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•(0910)

[*English*]

The Vice-Chair (Mr. Peter Stoffer (Sackville—Musquodoboit Valley—Eastern Shore, NDP)): We're in committee business and our discussion is on depleted uranium and Canadian veterans.

We're very honoured today to have with us Louise Richard. She is here to present and discuss her concerns.

Madame Richard, we're very honoured that you're with us today. We greatly appreciate your time, and that of your supporters as well, to help us in our study of depleted uranium and the concerns of Canadian veterans.

Please take your time. We're here for you in both official languages.

The very first time I met you was back in 2001, I believe, in room 362, so it's good to see you again. I wish you the very best.

Please proceed.

Lt (N) Louise Richard ((Retired), As an Individual): Thank you, Mr. Chair.

I apologize for not being here on March 7. I'm very unwell. I have a serious blood condition. My eyes are bad and my concentration is poor. So if you could please be patient with me, I'd appreciate it. I'll do my best.

I see that we're short of time already, so I'll—

The Vice-Chair (Mr. Peter Stoffer): It's okay.

I also want to correct the record. It's retired Lieutenant (Navy) Louise Richard.

Thank you.

Lt (N) Louise Richard: Thank you, sir.

Before I start my remarks, I would like to mention that my mother, Marie Richard, is here with me. She's a Queen's Diamond Jubilee Medal recipient for this year. I'm very proud of her. She's a co-founder of the yellow ribbon support group, from back when we went to the Gulf War. She also has been a very passionate advocate along with me every step of the way. I wouldn't be here today if it weren't for my mother.

[*Applause*]

Lt (N) Louise Richard: Also, my brother, Pierre Richard, is sitting behind us. I'm very pleased that he came up from Montreal.

Thank you.

I was born into a military family of great military tradition. My grandfather, my mother's father, was a World War II veteran, an officer. My uncle, her brother, was a logistics officer. My brother Pierre was a Royal 22nd Regiment officer, and my father was a lieutenant-general with the R22R.

I'm an RN. I have a post-graduate degree in mental health. I'm a disabled 1990-91 Persian Gulf War veteran. That also was known as Gulf War I or Desert Shield/Desert Storm. I will share with you my personal experience to enable you to better understand where this whole nightmare started and why so many of us are seriously ill, dying, or dead.

For 22 long years now, our war and the various serious lasting health consequences have yet to be addressed, and not from lack of trying, trust me. What's interesting today is that this is the day 22 years ago that I came back from the Gulf War. I'm blessed to still be alive. A lot of my colleagues are no longer with us.

I was 29 years old. I was very athletic. I recently had been promoted to captain. I was in the prime of my life, my health, and my career. I was sent to the Gulf War on January 24, 1991, as a nurse, a member of the advanced surgical contingent. We were fewer than 50. Colonel Claude Auger was our commanding officer and also our surgeon.

Preparation for deployment was very chaotic, confusing, and very fast. It was comprised of many inoculations. To name a few, there were inoculations for typhoid, meningitis, yellow fever, cholera, influenza, and hepatitis B, too many in too short a timeframe. Protocols weren't followed.

As if that weren't enough, shortly upon my arrival in Al Jubail, Saudi Arabia, I was inoculated with biological warfare agents, such as anthrax with pertussis, bubonic plague, and botulism toxoid. These were the known vaccines received. Most vaccines were never documented in our vaccination books. I had many flu-like symptoms and achiness, but I had a very serious reaction to the anthrax vaccine.

Over and above all of this, we were ordered to take a little pill every eight hours. It was called pyridostigmine bromide, or NAPS. It was a prophylactic agent against nerve gas exposure. Just that pill alone caused a lot of illness and gave me very serious side effects, such as sweating, urination, hypersalivation, and difficulty in seeing. This was in the desert, so it was very unusual to have these kinds of side effects. We were also issued DEET, a body insect repellent. We were given experimental drugs and vaccines without our knowledge or consent.

Shortly after our arrival in the Middle East we were deployed to southern Saudi Arabia in the desert, less than 20 kilometres from the Iraq-Kuwait border. We amalgamated our tents and our operating room theatre with the British 32 Field Hospital. Ninety-five per cent of our patients, our casualties, were Iraqi prisoners of war. They were infested with lice and communicable diseases and covered in shrapnel and open wounds. God only knows where they were and what they were exposed to before reaching us. We also had the responsibility, along with the British, to take care of over 5,000 Iraqi prisoners of war.

Organophosphates, a very strong pesticide, was liberally sprayed on tents and surrounding areas to keep the desert creepy-crawlies at bay.

Since I was there during the air and ground war, we had numerous Scud alerts. The sirens went off many times. After a while we were told to ignore the false alarms and not bother with our protective suits. Often the gas mask was worn just to help us breathe and protect ourselves against the toxic oil and smoke from the over 800 oil wells set ablaze.

• (0915)

For the first time in the history of modern warfare, depleted uranium ammunition was used. The massive number of bombs, cluster bombs, bullets, various artillery shells all contain DU. The Americans used over 350 tonnes, and God knows how much the Brits used. Close to one million DU shells were fired during the first Gulf War.

Depleted uranium does not occur naturally. It is not found in nature. DU is a byproduct of the industrial processing of waste from nuclear reactors, better known as weapons-grade uranium. It's a toxic radiological waste. It's cheap and plentiful.

A DU shell bursts into flames as soon as it leaves its delivery device. When it hits its target, it burns on impact and creates an extreme temperature of over 2,000 degrees Celsius, releasing into the air billions of invisible little radioactive particles. This extreme fine dust of aerosolized, vaporized uranium oxide consists of metallic microparticles that are smaller than a virus or a bacteria.

DU emits alpha radiation, ionizing radiation. It's chemically toxic and radioactive. One becomes exposed if it's inhaled, ingested through the eyes, in contact with open wounds, contaminated clothing, prisoners of war, blown-up tanks, battle debris, shrapnel spread into the environment by desert winds, contaminating everything in its path. It remains toxic and radioactive for 4.5 billion years.

It's highly dangerous internally. Depleted uranium contamination causes virtually every known illness. It clings to the respiratory

system for years, even decades, and irradiate the surrounding tissues, damaging neighbouring organs. Gradually it passes through the lung blood membranes into the bloodstream and lymphatic system causing illness to the entire body.

Radiation mutates cells causing cancers, leukemia, lymphoma, congenital disorder, and birth defects. They enter the bloodstream and circulate freely through the body, emitting radiation as they travel. Some concentrate in lymph nodes and cause lymphatic cancer, others in the bladder, the brain, and cause kidney damage, as we're aware of. Eventually it settles in major organs, the bones, and the teeth.

Many soldiers brought contaminated debris home with them as war souvenirs without knowing the dangers of it. We were never told about the use of DU on the battlefield, let alone how to protect ourselves against it. At the end of our war I don't know what nitwit chose to bring this blown-up tank into our compound, but it was an Iraqi tank that had been blown up, and obviously it was contaminated with DU, but we were not aware of it at all.

The Persian Gulf War veterans in 1 CER were exposed to the most toxic battlefield ever known to mankind. We were in an abnormal environment, under abnormal conditions, and suffered abnormal exposures. Since most of us suffer from abnormal and unique, very serious and debilitating chronic symptoms, illnesses, and diseases, it has become known as Gulf War illness, medically unexplained chronic multi-symptom illness. Gulf War illness is characterized by a combination of memory and concentration problems, persistent headaches, unexplained fatigue, widespread pain, chronic digestive problems, respiratory problems, skin rashes, and so on.

Scientific evidence leaves no question that Gulf War illness is a real condition. They are objective biological measures that relate to structure and functioning of the brain, of the autonomic nervous system, neuroendocrine system, and immune alterations and variability in enzymes that protect the body from neurotoxic chemicals, also known as PON1. It's an enzyme that helps metabolize any kind of toxins through the system.

A scientific report says that Gulf War illness fundamentally differs from stress-related syndromes described after other wars. Studies consistently indicate that Gulf War vets have lower rates of PTSD than veterans from other wars. Gulf War illness and depleted uranium: this is a new phenomenon. It's unknown to medical science. It's a new medical condition.

All governments for the past 22 years, which include five prime ministers, 14 ministers of veterans affairs and 12 ministers of national defence, have done everything to lie, deny, mislead the ill and disabled veterans and their families, mislead the Canadian public, and make all believe that all is fine with us and we are very well taken care of. Canada has downplayed this very serious health consequence that has plagued us for over 22 long years now. We are sent by Parliament to the worst hellholes on earth to protect and respect our human rights and our democracy, only to come home and have them stripped away by our own governments that sent us to war.

● (0920)

Many spouses, children, and civilian populations are also ill with Gulf War illness. One in three is ill, getting worse, dying, or dead. More than 80,000 U.S. Army vets have died since their return from the 1991 Gulf War. Over 8,000 U.K. vets have died also. How many Canadians? Who knows? No one seems to care or know.

We are released from DND undiagnosed, misdiagnosed, or not diagnosed at all. We're left untreated. We're left on our own to find our own doctors, civilian doctors, specialists, therapists, psychiatrists. Canadian vets have been totally abandoned. Our symptoms, illnesses, and concerns have been minimized, belittled, ignored—stress. As for the doctors and specialists we do find who are willing to take us on, VAC has the nerve to challenge their diagnoses, their treatments, and their credentials. Veterans Affairs dictates to us how many treatments, and the distance we can travel on our claims. Policy always overrules the needs of the ill veteran.

Veterans' medical files and immunization books are either missing or simply nothing was documented, and there is very little documented upon release. We have since personally experienced the military's removing important key documents from veterans' files. They have also blacked out information in the files. How is a vet to prove what he or she is suffering from and relate it directly to military service when the needed documents are nowhere to be found?

This goes against us for VAC applications and appeals, since you must prove that what you are applying for and suffer from is directly related to your military service. Veterans and families must be granted the benefit of the doubt. The burden of proof should be on VAC, not on the disabled veteran. Wasn't going to war enough? Many wars and missions have occurred in the past 20 years with Canadian involvement: the Gulf War, Somalia, Rwanda, Croatia, Bosnia, Kosovo, the Balkans, Afghanistan. We know that depleted uranium was also used in Bosnia, in the Balkans, in Afghanistan, and also in Iraq.

The Gulf War veterans and modern combat vets as a whole have been made to feel like toxic waste that has been disposed of and dumped onto our provinces, our families, and significant others who are expected to care for us and understand our needs and illnesses without any knowledge, direction, or support from National Defence, Veterans Affairs, or Parliament. Instead of investing in science and research, proper diagnostics, and treatments, VAC and our government chose to create more legislation, more red tape, and more roadblocks. Why is Canada not contributing to ongoing

international research on these very serious and complex medical issues and illnesses?

Our VAC research department is pathetic. It's focused on geriatrics. It's totally isolated in Prince Edward Island. It's totally out of touch with the real world, and stuck in a rut. The VAC website is not helpful at all either. Why is the American research not on there? Why is the Canadian Blood Services' indefinite deferral of the XMRV for those of us diagnosed with chronic fatigue syndrome not on there? This came into effect in 2010.

If Canada can't or won't be part of the ongoing research, well then let's embrace the countries that are, mainly the U.S.A. Include us. Apply their findings, their very credible and conclusive science and research, and treatment approaches. Give us some hope, some answers, and eventually some quality of life. The U.S.A. has spent close to a billion dollars in the past 20 years to try to find answers, treatments that may be helpful. Since 2008 the U.S.A.'s Research Advisory Committee on Gulf War Veterans' Illnesses states that it's a real illness and differs from trauma and stress-related syndromes.

We have a Canadian professor from the University of Alberta, Dr. Gordon Broderick, who's working with the research advisory committee on Gulf War illness. He's also working with Dr. Nancy Klimas exactly on this XMRV. They're working on biomarkers right now. That is supported by the CDMRP.

● (0925)

Canada needs to implement something similar to what the U.S.A. has for veterans with medically unexplained multi-symptom illness and presumptive diseases, the nine infectious diseases, presumptive and associated diseases with radiation exposure related to the first Gulf War, the conflict in Iraq, or Afghanistan. Please go on the U.S. Department of Veterans Affairs website for all the pertinent and life-saving information.

How dare Veterans Affairs Canada withhold such important science, possible treatments, and diagnoses from our vets and families and from the doctors and specialists trying to help us? Doing so just seems to prolong the pain and suffering. To many of us, it's criminal.

To date the approach and responses from our government and responsible authorities have been ones of total abandonment, criminal negligence, and total reckless disregard. This situation is not only a national tragedy but also a scandal of national interest.

Too many vets have died at the hands of our government. I'll name a few. There was Michael Peace, who had been in Bosnia. There was Terry Riordon, who died from depleted uranium and heavy metal toxicity. He was a Gulf War veteran. He died in April 1998. We're very familiar with his wife Susan, who has come to Ottawa numerous times. Brian Dyck had ALS. He was a Gulf War veteran. He died October 8, 2010. Minister Blackburn at the time came forward on October 15, 2010, basically saying that based on the latest medical research, our government had made changes so that veterans affected by ALS could obtain the help and support they needed and deserved more quickly than ever before. That was on October 15, 2010.

In the United States, through their research, in 2008 the VA established ALS as a presumptive compensable illness for all veterans with 90 days or more of continuous service in the military, with no need to prove anything. Right there we're already two years late on the research. Brian Dyck and his family weren't able to benefit from their legitimate diagnosis or to get any kind of treatment and help.

Veterans and families have earned, deserve, and need the best care this country has to offer. Veterans Affairs Canada is mandated to care for the veterans and their families, to acknowledge us, and to recognize the seriously ill and disabled modern veteran community. Every single disability application since 1990, for those living or deceased, needs to be reopened and re-examined with a fresh and bold new look in respect of the conclusive science and research.

In today's war zones, battlefields may not disable, but their effects may be felt when soldiers return home. Our war wounds may not be visible to the human eye, but that doesn't negate the fact that we are seriously ill.

It is said that a country is judged by how its veterans are treated and taken care of. I would say Canada has a failing grade.

If Canada can't or won't take care of us, then don't send us.

• (0930)

The Vice-Chair (Mr. Peter Stoffer): Thank you, Madame Richard, for your presentation. We greatly appreciate it.

Now we'll go to five minutes of questions, starting with Mr. Chicoine.

[*Translation*]

Mr. Sylvain Chicoine (Châteauguay—Saint-Constant, NDP): Thank you, Mr. Chair.

To both Ms. Richards, thank you for coming here to testify and to share your experience with us.

You left your health behind when you went to war. All I can do is express our most sincere gratitude for the sacrifice you made. I would imagine that when one signs up for the armed forces, leaving one's health behind does not come to mind.

Your observations on the services offered to veterans seem rather damning. Therefore, I would like you to tell us about your experience. I would like you to tell us if, in your opinion, your illnesses are linked to depleted uranium and, if so, what leads you to think that.

Lt (N) Louise Richard: That is a good question.

Do I think that it is linked to depleted uranium? Yes. I was tested by an independent team, as well as the services that had been offered to us by the Canadian system in 2000, and in that regard, clearly, the test was rather inconclusive. All of the governmental test results are negative and I was not surprised, because both companies that had been hired by the government admitted that they were incapable of conducting tests to detect the presence of depleted uranium. The fact that we were misled this way really caused a lot of damage among the veterans' community. The department's credibility was diminished.

When I left for the Gulf War, I was 29 years old and a triathlete. I celebrated my 30th birthday over there. I just turned 52 on March 17. That means I have been sick for 22 years.

I realized right away, even before leaving, that all of the injections received were not normal. That was very clear. Usually, nurses such as I follow a protocol. If something goes wrong, at least then, it can be determined which injection could have caused a particular reaction or illness. When 8 to 12 injections are received in the same day and it is not documented, how can it be determined what has made us unwell?

I did not feel well when I took the plane. Even my mother, the day before my departure for Trenton to go and take the C-130, could not hold me in her arms because I was in so much pain. She will never forget it. Already, while leaving, I did not feel well. On board this C-130, it took 34 hours to arrive in Saudi Arabia. We had a lot of time to not feel well. On site, we were ordered to take more injections that had not been tested or approved. We did not even know what they were. We were given orders. Another nurse would give my injections, and then, as a nurse, I would give soldiers their injections, knowing that it was not medication that had been approved or tested. It was done through the British; it was not even Canadian. I asked myself questions. I reacted to that. Afterwards, we were ordered to take a small pill every eight hours. I reacted badly to that as well. I had abnormal symptoms, like hypersalivation in the middle of the desert, vision problems, urinary and fecal incontinence, cramps and gynecological bleeding. It was too much.

On top of that, we were operating in the desert, where there are sand storms. We were exposed to everything in that environment, to local endemic illnesses that we were not used to. The Americans recognized nine communicable diseases linked directly to the environment in which we found ourselves. That is serious.

We started to put it all together. We did not feel well. At 29 years old, as a triathlete, I did not feel well. I realized that others were fine. It did not seem to affect them in the same way. As a nurse, I found that rather strange, but I told myself that maybe they had received a placebo and I had gotten the real thing. Who knows? One wonders.

The longer the war went on, the more we received prisoners of war and wounded. I remember, among other things, a surgery with Colonel Auger, with whom we worked. Afterwards, he became General Auger, then Surgeon General in 1998, and then he was let go in 1999.

• (0935)

[English]

The Vice-Chair (Mr. Peter Stoffer): Madame Richard, I do apologize, but we are past our time on this, and I'm trying to let as many members ask questions as possible. By all means, you may get a question furthering your testimony that you gave to Mr. Chicoine. I do apologize, but I want to give everyone an opportunity to ask questions.

We'll move on to Mr. Hayes, please, for five minutes.

Mr. Bryan Hayes (Sault Ste. Marie, CPC): Thanks, Mr. Chair.

Madame Richard, you were born into a military family. Thank you for carrying on the tradition. That tends to happen in military families.

I know in my own family, I didn't carry on the tradition, but I have 75 years, between my father and my two sisters, of service. My brother-in-law also fought in the Gulf War.

With that in mind, I just want you to know that all on this committee care deeply about our veterans, and I would suspect that everybody on this committee has some direct connection with military service.

I certainly agree with you when you state that you have earned and deserve the best care. I believe that fully. Having travelled many places around the world with my father, he has earned and deserves the best care. All veterans have, without question.

Now, when you heard that the Scientific Advisory Committee on Veterans' Health was going to be established to study depleted uranium, how did you feel?

Lt (N) Louise Richard: I thought it was interestingly late, but on the other hand, should I be surprised? No.

I was quite curious about how the committee that was appointed by Minister Blaney would go ahead with this, because it is complex. Depleted uranium is something that I had never heard of when I went to war—and I was involved in this—let alone anyone else. You may be aware of depleted uranium, but most of us sure weren't.

I took the time to go through the report. One thing that shocked me before I even cracked it open was that when I looked at who Major-General Pierre Morisset was—it didn't ring a bell in my brain—I realized that he was the deputy surgeon general for four years. He was appointed surgeon general in 1992. So for four years before 1992, from 1988 on, he was totally aware of us being sent to the Gulf War. Being part of the office of the surgeon general, and then himself becoming surgeon general in 1992 until 1994, he knew exactly what protocol any of us received, or he should have known.

That shocked me to know that he was totally involved. I was sent to war and came back sick, and was told, "You malingerer, it's all in your head". DND allowed me to get more and more sick, and did not see to my physical illnesses, just "PTSD", or "maligner". I was shocked and very disappointed to see that he chose to do nothing.

• (0940)

Mr. Bryan Hayes: Did you have an opportunity to provide documents and information to the scientific advisory committee?

Lt (N) Louise Richard: I was never asked. I did write one e-mail. It was never responded to. I guess it went into cyberspace somewhere. I tried.

Like so many veterans, I think at this point now we've kind of lost trust and faith in Veterans Affairs. We've seen what they have not done for us.

So when General Morisset says that he only had, what, five e-mails, and he kind of interviewed two people, that's pretty sad. That is pretty sad.

Mr. Bryan Hayes: But you did have an opportunity to provide something, a couple of e-mails, or....

Lt (N) Louise Richard: I did one e-mail, because I didn't believe in this report.

Mr. Bryan Hayes: Through the chair, can we make arrangements to have a look at that e-mail? I don't think we've ever seen it. I've not seen any of the documentation, so....

Is that a request we can make, Mr. Chair?

The Vice-Chair (Mr. Peter Stoffer): I will confer with our clerk.

Mr. Bryan Hayes: Okay.

The Vice-Chair (Mr. Peter Stoffer): There may be an aspect of confidentiality, but the clerk will check with Dr. Morisset on it.

Mr. Bryan Hayes: In terms of the approach, Madame Richard, do you think it's a good approach to hear from both scientists and veterans when we study this issue, as we're doing? I mean, we're endeavouring to hear from all sides. I hope you're happy to be here today; I'm certainly happy for you to be here today.

We've listened to scientists, we've listened to committee members, we've listened to peer reviewers, and now we're listening to folks who have been most impacted.

Is that approach a reasonable approach?

Lt (N) Louise Richard: It is a reasonable approach. I must say I'm disappointed in the choice of scientists. General Morisset says there's no testing to be done for depleted uranium, but there is. That wait is not acceptable. There are treatments available. When our soldiers come back and may have been in an environment where DU was present, you don't wait 10 years or 22 years to test them. You don't say, "Oh, by the way, you have no hair. Maybe it's depleted uranium. Maybe you were poisoned." It's a little too late.

I found the references interesting in this report. I became very interested in Gulf War syndrome early on because I was affected myself. Being a nurse, being around the military hospital at the time, I saw a lot of people who had weird symptoms and a lot of weird things happening. No one could tell them what the hell was going on. When the Internet started up, we started researching. We've stayed abreast of what has been going on internationally, mainly with the Americans and the Brits. Canada did an interesting study back in 1998, the Goss Gilroy report. They were pressured by me and other vocal veterans to do something. They had opened a clinic and then closed it. Dr. Ken Scott was in charge. There was a phone line; it was disconnected. When they decided to do this report, it was like, wow, they're actually kind of interested. The only problem is it's a self-reporting questionnaire that has never been peer reviewed or had a follow-up. We know in the report of the Scientific Advisory Committee on Veterans' Health that they speak about our corps of engineers in Doha.

• (0945)

The Vice-Chair (Mr. Peter Stoffer): Madame Richard, thank you very much.

We now move on to Mr. Casey.

Mr. Sean Casey (Charlottetown, Lib.): Thank you, Mr. Chair.

Ms. Richard, in the course of your opening remarks, you talked about the difficulty of having to carry the burden of proof when you're dealing with Veterans Affairs. This is not a question; it's a comment. You may or may not be aware that in the last report of this committee, the Liberal Party put forward a minority report recommending that the burden of proof be lowered for veterans. Rest assured that this has been heard by at least one party and it's going to be actioned.

I want to come back to something that you said in response to Mr. Hayes' question with regard to the e-mail you sent to the committee. We heard from the clerk that there might be a confidentiality issue. There would only be a confidentiality issue if you claimed confidentiality. Do you have the e-mail, and are you prepared to share it with the committee?

Lt (N) Louise Richard: I will share it if I can track it down. I've had a lot of computer problems, but if I can, I will be glad to share it.

Mr. Sean Casey: That would be appreciated.

I want to follow up on another question asked by Mr. Hayes. At the start of his questioning of you, he indicated that you have earned and deserve the best care.

If you were to be given what you've earned and deserve, what would it be? Could you compare it with the care that you have been afforded? If the government were to treat you right and give you the care you've earned and deserve, what would it look like?

Lt (N) Louise Richard: What would it look like? First of all, it would look like a blank card, *carte blanche*.

I don't believe we should have to prove anything. At the end of the day, we were selected to go. We left healthy; we came back sick. It's not up to me to pay thousands of dollars to get tested, do research, bring reports, and then VAC denies me. Then I have to go back and

run after more doctors, and more reports, and pay, and then borrow money from my mother to do tests and tests.

At the end of the day, Veterans Affairs is broken. It's a policy-driven system and it's bureaucrats. There is no scientific advisory anything in there. There is a research department, but they deal with the transition of veterans leaving the forces and going out on civvy street, or this or that.

How is that supposed to help me with complex, chronic, disabling physical and emotional symptoms daily? It doesn't seem to matter that I've proven it time and time again, because I've found the doctors and I've paid the money to get reports. If you have chronic neurodegenerative conditions, they're not going to improve tomorrow. We all know they'll worsen with time, so why do my care providers, every three or six months, have to write reports for Veterans Affairs for me to beg for 10 more treatments?

It's just insanity. It should not be. At the end of the day, too, here are all these medical reports and science given to bureaucrats, who have no medical knowledge, no medical expertise, and we know darn well, because I was involved in the privacy breach, sir, that those files go from Charlottetown to TAC, to a district office, to this person, to that person.

Who are they? Once you put in an application, or even ask for 30 chiropractic or massage sessions, whatever it may be, by the time it gets approved there's a time lapse. This chronic condition, or the condition this veteran is going after, will get worse because they have to wait. As far as I'm concerned, we need a scientific advisory committee of some kind.

An hon. member: With vets.

Lt (N) Louise Richard: Yes, with veterans, just like in the United States, something like the research advisory committee on Gulf War illnesses, where it's based on science, research, and facts, by scientists, not Veterans Affairs Canada.

• (0950)

The Vice-Chair (Mr. Peter Stoffer): Thank you, Madame Richard

Mr. Casey, thank you.

We now move on to Mr. Young, please.

Mr. Terence Young (Oakville, CPC): Thank you, Chair.

Thank you very much, Madame Richard, for being here today.

I want to congratulate you on your advocacy, which I find very courageous. I am very, very pleased to hear that your mother was recognized with the Queen's Diamond Jubilee Medal. I think you should also be recognized for your leadership in a similar way and I hope that happens. If it hasn't happened already, I hope it happens soon.

I imagine your biggest challenge was telling everybody what was happening and nobody believed you. It must have been very lonely with the two of you working together.

Mrs. Marie Richard (As an Individual): She is educating the doctors, her specialists.

Mr. Terence Young: Yes, so congratulations.

I'd like to ask you three brief questions, if I may, and then give you an open question because I'd like you to summarize for me and the committee members.

You said Canada is not doing research on these matters. What conclusion have you drawn on why Canada isn't? Could you give me a brief answer on that? Then I'd like to move on. Why isn't Canada doing research on these matters?

Lt (N) Louise Richard: Well, I think it's like anything. If you don't deal with it, it doesn't exist.

Mr. Terence Young: It's like wilful blindness, or is it a cost issue? What conclusion have you drawn?

Lt (N) Louise Richard: To me there should not be a cost associated to any care for veterans regardless of what it is.

Mr. Terence Young: Do you think it has been a cost issue, or do you just think that it was such a big problem no one wanted to talk about it, that they hoped it would go away?

Lt (N) Louise Richard: I think it's all of the above, but the fact that the headquarters of Veterans Affairs is in Charlottetown is far from being helpful. It should be here in Ottawa.

Mr. Terence Young: You broke down two categories of injury or illness, which were trauma and stress. Is Gulf War illness a third category, or would you categorize it as a trauma?

Lt (N) Louise Richard: It's an illness on its own.

Mr. Terence Young: It's in the third category.

How many veterans have been affected as you have been? Sorry, I'm new to the committee. How many veterans have been affected?

Lt (N) Louise Richard: I wish I knew the answer, sir.

Mr. Terence Young: Do you have any idea?

Lt (N) Louise Richard: Canada doesn't do any statistics or research, so we don't really have any data. It's word of mouth, but back in the early 2000s, I knew of close to 400.

Mr. Terence Young: I'd like to ask you an open question and give you the rest of my five minutes. It might be three-and-a-half or four minutes.

Can you give me a list of actions that you think the government should take now if you were in charge, that is, things that you feel were addressed in the report appropriately and were helpful, and things that were not addressed in the report? Can you give me a brief list so the committee can do its deliberations and take action and make recommendations based on what you've noticed has either been missing or has been addressed appropriately.

Lt (N) Louise Richard: The immediate thing that needs to be done is to establish an independent, active, medical scientific advisory board. We're dealing with difficult to understand serious chronic illnesses. We need specialists like in the United States and Britain. That's the first thing I would do. We would have real doctors and we would meet with real people, not have a kind of paper warfare. That seems to be the only way Veterans Affairs works. It has to be tangible and face to face. We should have the nucleus here

in Ottawa where we have access to all these specialists and universities, and maybe have hubs in each province or OSI clinics to make sure there's a continuity, and a national standard of care, which is not there now. Right now, it seems that whoever gets that application and however they interpret the policies is the flavour of the day. That has to stop.

Mr. Terence Young: What other things should we do?

Lt (N) Louise Richard: We should absolutely have veterans be part of this active medical scientific advisory board. Honestly, and this has been asked not just by me but by Sean Bruyey and all kinds of veterans and advocates through SNAG, the special needs advisory group, and through the Office of the Veterans Ombudsman. VAC is broken.

When I went to war and I started coming home with all these illnesses, they decided to tweak the table of disability in 2000. We had already been falling through the cracks for 10 years. Then you find out it hadn't been amended since 1919.

• (0955)

Mr. Terence Young: What's the best way to fix it?

Do you have any other suggestions as to how to fix it? That would be helpful.

Lt (N) Louise Richard: To me it's just a system that's broken. It doesn't work for us anymore. It cannot just be about policy, and beg and apply, deny and appeal, and all of this stuff. That has to stop. People are dying at the doors of Veterans Affairs waiting for decisions and waiting for a disability pension. Families are broken. When things aren't happening from VAC we have to go out and find it on our own. Most veterans don't have that kind of money. They're sick. They're vulnerable. They need help. Veterans Affairs needs to seek them out, not the other way around.

The Vice-Chair (Mr. Peter Stoffer): Thank you, Madame Richard.

We now go to Ms. Mathyssen, please.

Ms. Irene Mathyssen (London—Fanshawe, NDP): Thank you, Mr. Chair.

Ms. Richard, it's good to see you here and it's very courageous of you to provide this testimony.

I've heard a number of technical things about DU and whether it's toxic or not toxic. It seems to me that we're talking about something far more human than just the scientific evidence. I wanted to ask you about these inoculations that you received. It sounds to me like a terrifying cocktail.

How did you know that some of them were experimental? Where did you get that information?

Lt (N) Louise Richard: We were kind of taken aside. When I arrived in Saudi Arabia we amalgamated with the British because I was in a little group and the Brits had already inoculated their people. From nurse to nurse we discussed the fact that these are ordered, and by the way, it's hush-hush, a secret, but it's anthrax. It's botulinum toxoid. It's the plague. You take it, you shut up, and it's not documented. Then you turn around and go and inoculate your group and you don't tell anyone what you're giving them.

Ms. Irene Mathysen: You mentioned that VAC challenges every doctor willing to discuss or identify what has happened to you and willing to treat you.

Could you explain what you meant by that and the details surrounding that challenge? What is the motivation for it as you understand it?

Lt (N) Louise Richard: Madam, if you went on a trip healthy and you came back sick wouldn't you want to know what happened and where it happened? Is it life threatening? Is it a bug that's going to leave in 10 days? It's human nature.

When someone who is in the medical system gets ill, the first thing you want to know is what happened. That is just the way I am. Of course, I researched and analyzed my symptoms. Through my work I was helping other veterans find doctors because when you leave DND you're on your own. As the general said, once that uniform is off... It took me eight months to get a GP and that was thanks to my mother.

Ms. Irene Mathysen: You've obviously kept in touch with a number of your comrades, a number of veterans. You've also described some of the symptoms that you experienced while you were in the Gulf. I'd like to know what your day-to-day life is like at this moment.

Lt (N) Louise Richard: It's a life of existence. The joie de vivre is gone. It's trying to get through each day. I have multiple various chronic illnesses: chronic fatigue, fibromyalgia, multiple chemical sensitivity—very serious. I had back surgery when I was in the military in 1994, and it went wrong. They treated me as a malingerer, that it was all in my head and that I was just a Gulf War whiner. They didn't treat me for a month. I turned out to have severe osteomyelitis of the spine, of the psoas muscle. It went into the spine. It went everywhere. I was in the hospital for four months. My mother thought I was going to die.

Over and above that, when I told you I had gynecological bleeding during the Gulf War, it continued really badly after I came back to Canada to the point where I had to have blood transfusions. That's how much I was bleeding. Then I was told, "You're cutting your veins. You're just falsifying the blood results." How dare they? How dare you guys do this? We're sent over healthy and we come back ill. Because I was already so ill in the Gulf, my immune system was shot. I couldn't fight infection. I couldn't fight any of these things any more.

Now I've got gut problems, really bad GI, as they say in the report, these presumptive illnesses that the Americans have come forth with, severe chronic pain, severe chronic fatigue. It's very hard for me to concentrate. You should see my apartment. In just trying to organize for this, it looks like a battlefield. I can't stay focused. The brain is in

a fog all the time. It's photophobia. I can't drive at night. My eyes can't handle it any more—

Mrs. Marie Richard: —or go over bridges.

Lt (N) Louise Richard: —or go over bridges. I have these weird phobias I never had before. It's brain damage from the exposures.

• (1000)

The Vice-Chair (Mr. Peter Stoffer): Ms. Richard, thank you very much.

We'll now finish our questioning for this round with the parliamentary secretary, Eve Adams.

We have another witness coming up very shortly.

Ms. Adams.

Ms. Eve Adams (Mississauga—Brampton South, CPC): Thanks very much, Ms. Richard, for preparing for this and coming. I know it would take a great deal of work. We're very happy you were able to join us, and that your mom and your brother are here. Every time we send members of the armed forces to fight, the family also endures the angst. The service of our veterans would not have been possible without the assistance and the love of the families, so thank you all for coming.

I know we're pressed for time. Ms. Richard, I don't know if you've had an opportunity to review the study. Veterans Affairs commissioned an independent scientific committee to examine depleted uranium. That study was then peer reviewed and it came up with seven conclusions. If I were to read each of the seven conclusions to you, and I apologize for being so quick, could you please tell me if you agree with that conclusion or if you disagree?

The first conclusion of the study is:

Depleted uranium (DU) is potentially harmful to human health by virtue of its chemical and radiological effects.

Lt (N) Louise Richard: Absolutely.

Ms. Eve Adams: The second conclusion of this study is:

Within a military setting, the highest risk of exposure to depleted uranium is in those who were: in, on or near vehicles hit with friendly fire; entering or near these burning vehicles; near fires involving DU munitions; salvaging damaged vehicles; or involved in clean up operations of contaminated sites.

Lt (N) Louise Richard: Absolutely, and medical staff.

Ms. Eve Adams: The third conclusion is:

It is unlikely that Canadian soldiers have been exposed to levels of depleted uranium which could be harmful to their health.

Lt (N) Louise Richard: That's false.

Ms. Eve Adams: The fourth conclusion is:

There is no consistent evidence from military cohort studies of adverse health effects that could be attributed to depleted uranium.

Lt (N) Louise Richard: I don't agree with the cohort study, so I will disagree.

Ms. Eve Adams: Which one don't you agree with?

Lt (N) Louise Richard: You're catching me off guard here, but for instance....

Ms. Eve Adams: I don't mean to put you on the spot. You're most welcome to send it in afterwards. I don't mean to put you on the spot.

Lt (N) Louise Richard: Could the clerk remind me of the question?

Ms. Eve Adams: No problem.

Number five is:

There is no strong evidence of adverse health effects reported in larger civilian studies with longer follow-up periods in populations with increased exposure to uranium (e.g. uranium production and fabrication workers).

Lt (N) Louise Richard: I think that's false.

Ms. Eve Adams: Are you aware of strong evidence of adverse health effects reported in larger civilian studies?

Lt (N) Louise Richard: There have been quite a number of them in Bosnia, Kosovo, and Iraq, with birth defects, the 800% rise in cancers. It's been very documented.

Ms. Eve Adams: Number six is:

Our finding that exposure to uranium is not associated with a large or frequent health effect is in agreement with the conclusions of other expert bodies.

Lt (N) Louise Richard: I couldn't assimilate your question. Sorry.

Ms. Eve Adams: No problem. I'll move on.

Number seven is:

There are many Veterans suffering from persistent symptoms following deployment or military conflict which, although not linked to specific exposures such as DU, can cause considerable suffering and can be effectively treated.

•(1005)

Lt (N) Louise Richard: —can cause a great burden. Effectively treated, hopefully.

Ms. Eve Adams: Looking forward now that the study is complete, how should the government respond to the results of this study?

Lt (N) Louise Richard: It should admit to the fact that the urine testing the government has done was misleading. It was wrong. It did not use appropriate facilities to do indepth testing. We should bring it a step further to check the chromosomes and the cells in the RNA. There is clear evidence that it's not just urine. It can be tracked at the molecular level also, so we need to go a step further than stopping at urine.

Ms. Eve Adams: Then specifically, going forward, how do you think the government should respond to cases like yours?

Lt (N) Louise Richard: I'm not unique. It's cases like ours.

We have to go back in time and go after every single person who has knocked at Veterans Affairs' doors with an application of some kind, whatever ailment it is. We need to backtrack. We need to go through every single case back to 1990, with the evidence, the clear research. We need to follow it. We need to help our families, our

doctors. We need to educate Canadians on this. There are nine communicable diseases. This is serious. There is a blood ban on chronic fatigue syndrome, the XMRV virus. They are working on biomarkers.

This is important stuff that doesn't stop at the veteran. This is in our blood supply. Depleted uranium, as we know, goes all over the body, to the organs. Does anyone here want an organ of mine if you're in a car crash tomorrow?

A voice: No.

Lt (N) Louise Richard: I wouldn't either. I was banned from giving blood by the Red Cross back in 1994 because I showed illness back at that time and they were questioning all of this. I was part of the plasmapheresis program. I was very honoured to be part of that, so when I was told no, I was wondering what was going on there.

We need to go in depth on a lot of things that Veterans Affairs and Canada have not even scraped the surface on.

The Vice-Chair (Mr. Peter Stoffer): Captain Richard, thank you very much on behalf of all the committee not only for your service but for your testimony as well. To your mother and brother as well, thank you all very much.

Your evidence is very helpful for us to proceed. If there is anything in the future that you have that you could submit in writing, at your convenience, of course, that would be most helpful.

I also wish to advise the committee that she was kind enough to bring this CD, which is only in English, mind you, so if you wish to have one, there is one here to pick up.

We thank you very much for the opportunity to speak with you today.

Lt (N) Louise Richard: Thank you very much for your time.

The Vice-Chair (Mr. Peter Stoffer): We'll recess for one minute while our next witness comes in.

•(1005)

_____ (Pause) _____

•(1010)

The Vice-Chair (Mr. Peter Stoffer): Members of Parliament, please take your seats.

Folks, we're now very pleased to have Dr. Eric Daxon, a research leader of the Battelle Memorial Institute.

Sir, thank you very much for coming today. We appreciate your time. Please proceed for 10 minutes.

Dr. Eric Daxon (Research Leader, Battelle Memorial Institute, As an Individual): Thank you.

First, I'd like to say that it's a pleasure and an honour to be here before this committee. Second, I'd like to thank you for the work you're doing for Canadian veterans. I think this committee speaks volumes for your interest in Canadian veterans. I'm not a combat veteran, but I was on active duty in the U.S. Army for 30 years, and I'm especially appreciative of the work that is being done for our combat veterans.

Before I begin, I need to make it clear that I'm here as an independent subject matter expert and not as a representative of my company or any other organization. The comments that follow express my views on the issues at hand. I'm a health physicist by training experience. I received my master's degree in nuclear engineering from the Massachusetts Institute of Technology and my doctorate in radiological hygiene from the University of Pittsburgh. My involvement with DU research started in 1992 with my assignment to the U.S. Armed Forces Radiobiology Research Institute, commonly known as AFRRI, first as a branch chief and then as the chair of the radiation biophysics department, and finally, as the team leader for the AFRRI DU research effort.

There were two significant outcomes of this assignment. The first was the initiation of the AFRRI animal model research program into the health effects of embedded DU fragments. The second was providing assistance in the development of the Baltimore depleted uranium follow-up program. The Baltimore program was initiated to provide long-term clinical follow-up for U.S. soldiers with retained DU fragments from U.S. friendly fire incidents during the first Gulf War.

In my follow-on assignment, I became the U.S. DOD's spokesman for the health physics aspects of depleted uranium exposure and the U.S. Army Surgeon General's consultant for depleted uranium. In this capacity, I was part of the initiation and execution of the DU capstone project. When I retired in 2003, I continued my work with the DU capstone project. In the interest of full disclosure, my current company, Battelle, conducted the capstone project.

I became involved in this effort for this committee when Dr. Morisset asked me to review the report on the Canadian experience with depleted uranium. Up front I would like to say that I concur with how the report was conducted, and I do concur with the conclusions of the report.

I'd like to spend a little time discussing a couple of aspects of each of the topics I've been talking about.

The initial review of the potential health effects of the use of DU in munitions was carried out by the U.S. DOD Joint Technical Coordinating Group for Munitions Effectiveness. In a report published in 1974, the group recommended a series of tests to estimate the amount of DU that could be inhaled or ingested subsequent to a variety of scenarios, including fires and tanks being struck by DU. These studies were initiated and culminated in the capstone depleted uranium project.

The overall objective of the capstone project was to estimate the health risks to personnel in each of the three levels of exposure. The first part of the project was the capstone test. The purpose of the capstone test was to measure the DU aerosol concentrations immediately after penetration by a DU munition. This was

accomplished by a series of experiments that entailed firing DU munitions at U.S. armoured vehicles and then using a specially designed sampling array to collect the DU aerosols that were emitted shortly after penetration and at selected time periods after penetration.

The second part of the DU capstone project was the conduct of a health risk assessment for levels I through III. The capstone test data was exclusively used for a level I assessment. Level I exposure are those people who were in, on, or near a vehicle at the time the vehicle was penetrated by a munition, or those first responders who entered the vehicle immediately after to render first aid to the people inside the vehicle. Level II are personnel who, as a result of their job, routinely entered depleted uranium contaminated vehicles. Level III is basically everybody else. The level II and III risk assessments used a combination of capstone data and previously published data. The capstone health risk assessment concluded that DU exposures exceeding safety levels could occur for level I and level II, but would not for level III. Canadian exposures fall into level III.

The Baltimore VA DU monitoring program began its health surveillance of level I, and that's the highest exposed, U.S. veterans with embedded fragments in 1993, and repeated the monitoring every two years.

●(1015)

The results of this clinical monitoring have been reported in multiple peer-reviewed publications. The most recent journal article I am aware of is in a 2011 issue of the *Journal of Toxicology and Environmental Health*. The results reported in this paper are consistent with prior reports. Veterans with retained DU fragments are still excreting elevated levels of depleted uranium. No significant evidence of clinically important changes was observed in kidney or bone, the two principal target organs for DU. That was the conclusion of the 2011 report and all of the reports that I can remember since the study was started.

The results of the Baltimore surveillance efforts are relevant to the Canadian experience with DU because the aerosol exposures of these veterans were several orders of magnitude greater than level III exposures that occurred at Doha or in any of the other level III scenarios.

There are multiple U.S. and international reviews of the health effects of DU stemming from its use in combat. The findings and conclusions in the report I was asked to review are consistent with these reviews and my understanding of DU exposures.

In all cases the primary conclusions of these reports are consistent. With the exception of level I exposures, the people in, on, or near at the time the vehicle was struck, it is unlikely that exposures to DU during this conflict were high enough to generate adverse health effects. This is not the same as saying our veterans are not ill possibly due to their service to our nations. What it does mean is that in seeking a method to determine the source of the illness, DU is a highly unlikely candidate. I believe we can best help our veterans by focusing on other sources of illness that have a higher likelihood of leading to effective treatment.

Once again I would like to thank the committee for this invitation and for the work you are doing on behalf of your veterans.

The Vice-Chair (Mr. Peter Stoffer): Dr. Daxon, thank you very much for a very prompt and precise presentation.

Committee members, we will be going to four-minute rounds due to the time.

We will start off with Ms. Papillon, please.

[Translation]

Ms. Annick Papillon (Québec, NDP): Thank you very much.

Thank you for being here with us today.

[English]

Dr. Eric Daxon: I'm sorry. I'm having a little trouble with the translation.

The Vice-Chair (Mr. Peter Stoffer): Dr. Daxon, where are you from originally, by the way? I was going to say Kentucky with that accent.

Dr. Eric Daxon: No, actually, I was born in Asmara, Eritrea. I'm an army brat. Right now I'm from Texas, and I can guarantee you one thing: it's a lot warmer there than here.

The Vice-Chair (Mr. Peter Stoffer): Yes, sir. Thank you.

Dr. Eric Daxon: It was close to 35 degrees today, so it's truly warm there. My wife and I unfortunately like the cold and snow. Why we're settling in Texas I truly don't know.

I'm sorry it's taking me so long. I guess my fingers aren't quite as young as they used to be.

Mr. Bryan Hayes: Sometimes it's better to unplug it and then plug it back in.

• (1020)

Dr. Eric Daxon: Thank you, sir. You must be an engineer.

I'm sorry, Ma'am, go ahead.

Ms. Annick Papillon: Okay.

Thank you very much for that.

[Translation]

I would like to just come back to the testimony we heard previously, which was really quite interesting. In fact, what we should remember above all, is that there is a serious shortage of scientists. Scientists with medical expertise need to be hired in order to better meet the needs of veterans and provide them with the most appropriate care.

I would like to hear more from you on the Department of Veterans Affairs' need to hire scientists. They could work more cooperatively with universities. I would like to know if you have any ideas to suggest how we can move forward.

[English]

Dr. Eric Daxon: The short answer is that I really can't offer any suggestions. I'm sorry. I know how the U.S. Veterans Affairs works. The one thing in the U.S., and it sounds as if it's the same thing here in Canada, is that the policy for determining whether or not an illness is compensable is basically set by Parliament and by your DOD.

The one thing that I think was really effective in the U.S. effort early on was the outreach to veterans. Very early on after the Gulf War there was a lot of reaching out by the U.S. government to U.S. veterans. I thought that was extremely effective.

[Translation]

Ms. Annick Papillon: It seems that, nonetheless, there are differences. Actually, Ms. Richard, who testified before this committee just before you, was explaining to us that there are tests, which received perhaps greater recognition in the United States, that could detect certain illnesses or certain causes, such as in the case of depleted uranium.

Could you tell me about some of the tests used in the United States that Canada could use as a model? That would be worthwhile indeed.

[English]

Dr. Eric Daxon: At this point, I'm a health physicist, so I'm dealing primarily with the physics part of this, how DU is internalized, how it's metabolized, and the radiation health effects for that.

What I think Madame Richard was referring to was the U.S. effort very early on to measure the amount of depleted uranium in urine from our combat veterans. At this point in time, as Madame Richard said, it is really too late to conduct those measurements to determine whether or not there are increased levels of DU in the urine. Increased levels of DU in the urine are indicative of increased levels of DU—

[Translation]

Ms. Annick Papillon: Perhaps we could now conduct analyses that would allow us not to end up slow on the uptake again, like in situations such as those that occurred more than a decade ago. Perhaps we could immediately set up our own procedures, tests and scientists that would be able to help our soldiers of today right now, those who will be our veterans of tomorrow. I don't know if that could be a solution.

We could implement solutions like that one, in order to go beyond the tabled report, which concluded that it was very unlikely that there were any cases of depleted uranium contamination. I don't want to focus exclusively on those recommendations. I want solutions. I want tests to be implemented. Perhaps the procedures need to be changed or re-engineered in order to be able to make a diagnosis more quickly. At the very least, appropriate care must be offered to our soldiers and veterans.

[English]

Dr. Eric Daxon: I will discuss what I know about the U.S. system for pre-deployment and post-deployment screening. This was basically developed after the Gulf War to try to mend some of the problems that we had with our returning veterans from the Gulf War. The U.S. system starts with a pre-deployment screening questionnaire where people are provided with an opportunity to assess their health and to provide an indication of the types of concerns that they have prior to their deployment. There are preventative medicine units and organizations that are deployed with our soldiers that are actively monitoring the environment to determine whether there are toxins in the environment.

I think the strongest part of the U.S. program is when the veterans return. There's a post-deployment questionnaire. There's medical monitoring that's established based upon the veteran's assessment of the exposure that the veteran had. For instance, if the veteran returning from the most recent Iraq war checked the depleted uranium exposure box, he would be provided access to a physician trained on depleted uranium exposures who would be able to answer whatever questions the veteran had.

Prior to executing that program, we established first a U.S. army-wide DU training program. Madame Richard is correct. The soldiers that were sent over in the first Gulf War were not informed about the fact that DU rounds were being used. In the U.S., we started a training program that basically required all soldiers to watch a training film.

• (1025)

The Vice-Chair (Mr. Peter Stoffer): Thank you very much.

We need to move on. Maybe you can continue that discussion with the next member.

Mr. Zimmer, please, for four minutes.

Mr. Bob Zimmer (Prince George—Peace River, CPC): Thank you, Doctor, for coming today. Thank you for your service to our neighbour to the south, but also to our veterans today through your testimony. I thank all the veterans in the room for their service to Canada.

You mentioned that U.S. members have DU fragments in their bodies. Your research is focused on this, on the health effects from DU. Have there been any negative health effects attributed to those fragments?

Dr. Eric Daxon: Other than the injuries that were caused by the fragments themselves, there have been no attributed adverse health effects due to the fact that they're DU. These soldiers were wounded and these soldiers do have health effects, but it's not due to the depleted uranium.

Mr. Bob Zimmer: Obviously, they came back after the time they served. Until today, in 2013, have there been any long-term effects of DU exposure?

Dr. Eric Daxon: None that I'm aware of, no.

Mr. Bob Zimmer: Okay.

Have there been any effects on veterans' children as a result of DU exposure?

Dr. Eric Daxon: No, there have not. Immediately after the Gulf War, as a veterans' concern was raised, a study was initiated. They studied that relationship and found no correlation.

Mr. Bob Zimmer: Okay.

I assume that there's a fairly small number of scientists dealing with this internationally. Is that correct?

Dr. Eric Daxon: Small is a relative term. To me, it's kind of large, but from your perspective, it's probably small.

Mr. Bob Zimmer: Maybe you could enlighten us a little about that.

What countries are studying DU? Do you corroborate your research and evidence? Do you get together and share data?

Dr. Eric Daxon: The last depleted uranium symposium that occurred was sponsored by the Armed Forces Radiobiology Research Institute. That was three or four years ago. It took place along with the 50th anniversary of the founding of AFRRI. I see these results presented at professional meetings periodically, and they're published in radiobiology research and the *Health Physics Society Journal*. As to whether there has been a DU conference, the only one that I'm aware of is AFRRI's.

Mr. Bob Zimmer: How about where you get on the phone and collaborate with other scientists internationally? We assume that's happening. Can you let us know if that is happening, and what does it look like to you?

Dr. Eric Daxon: The collaboration is happening. The way we collaborate is through scientific journal articles. The communications are peer reviewed. There are articles that go back and forth in which findings are concurred with or disputed. That's the way the collaboration occurs. Periodically in the U.S. there are meetings where DU is discussed, but other than the normal communications that happen between people who are studying the same thing, the primary way is through the literature.

• (1030)

The Vice-Chair (Mr. Peter Stoffer): Thank you.

We now move on to Mr. Casey.

Mr. Sean Casey: Thank you, Mr. Chairman.

Dr. Daxon, back in December 2009 an Italian court found the Italian Ministry of Defence guilty of negligence and ordered it to pay \$1.4 million to the family of a Kosovo veteran because he had died of Hodgkin's lymphoma. The judge in that case said that there is obviously a link between the point of serving in an area where depleted uranium was used and the serious diseases that may result, including Hodgkin's lymphoma.

Two questions arise out of that. One, are you familiar with the case? Two, are you aware of any other litigation that dealt with a similar claim?

Dr. Eric Daxon: I am not familiar with the case; I am not aware of any other litigation; and I disagree with the conclusion.

Mr. Sean Casey: This committee is going to Washington next month. What advice do you have for us, as someone who's an expert in the field in the United States? Are there certain people or certain things this committee should see that would be valuable to us in advancing this study?

Dr. Eric Daxon: I would recommend you go see the Baltimore VA DU monitoring program. Talk to Dr. McDermott and her staff. I had the privilege of walking through her facility in 2001-02. It is a very caring group of people that I think are treating U.S. veterans correctly.

The Vice-Chair (Mr. Peter Stoffer): Sorry, if I may interrupt for one second, if you have any coordinates or numbers for that individual, we'd be very happy to receive this information later.

Dr. Eric Daxon: Absolutely.

The Vice-Chair (Mr. Peter Stoffer): Thank you.

Go ahead, Mr. Casey.

Mr. Sean Casey: The scientific study that was done excluded case reports, cross-sectional studies and clinical studies of hospitalized veterans, whatever the outcomes. In your opinion, is that a weakness in the study, the fact that these things were excluded?

Dr. Eric Daxon: I would have to read the actual study to determine, but in general, a case report—that's not a weakness. Part of the problem you have with a case report is that we're dealing with a distribution of people who get illnesses or don't get illnesses.

The best analogy I have is that if I had a jarful of multicoloured M&M's, a case report is like reaching in once, pulling out a red one, and saying they're all red. You need to pull out more M&M's to get a good understanding of what the distribution actually is in the bottle.

That's what these studies are intended to do.

Mr. Sean Casey: That's the difficulty we find ourselves in. We've had a couple of veterans appear before the committee—very passionate, very convinced, and very sick—and yet we have a report that wouldn't look at their records, that came up with a conclusion based on a paper review.

One of the veterans who appeared in front of us provided us with some work that was done in examining hair samples. Could you offer an opinion on the reliability of that type of testing as compared with others in determining levels or traces of radioactive material?

Dr. Eric Daxon: Unfortunately, I can't. I haven't studied using hair for radioactive material. Anything I would say would be strictly conjecture.

The Vice-Chair (Mr. Peter Stoffer): Thank you very much, Dr. Daxon.

Oh, and by the way, you don't have to give us that information. The woman in question will be appearing before us on Tuesday.

Dr. Eric Daxon: Excellent.

The Vice-Chair (Mr. Peter Stoffer): Thank you very much.

We'll now go to Mr. O'Toole, please.

Mr. Erin O'Toole (Durham, CPC): Thanks, Mr. Chair.

I thank you very much, Dr. Daxon.

I have two questions, a short one and then one a little longer.

In your opening statement, you said that you'd reviewed and agreed with the report chaired by Dr. Morisset. Is it fair to say that the report is as up to date and as widely consultative as possible on the subject of DU?

• (1035)

Dr. Eric Daxon: Yes, I believe it is. They took good advantage of the multiple extensive reviews of the literature that have occurred through the years. To me, that's just good science.

Mr. Erin O'Toole: Thank you.

It was difficult when we had Madame Richard in here, because as Mr. Casey alluded to, and as many of us have said, we want to help our veterans. I joined the forces shortly after the Gulf War, and have watched the issues that...

Most of her testimony related more to Gulf War syndrome as opposed to DU. In my reading over the years, DU was held out as a possible cause for idiopathic illness around the Gulf War, or what she described as unexplained multi-symptom illness, Gulf War syndrome.

Have you found that both the literature that Dr. Morisset's group reviewed and your own research have really excluded DU as a possible cause for the wider Gulf War syndrome?

Dr. Eric Daxon: Yes, I have. I'll answer plainly, because the report was written in plain language, so yes.

Scientifically I've got a problem, because the way I'm trained, there is a probability that I could stand up, walk toward that wall, and walk through the wall. I can't exclude that because of the way I'm trained.

So if you ask me for 100% certainty, I'm going to be very hesitant to do it, but the report was written in plain language, so I'm going to answer plainly. I believe that DU has been ruled out as a causative agent.

That doesn't mean these veterans are not sick. They are.

Mr. Erin O'Toole: Yes, and that's what conclusion seven of Dr. Morisset and the group's study recognized. When Dr. Morisset appeared here, it was his professional opinion, and I would ask if you agree, that often when it's idiopathic, it can't be explained. It's better to treat the symptoms than really to try to find the magic bullet of causation.

Even in Madame Richard's opening statement to us, she talked about vaccines, prisoner contact, organophosphates, oil field fires.

In your opinion, is it causation that's more important, or is it treating the symptoms?

Dr. Eric Daxon: I am not a physician, but the one thing every physician I've ever dealt with has basically told me is, "I don't care what you tell me the dose is, I'm going to treat the patient in front of me." So I would believe that. I think it's important that physicians be allowed to treat the patient in front of them.

The Vice-Chair (Mr. Peter Stoffer): Thank you very much.

We'll now go on to Ms. Mathysen and then Monsieur Chicoine.

Ms. Irene Mathysen: Thank you very much, Dr. Daxon, for being here.

I'm going to continue in the vein that has been followed by the last two questioners, and that is, that people such as Madame Richard and Monsieur Lacoste believe that they are the victims of depleted uranium, and that's what we've been pursuing.

About one week ago or so, Dr. Nicholas Priest from Atomic Energy of Canada Limited told the committee that we do indeed seem to be concerned about DU because whenever you ask about all of these chemicals, vaccines, and toxins people such as Monsieur Lacoste and Madame Richard were exposed to, the response is, "We can't talk about that; that's a secret", and in the effort to maintain that secret, we're chasing the wrong explanation.

Would you agree with Dr. Priest that we should be looking at something else? What happened to these people? Is it possible that if we do look at this cocktail of toxins and vaccines, we may find culpability with the Department of National Defence here in Canada and with the Department of Defense in the United States? Is that the problem?

Dr. Eric Daxon: In terms of culpability with the vaccines, I really can't address that. I'd just be speculating.

In terms of whether or not DU should be listed in this mix, right now the evidence says no, that it shouldn't, that it would be better if people focused in other directions.

I have a little personal story. I had severe neck pain that would kind of drop me to my knees for a while. This was during the response to the World Trade Center bombings. It was really bad. I had an old injury that I thought had been aggravated and I assumed it was going to need surgery so I didn't want to go in. I'm a guy. I finally went in and talked to the physician. He listened to me and he said, "Oh, it's stress." I said, "No, it's not. You have to operate on me. This can't be stress. It hurts too much." He convinced me, and I started taking the medication. Two or three weeks later, the episodes stopped, and I haven't had one since. I can't imagine what I would have done if I had been convinced that I needed surgery and then I tried to find a surgeon to operate on me. No ethical surgeon would, because there was nothing wrong with my neck. I needed to be treated for stress.

That's how I would answer that question. I firmly believe, after being beaten up by many physicians, that a physician needs to treat the patient in front of them.

● (1040)

The Vice-Chair (Mr. Peter Stoffer): Monsieur Chicoine, please ask a very quick question.

[Translation]

Mr. Sylvain Chicoine: Thank you, Mr. Chair.

I would like to continue somewhat along the same lines as Ms. Mathysen.

You also mentioned in your opening statement that it is important to determine the source of veterans' health problems.

Here in Canada, it seems that we have long suspected uranium as being the cause of illnesses. However, that seems to be less and less

the case. And yet, other tests or examinations have not really been conducted to determine the source of Gulf War syndrome, among others. This syndrome is common among veterans who, upon their return from different conflicts, experience similar health problems.

What is your experience of that situation in the United States? Have studies been done that could point to other elements as being the possible source of Gulf War syndrome in particular?

[English]

Dr. Eric Daxon: I'm speculating, because it's not my area, but yes, I know studies were conducted. There are several epidemiological studies, some of which were conducted by our Department of Veterans Affairs, looking at other potential causative agents.

The Vice-Chair (Mr. Peter Stoffer): Thank you, sir.

Mr. Lizon, you get to back up the team, sir.

Mr. Wladyslaw Lizon (Mississauga East—Cooksville, CPC): Thank you very much, Mr. Chair. Thank you for coming, Dr. Daxon.

We're talking about urine tests to determine the presence of depleted uranium. Can you tell the committee how it is determined that depleted uranium as opposed to natural uranium is in the urine?

Dr. Eric Daxon: Oh, I'd love to. I'm serious, because this is right in line with what I do.

We're looking at the ratio between uranium-235 and uranium-238. There are alpha spectroscopy and some mass spectroscopy methodologies that will allow us to determine what that ratio is. If the amount of U-235 is around 0.7%, it's natural. If it's less than 0.7%, by definition it's called depleted uranium. If it's 0.2%, then it was DU that was made in the U.S.

Mr. Wladyslaw Lizon: Thank you very much. I would assume that it would be the same principle if they test hair, for example.

Dr. Eric Daxon: Yes.

Mr. Wladyslaw Lizon: Would you say that a primary conclusion of the report is that Canadian veterans have never had the combination of proximity and exposure to depleted uranium that could pose a negative health risk?

Dr. Eric Daxon: You use that term "never" again, and I have a wall I have to contend with, but I'll speak plainly. Based on the Canadian exposures that I read in the report, all the exposures were level III, which means they're well below safety standards. Almost by definition, that means the likelihood of adverse health effects—and I'm being really cautious here—is very low. I'm speaking to two audiences. I'm speaking to you and I'm also speaking to my peers, because they will check up on me.

Mr. Wladyslaw Lizon: Therefore, going forward—

The Vice-Chair (Mr. Peter Stoffer): Sorry, Mr. Lizon.

Dr. Daxon, you said they were below safety standards. Do you mean they wouldn't have been above safety...? Okay. Now I've got it. I apologize.

● (1045)

Dr. Eric Daxon: The exposures were safe, to speak plainly.

The Vice-Chair (Mr. Peter Stoffer): Yes, sir. Thank you.

Mr. Lizon, sorry.

Mr. Wladyslaw Lizon: Do you believe misconceptions about depleted uranium health effects can hurt soldiers and their families?

Dr. Eric Daxon: Yes, I do. The vignette about my neck pain is why. It was very much stress. I was treated for stress and I haven't had an episode since.

Mr. Wladyslaw Lizon: The report states that you and your colleagues were asked if you thought the report was clear, accurate, coherent, and complete. Would you agree that these terms accurately describe this final report?

Dr. Eric Daxon: Yes, with one small exception. The term "shrapnel" is used in there, and in the U.S. that's a very narrowly defined term. It should have been "fragment".

The Vice-Chair (Mr. Peter Stoffer): Dr. Daxon, Mr. Lizon, thank you very much.

We greatly appreciate your time. Sorry for the cold weather you're experiencing here.

Dr. Eric Daxon: I love it. Thank you.

The Vice-Chair (Mr. Peter Stoffer): If there's anything you can present to us in writing in the future that you may think of, or if you have more testimony that you would like to add, we'd be honoured to have that.

On behalf of the committee, thank you very much for coming here.

Members of the committee, I'll just let you know that Thursday's meeting will be at 1 Wellington, near the Château.

Thank you. That's it. God love you.

The meeting is adjourned.

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