIF/OEF veterans. It is only -- obviously only
22 includes those who left active duty. And so it

1 doesn't include anyone who's still in the service.
2 So it's incomplete. Doesn't include everyone who
3 served.

4 It doesn't distinguish because of the
5 nature of the data -- I can get into that if
6 anyone's interested in why this is the case. But
7 we can't distinguish between those who served only
8 in OIF versus only in, only OEF or both. So they
9 are lumped together.

10 It's not realtime. It only -- our last
11 -- current roster only includes separations
12 through last August, end of August this year.

13 And, of course, I should add we don't
14 include deceased veterans either.

15 In our latest roster we have more than
16 631,000 OIF and OEF veterans. These are veterans,
17 as I say, who served in Iraq and Afghanistan, the
18 current conflict, came back and separated from the
19 military service.

20 As you can see there, biased weight
21 surprisingly I think towards Reserve and National
22 Guard.

1 If you look at the actual proportions in
2 Reserve and National Guard versus active duty who
3 are actually in service in Iraq, it's balanced the
4 other way.

5 For some reason, we're -- a lot more
6 Reserve and Guard are leaving the military after
7 being deployed to Iraq and Afghanistan.

8 And as I mentioned, I kind of already
9 discussed this, but very quickly, we compare that
10 roster of 630,000 OIF/OEF veterans with our
11 electronic computerized inpatient/outpatient data
12 records and we then look at using the standard
13 ICD-9 codes for their diagnoses, and we can list
14 out their diagnoses by their frequency.

15 And I'm getting back into some of the
16 caveats. We started adding -- this report has
17 grown and grown and gotten longer and longer as we
18 tried to add more and more caveats, not that it's
19 been all that helpful really in preventing people
20 from misunderstanding it.

21 But we feel compelled to point out that
22 this data is really primarily administrative data.

1 We're not reviewing patients' charts or anything
2 like that. We are going through what is
3 essentially administrative data. And so you have
4 to be, you have to be cautious in interpreting it.

5 It only applies, I think the main
6 caution is it only applies to those veterans who
7 have both separated from military service and
8 veterans of OIF and OEF and elected for some
9 reason to come to VA for their health care. And
10 it's a very selected population.

11 DR. SHAMOO: Adil Shamoo. Can I have a
12 qualification? Are you talking about the 631,000,
13 that's everybody who's been separated from, from
14 the operation?

15 DR. BROWN: Yes.

16 DR. SHAMOO: Not only those who came to
17 VA; is that correct?

18 DR. BROWN: Right.

19 DR. SHAMOO: Thank you. Sorry.

20 DR. BROWN: All right. You can read the
21 rest of these caveats on your own. I think they
22 are pretty self-explanatory.

1 I'll get to actually some of the data
2 that we found.

3 I think probably the most -- getting to
4 your point, Shamoo, yes, you're exactly right.
5 631,000, that's the whole roster. That's everyone
6 who separated.

7 What we found is 32 percent of those or
8 205,000 of those have come to VA either as an
9 outpatient, primarily as an outpatient or -- but
10 also inpatient as least once since they separated
11 from military service.

12 And 97 percent, in fact, come on an
13 outpatient basis, which is consistent with how we
14 provide health care in general to veterans.

15 Amongst those who have sought health
16 care, about equal amounts, 101,000 come from
17 active duty and about almost the same amount have
18 come from Reserve and National Guard. About maybe
19 even split.

20 One of the questions, of course, that we
21 get asked is, and you kind of heard this theme
22 throughout, is are we ready collectively to deal

1 with the health issues of these new veterans or
2 are we going to be overwhelmed somehow by this new
3 population of veterans?

4 And our answer -- I mean, it's kind of
5 hard to answer that. There's different ways we
6 can talk about that.

7 But we argue that Department of Veterans
8 Affairs is a very robust and a very large medical
9 care system. We anticipate providing in this
10 current -- in the last fiscal year that we have
11 data for this care to 5.3 million individual
12 veterans.

13 And so these new veterans, the 205,000
14 veterans who have sought health care for us
15 collectively since we've started doing this back
16 in 2002 represent only about 4 percent of that, of
17 all the health care that we provided at least in
18 fiscal year '05.

19 So we would argue at least in terms of
20 numbers, it's small. It's a very tiny number.
21 But, of course, in terms of significance, it's
22 critical. I mean, this is a new generation of

1 combat veterans that are coming to VA for their
2 health care. So it's a critical, it's a small but
3 critical population to us.

4 This breaks down where they come from.
5 Basically veterans live where all Americans live.

6 Yes?

7 MS. EMBREY: Ellen Embrey.

8 DR. BROWN: Please.

9 MS. EMBREY: I have a question on the
10 slide 8 which is a couple slides back, the Reserve
11 and National Guard members, they come off active
12 duty, but they may still be members of the force
13 that's just not on active duty.

14 DR. BROWN: Correct.

15 MS. EMBREY: Are these folks that have
16 gotten out altogether or are they still Reservists
17 but not on active duty?

18 DR. BROWN: The latter. They are
19 eligible for VA health care. It's a good
20 question.

21 Typically with Reserve and National
22 Guard, we can -- when a Reserve and National Guard

1 will have had multiple tours and they'll have
2 multiple DD-2 -- whatever it's called, the
3 separation form, DD-214 or whatever it's called,
4 if you look at the demographics, there's really
5 nothing surprising there. The veterans that are
6 coming to VA are primarily male. They are young.
7 Their peak age is between 20 to 29. They are
8 primarily Army. As I mentioned, they are roughly
9 split equally between active duty and Reserve and
10 Guard. And, of course, they are primarily from
11 enlisted ranks.

12 The diagnoses -- I'll get to a table in
13 a moment that actually shows the ICD-9 codes
14 broken down by frequency.

15 But the bottom line is that the
16 diagnostic codes that we see are kind of all over
17 the map. They don't, they don't really tend to
18 trend in any one particular area. They are, they
19 are kind of what you would see from any typical,
20 we think, any typical outpatient group.

21 We -- somebody noted in this data that
22 there are more than -- almost 8,000 discrete ICD-9

1 diagnostic codes that have at least one veteran in
2 them.

3 The three most common health problems
4 that we've seen are, not surprisingly,
5 musculoskeletal ailments, principally joint and
6 back pains -- joint and back disorders which we
7 think is consistent with the kind of occupation
8 that these people are involved with, obviously,
9 the second is mental disorders, and the third is
10 symptoms, signs and ill-defined conditions.

11 This gets at the frequency of possible
12 diagnoses among these recent combat veterans.

13 And, again, you can see that the top,
14 the top item down at the bottom is, this is
15 separated by ICD-9 code, but down third from the
16 bottom is diseases of musculoskeletal
17 system/connective system, 42 percent, mental
18 disorders, 35, almost 36 percent, and then the
19 rest are less than that. You can see this. And
20 then the third is, as I mentioned earlier, signs,
21 symptoms, ill-defined conditions.

22 People, of course, are focused very

1 closely on mental health issues amongst these new
2 veterans, and so we broke that down further in
3 this particular slide.

4 You can see we're seeing veterans
5 diagnosed with PTSD. We see roughly almost
6 34,000. That's about -- I think that works out to
7 something like 15 percent of the total. I forget
8 the exact number. And this is, this is one of the
9 items that's gotten quoted a lot. It gets picked
10 up by media to say, you know, 15 percent of
11 veterans have PTSD.

12 But it's not, it's not -- it's an
13 unfortunate conclusion because of all of the
14 points that I made. This is only those veterans
15 who come to VA. It's not, it's not, it's not an
16 epidemiological study that -- it's not a
17 population-based study that allows you to really
18 draw conclusions about veterans as a whole.

19 And, secondly, the concern is that these
20 diagnoses, as I mentioned, this is administrative
21 data, so some of them are rule-out diagnoses. We
22 have a little bit of data that shows that probably

1 one in four of these diagnoses don't get
2 confirmed. For example, they are rule-out
3 diagnoses.

4 But, nevertheless, there it is. I mean,
5 we don't want to underestimate it either. We are
6 seeing mental health problems amongst these new
7 veterans.

8 To summarize, recent Iraq and Afghan
9 veterans are presenting to VA with a wide range of
10 possible medical and psychological conditions. We
11 stress that we really can't make recommendations
12 to our health care providers about a particular
13 test or evaluation to use because these patients
14 look like more or less to the first approximation
15 like patients, like any other group of patients,
16 so there's nothing really special that we can
17 recommend to look out for. Therefore, veterans
18 should be worked up based on the signs and
19 symptoms they present.

20 I'm not going to go over that last point
21 here. And, again, this last summary is really
22 trying to, to emphasize the caveats and

1 limitations of this data.

2 And I think that is -- yeah, that's -- I
3 think that's all I'm going to say, except to say
4 we're going to continue this program monitoring
5 these veterans.

6 The last point I would make is that we
7 also -- I mean, we're aware again, now that we've
8 pointed out so carefully, that this data is not
9 really a substitute for epidemiological studies.

10 We also feel -- we essentially always
11 had plans to go ahead and start setting up to do,
12 preparing to do the epidemiological studies,
13 morbidity studies, mortality studies that one
14 would need to really characterize the health of
15 these veterans as they, this cohort, moves, as it
16 starts to age, really in the same sense that's
17 we've done with Vietnam veterans, we had these
18 studies ongoing with veterans of the 1991 Gulf
19 War, and we're planning on doing those studies as
20 this population moves on and gets older.

21 And that's the last slide I have, and
22 I'd be happy to answer any questions.

1 (Applause)

2 DR. POLAND: Give you a medal, Mark, for
3 achieving that. Thank you.

4 Yes, sir.

5 DR. KAPLAN: Kaplan. Are most of those
6 or all of those claimed to be service-associated
7 disabilities?

8 DR. BROWN: These are not, these are not
9 disabilities. These are not necessarily claims.

10 DR. KAPLAN: But, I mean, of 600,000, a
11 third of them came to the VA, if I read that
12 right, for medical care, correct? Is that right?

13 DR. BROWN: This is strictly for medical
14 care.

15 DR. KAPLAN: Yeah.

16 DR. BROWN: One independent from the
17 process that they would have to initiate for a
18 disability claim.

19 DR. KAPLAN: Okay. I'm not sure I
20 understand that, but maybe somebody will explain
21 it.

22 DR. BROWN: Well, you have to -- there's

1 two different -- the part I'm talking about is
2 purely the medical care that we provide.

3 A veteran may very well elect to file a
4 claim for one of those diagnoses, but that would
5 be a separate process. That's not recorded here.

6 DR. KAPLAN: So they may be in there,
7 they may not. You just don't know what the
8 breakdown is; is that correct?

9 DR. BROWN: It's not -- I just didn't
10 present it.

11 DR. KAPLAN: Okay.

12 DR. BROWN: This is, this is strictly
13 health care, strictly health care.

14 COLONEL GIBSON: Let me add -- this is
15 Colonel Gibson.

16 Let me add to Ed's comment here or Ed's
17 question that might help.

18 A few years back there was Congressional
19 language passed that allows veterans two years of
20 care at the VA where you do not have to prove
21 service connectivity to be authorized care.

22 These folks certainly fall within that

1 window. That's, that's why the service
2 connectivity issue that you're bringing up is not
3 really clear.

4 DR. POLAND: Okay.

5 DR. HALPERIN: Bill Halperin. Public
6 health surveillance is a topic that's really dear
7 to my heart. And I actually -- I don't think you
8 go far enough in disclaiming that this is neither
9 research nor surveillance.

10 What you essentially have here is usage
11 survey by a group of people who have an
12 entitlement.

13 It would be much like looking at I
14 belong to Horizon Blue Cross and trying to make
15 some sense of the health of the insured by looking
16 at what they utilize.

17 It's not surveillance. This group could
18 be having a horrendous excess of some
19 occupationally related exposure, and you wouldn't
20 know it, or they could have an amazing deficit of
21 some phenomenon because of healthy worker effect,
22 and you wouldn't know it.

1 It's not population-based. It's -- we
2 have no way of relating the numerator to the
3 denominator.

4 It's essentially not surveillance. It's
5 usage survey.

6 And I think by calling it surveillance
7 and you disclaim that surveillance isn't research,
8 you're running against the grain of the public
9 health community which would argue that
10 surveillance ought to be done with the same
11 quality as research.

12 You're running against the grain of many
13 industries in the United States that keep very
14 good data on what happens to their former workers,
15 having complete access to denominators and making
16 strides to get the numerator data as well.

17 So I really don't think you go far
18 enough in disclaiming the research aspects of
19 this, and by calling it surveillance, I think it's
20 problematic for surveillance, and I'd really urge
21 that it be called some sort of an incomplete usage
22 assessment.

1 DR. BROWN: Well, you're taking it too
2 personally, Bill. We didn't do it just to annoy
3 you, really.

4 DR. HALPERIN: I'm speaking for a group
5 of people, not personally.

6 DR. BROWN: I would say we call it,
7 actually we call it, if you look at the title of
8 the report, it is called a utilization report.

9 I mean, I don't disagree with anything
10 you've said, really.

11 And I think if you look at it, we put
12 all those caveats in there. I tried to cover it
13 in a very quick way, those points.

14 I don't disagree with what you're
15 saying. I think for our purposes, it's very
16 useful data, because we get these questions about,
17 you know, "What's going on with the veterans that
18 you're seeing?"

19 We get -- so for us it's been incredibly
20 valuable.

21 The other thing is regardless of whether
22 you're willing to call it a surveillance study or

1 not, and I agree with the points that you're
2 making, this data has been enormously popular.
3 It's probably one of the most popular reports that
4 VA has put out recently. It gets picked up by
5 Congress, it gets picked up by the media, it gets
6 picked up by veteran service organizations, it
7 gets reported on.

8 And I think that the reason -- well, I
9 think what's going on, my sense about what's going
10 on is people want to know, Americans want to know
11 what's going on with these, what's going on with
12 these veterans, what do they look like, what are
13 we seeing.

14 This is, limited as this is -- and,
15 again, I'm not going to disagree -- I agree with
16 all the points that you make -- this is what we
17 have now to go on.

18 DR. HALPERIN: Just a little repartee,
19 though. If you're calling this data the "Congress
20 wants to know what's going on with the veterans,"
21 I just hope that it's not misleading in the sense
22 of we don't know what's going on with the veterans

1 healthwise comparing observed with expected from
2 this data. All we know is what people -- what
3 kind of care people are utilizing.

4 DR. BROWN: Sure.

5 DR. HALPERIN: So even in your response,
6 I just worry that it may be describing this data
7 set in ways that it just can't be used.

8 DR. BROWN: We think it's, we think it's
9 absolutely not misleading.

10 You know, I mean, I think one of the
11 problems that we face as this data has gone out
12 there is it gets at the issue you raise. It gets
13 misinterpreted. I mean, people will quote it as
14 saying overseeing these rates of -- they'll quote
15 it as if it's a study.

16 We can't help that, nor at this point,
17 frankly, can we stop producing it.

18 This is, as I say, this is probably one
19 of the most popular reports that we have put out.
20 And I think that the reason is for better or
21 for worse, I think -- and we recognize those
22 caveats that you're mentioning.

1 Again, I agree with every, every point
2 you've made -- this is the best snapshot, the best
3 picture that we have of what's going on with this
4 population.

5 And I think, I think, again as I stated
6 at the end of my presentation, our sense is that
7 ultimately what we have to do is to do a proper
8 population-based study. We recognize that.

9 We can't -- we aren't in a position to
10 start that yet, but we will. We recognize that
11 that's inevitable; that this is very preliminary,
12 and it's a mistake to use it to characterize the
13 entire population for the reasons that you
14 mentioned.

15 DR. POLAND: Okay.

16 DR. GARDNER: Pierce Gardner. I hope I
17 can say this right. Can a veteran apply for
18 disability without coming through the VA system?

19 DR. BROWN: Well, I think, I think I
20 understand your question.

21 You could, you could apply for
22 disability compensation without coming in for

1 health care, but it's all part of VA.

2 DR. GARDNER: I'm trying to respond, and
3 you probably saw there was, there was -- on Monday
4 USA Today had a front-page article --

5 DR. BROWN: I didn't notice that.

6 DR. GARDNER: -- highly critical of the
7 continuing funding of Gulf War Syndrome studies.

8 DR. BROWN: Oh, I thought you were
9 talking about another criticism.

10 DR. GARDNER: And the figure that I
11 think I have straight in my mind was I believe the
12 total number of people counted as Gulf War
13 veterans was something like 699,000.

14 DR. BROWN: That's correct, 700,000.

15 DR. GARDNER: And the claim was that
16 199,000 had applied for disability benefits for a
17 war that was not very long.

18 DR. BROWN: Um-hum.

19 DR. GARDNER: And the implication was --
20 and I just wondered how those -- it didn't really
21 talk about the criteria for how those were judged.
22 And I just wondered whether your talk today had

1 anything to do with that.

2 DR. BROWN: Not really. The only
3 comment I would make on that is that if you look
4 at so-called era veterans, those who were in
5 service at the same time as those who fought in
6 the 1991 Gulf War, their disability claim is also
7 quite high. It's not quite as high as those who
8 were deployed, you wouldn't expect it to be quite
9 that high, but they are close.

10 So, I mean, this is really quite an
11 aside here, but it is an interesting observation
12 that the rate at which veterans from different
13 eras, if you go back to, say, World War II and the
14 Korean War and Vietnam, '91 Gulf War and our
15 current wars, the rate at which veterans apply,
16 the percentage of total veterans of these
17 different eras who apply for disability goes
18 steadily up. So that veterans for World War II,
19 less than 10 percent applied for disability,
20 whereas something like, I don't know, roughly a
21 third of the veterans from the 1991 Gulf War
22 applied for disability. It's steadily going up.

1 And I can't -- I don't know how to
2 interpret that. It can't possibly be that wars or
3 getting worse or are more demanding on our troops
4 than the Second World War was. I don't believe
5 that.

6 So there's some phenomenon going on that
7 makes people more willing to apply for benefits,
8 apparently.

9 But having said that, that has nothing
10 to do with what I presented.

11 DR. POLAND: One or two more brief
12 comments. We are technically supposed to be out
13 of the room at five, and we'll just do a quick --

14 DR. BLAZER: This will be very brief.
15 Dan Blazer.

16 There are many, many, there are many,
17 many theories about why we see this increased
18 application for benefits, a lot of it having to do
19 with this unexplained physical symptoms category
20 that's loosely been also categorized as Gulf War
21 Syndrome which has also been extremely
22 controversial. No need to go into that.

1 But, I mean, that has been looked at a
2 lot in terms of exactly why this is happening, not
3 only how do you categorize these individuals, why
4 this is perhaps happening, and those studies
5 continue to go on.

6 I think in defense of what Mark is
7 saying here, I think what this gives us is a very
8 important snapshot of what the VA has seen and
9 potentially could see in the future in terms of
10 the burden of care in the VA. I think that's the
11 critical issue.

12 This is not an epidemiologic study. It
13 cannot tell us -- I totally agree, this is not a
14 surveillance study, it's not a prevalence study.
15 You can't even begin to draw conclusions like
16 that.

17 But it is important in terms of telling
18 us the burden of care that might fall back on the
19 VA and somewhat what the distribution of that care
20 might be.

21 Again, it's not the best study, but it
22 gives us some snapshot. And I think from the

1 mental health perspective, it tells us that the
2 mental health care that may be required by the VA
3 subsequent to this war is going to be significant.

4 DR. BROWN: Yes, I think that's how we
5 look at it. We look at it for planning purposes.

6 And as I mentioned, we also use it for
7 outreach purposes. We have these veterans'
8 addresses, can contact them.

9 That's a good point.

10 DR. SHAMOO: Adil Shamoo. Okay. I'm
11 convinced this is lousy data or not good data.
12 But your conclusion -- you really got to
13 understand the public. Your conclusion, this is
14 not a very good data because it's not
15 epidemiologically sound, et cetera, et cetera, and
16 I was convinced by the comments I heard.

17 But at the same time, you make the
18 conclusion that the distribution of the illness is
19 no different than the society at large.

20 And there is a contradiction in that,
21 and the public at large really loses confidence
22 when, when they hear these contradicting sort of

1 set of statements.

2 DR. BROWN: Actually, I think that the
3 reaction has been the opposite of that, really.

4 I think, my sense is that when people
5 see this data, they have a different reaction than
6 what you professionals do. Their reaction has
7 been, Hum, it looks like VA is trying to stay on
8 top of this and trying to monitor this and is
9 concerned about this.

10 So I think -- I mean, I'm not surprised
11 that you're going to get different reactions
12 depending on different disciplines that you
13 present this to, but I think it's been helpful in
14 making it look like we're, we're trying to get out
15 in front of this and trying to get out ahead and
16 look out for problems.

17 Just -- I think, I guess, surveillance
18 is a term of art, of course, and when you say
19 surveillance, and I apologize for using that term
20 loosely, but there's another sense of surveillance
21 that I think that the data does get used for.

22 For example, if you remember a couple

1 years ago there was a concern that there was these
2 eosinophil pneumonias that popped up in the Gulf
3 War theater amongst veterans of OIF.

4 And you could look at this data and say
5 that, Well, okay, are we seeing high rates of
6 pulmonary disease, respiratory disease?

7 And at least those veterans who come in
8 to see us, we don't.

9 I found that somewhat reassuring.

10 DR. POLAND: Colleagues, we'll stop for
11 the day. We have a few items that we need to take
12 care of.

13 I'd like Miss Embrey to make an
14 announcement and then a few administrative
15 remarks.

16 Thank you, Mark.

17 MS. EMBREY: Thank you, Mark.

18 (Applause)

19 MS. EMBREY: I will not be here
20 tomorrow. And as the designated federal official,
21 it is my obligation to designate an alternate when
22 I'm not here.

1 So Roger Gibson will be the alternate
2 designated federal official to open the meeting
3 tomorrow.

4 COLONEL GIBSON: Okay.

5 DR. POLAND: Okay. We will adjourn for
6 this evening. We will re-meet tomorrow morning
7 here at 8:00 a.m. for those of you who want
8 breakfast, and we will begin the meeting promptly
9 at 8:30.

10 For those of you who are going out to
11 dinner, we're meeting in the lobby at 7:00.

12 Any other business the Board needs to
13 consider this evening?

14 (Whereupon, at 5:08 p.m., the
15 PROCEEDINGS were adjourned.)

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