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Chair

Mr. Greg Kerr

Standing Committee on Veterans Affairs

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● (0850)

[English]

The Vice-Chair (Mr. Peter Stoffer (Sackville—Musquodoboit Valley—Eastern Shore, NDP)): Good morning, everyone. I see we have quorum this morning.

Pursuant to Standing Order 108(2), we continue with our study of depleted uranium and Canadian veterans. We are very proud today to have with us, from the Department of National Defence, Janick Lalonde, senior advisor on toxicology, forces health protection, with Canadian Forces Health Services.

Madame Lalonde, we're very pleased to have you here. Please speak *en français ou en anglais*, whatever you prefer. Then we'll have a round of questioning afterwards.

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

Dr. Janick Lalonde (Senior Advisor, Toxicology, Forces Health Protection, Canadian Forces Health Services, Department of National Defence): Thank you very much.

[Translation]

First of all, I would like to thank the Standing Committee on Veterans Affairs for this invitation to come share with you my knowledge of depleted uranium. As a Canadian, as a member of the civil service and as a member of the team responsible for ensuring health services for the Canadian Forces, know that I take the well-being of the members of the Canadian Forces and its veterans seriously. As well, I would like to stress that, as a scientist, I am very much interested in the authenticity, accuracy and relevance of all scientific evidence submitted to me for study.

My academic life started at the University of Ottawa, where I obtained a bachelor of science, with a specialization in biology. During my post-graduate studies at the master and doctoral levels, I specialized in chemical and environmental toxicology, and more specifically on heavy metals, such as uranium. When I was doing my master's degree at the University of Ottawa, I developed a probabilistic risk analysis method for determining the quantity of fish that can be consumed before reaching a level of heavy metals that would be considered harmful to human health. When doing my doctoral studies at the INRS, I studied analytical chemistry and the drinkability of water in order to quantify the extent of environmental contamination by heavy metals.

[English]

Following my graduate studies, I was hired by the Department of National Defence as an environmental toxicologist. I have now held the position of senior advisor in toxicology within the directorate of forces health protection of the Canadian Forces Health Services group for the last 10 years.

In this capacity I have the help of a multidisciplinary team, and we conduct environmental health risk assessment. The team includes industrial hygienists, physicians who specialize in occupational and environmental health, preventive medicine technicians, and members of the deployable health hazard assessment team. The expertise of this multidisciplinary team is further complemented by medical intelligence officers who monitor potential occupational and environmental hazards in the field.

Where Canadian Forces members deploy, the deployable health hazard assessment team also goes to take air, water, and soil samples that are analysed for the detection of a series of contaminants. Taking into account these results and assuming conservative exposure scenarios, we determine if soldiers are exposed to contaminants above levels that could affect their health.

These assessments are typically conservative, in that they assume worst-case scenario exposures to environmental contaminants. Using conservative assumptions reduces the likelihood of underestimating potential adverse health effects.

Through a memorandum of understanding with our allies, the environmental analyses conducted by the Canadian Forces are shared and compared with similar assessments carried out by our allies. In addition to receiving our allies' environmental assessments, we also monitor those carried out by credible international organizations, such as the United Nations Environment Programme, UNEP, and the World Health Organization. This sharing of information and review of the literature augments our environmental surveillance and provides us with the reassurance that we did not overlook potentially dangerous occupational and environmental issues.

Of all the environmental samples analysed to date, we have not found excessive environmental uranium levels in theatres of operation. Similar observations were made by our allies and with the UNEP's reports on the environmental and health threats of using depleted uranium munitions in Bosnia, Kosovo, and Serbia.

All three reports from the UNEP concluded that the use of depleted uranium munitions did not constitute a significant threat to either the environment or the local populations. The World Health Organization also concluded that depleted uranium is not a threat to the local population in countries where it has been used, and the biological monitoring of citizens living in the general proximity of depleted uranium munitions impaction sites is not necessary.

[Translation]

In addition to participating in these environmental assessments, I have been managing the Canadian Forces Voluntary Depleted Uranium Testing since 2005.

On February 7, 2000, the Minister of National Defence announced that the Canadian Forces would offer depleted uranium testing to any veteran or active member who asked for the assessment. This offer was made to address concerns from some soldiers deployed to areas where depleted uranium was used. An external accredited laboratory has conducted all uranium analyses for the Canadian Forces.

[English]

To date, more than 200 Canadian veterans of the Gulf War and of the Balkans peacekeeping operations took part in the voluntary depleted uranium testing. Total uranium levels were all found to be within the normal range, and the radioisotope analyses did not indicate significant depleted uranium exposure. The tests have found no evidence of increased uranium levels among Canadian Forces veterans of either the Gulf War or the Balkans peacekeeping missions. These results were published in a peer review journal, and a summary of the results are posted on the Canadian Forces Health Services website.

The results of the Canadian Forces depleted uranium testing indicate that Canadian Forces members were not exposed to high levels of depleted uranium, which is consistent with the results of our allies, including the United States, Belgium, France, and Germany. The only consistent reporting of positive depleted uranium testing is made in a cohort of U.S. Gulf War veterans who were victims of depleted uranium friendly fire during the Gulf War. Some of these veterans have in their bodies fragments of depleted uranium munitions and continue to excrete high uranium levels in their urine. Despite this degree of exposure, no clinically significant uranium-related health effects have been identified. No Canadian Forces members have been involved in depleted uranium friendly fire, so it follows that Canadian Forces members have not tested positive for depleted uranium.

The Veterans Affairs Scientific Advisory Committee invited me last year to present to them the results of the Canadian Forces voluntary depleted uranium testing. I was asked by the Scientific Advisory Committee to provide a short list of key references pertaining to potential environmental and health impacts of uranium. I was not, however, one of the external reviewers of the depleted uranium and veterans health report. Nonetheless, after having reviewed the report, I can say I concur with its key conclusions. I am also of the opinion that it is unlikely that Canadian Forces members have been exposed to levels of depleted uranium that could be harmful to their health.

• (0855)

[Translation]

Multiple expert medical and scientific panels have consistently concluded that depleted uranium does not pose a hazard to military personnel unless they are inside vehicles that are hit by depleted uranium munitions.

In summary, I would reiterate that it is unlikely that exposure to depleted uranium among members of the Canadian Forces would have been significant enough to cause health problems.

[English]

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

Now we'll go to five-minute questions. We alternate back and forth.

We'll start with Mr. Chicoine, please, for five minutes.

[Translation]

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

Thank you, Ms. Lalonde, for coming to testify before us today.

I would simply like to mention that this week Ms. Richard, who is a veteran, came to testify before this committee. According to her, further to the voluntary testing in 2000-2001, both companies apparently said they were unable to test the level of depleted uranium adequately.

Can you comment on this statement? Is it possible for this to be so and that these two firms did not perform adequate tests?

Dr. Janick Lalonde: No, actually, it was people from one particular laboratory, namely Activation Laboratory, who basically did the depleted uranium analyses. They were able to do total uranium tests on the one hand, and, on the other, tests pertaining to the various uranium radioisotopes in order to determine whether exposure was from depleted uranium or uranium from a natural source. These studies were published in a peer-reviewed scientific journal. In other words, it was reviewed by other scientists working in similar areas.

Mr. Sylvain Chicoine: Thank you.

For some time, in the 1990s, it was thought that depleted uranium could affect people's health and be the cause of illnesses suffered by our military personnel on their return from operations. In particular, many suffered from what was called Gulf War syndrome. Many tests were done therefore to prove that depleted uranium was not the cause. In fact that was the conclusion of all the studies.

Has anyone begun to look into what might be other sources of these health problems? Have any tests begun in this connection?

Dr. Janick Lalonde: I would like to begin by saying that I am not testifying here today in order to say that Gulf War syndrome does not exist. We have seen what the witnesses said in this regard. I think we are more or less agreed. Some military personnel were not in good shape on their return from deployment. That was absolutely so.

As for a possible cause, I am sorry, but I cannot help you on that subject. However, I definitely know that attributing the cause of these problems to depleted uranium is mistaken.

Mr. Sylvain Chicoine: All the witnesses have told us they did not know if there were other studies into possible causes. The studies conclude, if not certainly, then very probably, that the cause of the health problems is not depleted uranium.

In your opinion, is it important to know what the cause of Gulf War syndrome is? In fact, health problems appeared not only after that war, but in later conflicts too. Many veterans come home with health problems, but the causes are not known. I find it a bit worrying that no one is looking into the cause of these health problems.

Dr. Janick Lalonde: I think that studying potential causes has to be important. Looking at treatments that might be effective is, to my mind, another way of finding answers.

• (0900)

Mr. Sylvain Chicoine: Thank you.

I turn then to the question of vaccination.

Ms. Richard told us that, when she was deployed during the Gulf War, she received a whole series of vaccinations that were not documented.

Can you tell us why they were not documented? Did the Canadian Forces have something to hide?

Dr. Janick Lalonde: I am not aware of this. Vaccination is not at all my area of expertise.

Mr. Sylvain Chicoine: Ms. Richard said that people had been let go from the Department of National Defense after receiving an incorrect diagnosis or without receiving one at all. People were left to their own devices and had to find doctors outside the Forces: specialists, therapists, psychiatrists and so on. According to her, when doctors diagnosed and corroborated their health problems, Veterans Affairs Canada had the nerve to call into question their diagnoses, their treatments and their qualifications. She said that Veterans Affairs dictated to them the number of treatments they could receive and the distances they could go to document their claims and that policy always trumped the needs of sick veterans.

Can you comment briefly on Ms. Richard's words?

Dr. Janick Lalonde: I cannot make any comments on the policies of Veterans Affairs Canada, but I can assure you that, regardless of the diagnosis and the reason for the ills suffered by members of the Canadian Forces, the group in charge of health services within the Canadian Forces treats them properly. It does not depend on the diagnosis or causes associated with it. The treatment is what counts. [*English*]

The Vice-Chair (Mr. Peter Stoffer): Thank you, Dr. Lalonde and Mr. Chicoine.

We now move on to Mr. Zimmer, please, for five minutes.

Mr. Bob Zimmer (Prince George—Peace River, CPC): Thank you, Doctor, for your presentation today.

I'd also like to thank all the veterans who are in the room today for your service to Canada. We definitely appreciate it.

Starting off, in your opinion, what can be learned from the results of the study we just went over?

Dr. Janick Lalonde: It's that depleted uranium is not likely the cause of adverse health effects within the Canadian Forces members who were deployed.

Mr. Bob Zimmer: Right. If you don't mind, do you have the conclusions in front of you, our seven conclusions? If we can go through them step by step, could you just give your opinion on those

Dr. Janick Lalonde: I have them in French, but that should be fine.

Mr. Bob Zimmer: That's okay, as long as translation works. Do you want me to read out the conclusion and then you respond?

Dr. Janick Lalonde: Sure. Yes, please.

Mr. Bob Zimmer: Number one:

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

Dr. Janick Lalonde: Absolutely, I agree.

Mr. Bob Zimmer: Number two:

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.

Dr. Janick Lalonde: I agree.

Mr. Bob Zimmer: Number three:

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

Dr. Janick Lalonde: I agree.Mr. Bob Zimmer: Number four:

There is no consistent evidence from military cohort studies of adverse health effects that could be attributed to $[\mathrm{DU}]$.

Dr. Janick Lalonde: I agree.

Mr. Bob Zimmer: Number five:

There is no strong evidence of adverse health effects reported in larger civilian studies with longer follow-up periods of populations with increased exposure to uranium...

Dr. Janick Lalonde: I agree.

Mr. Bob Zimmer: Number six:

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.

Dr. Janick Lalonde: I agree.

Mr. Bob Zimmer: Number seven:

There are many Veterans suffering 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.

Dr. Janick Lalonde: This is not directly my line of work, but after what we've heard from the other witnesses, I have to say that I agree.

Mr. Bob Zimmer: It kind of goes along with what Mr. Chicoine has said: we all care about our veterans' health. I think we're concerned about getting to the bottom of what the cause of any problems might be. Just to reaffirm what I think you've already said, do you think veterans would be best served if DU could be ruled out as a cause for their health concerns?

(0905)

Dr. Janick Lalonde: Absolutely.

Mr. Bob Zimmer: Good. Do you agree that the committee objectively followed its guiding principles of open-mindedness, comprehensiveness, and clarity in communication?

Dr. Janick Lalonde: Yes, I agree.

Mr. Bob Zimmer: I think the bottom line is that we want to get to the bottom of what these concerns are. Then we want to help veterans receive treatment for that particular symptom. If it's not DU, we want to say, okay, it's not DU, and move them to somewhere more in line with what the issues are. I think that's where we want to go.

Dr. Janick Lalonde: Yes, I agree.

Mr. Bob Zimmer: You've said this already, but I want to reaffirm it. In your opinion, is the study compelling enough to close debate on whether there's a link between depleted uranium exposure and illnesses suffered by certain Canadian veterans?

Dr. Janick Lalonde: Yes.Mr. Bob Zimmer: It's definitive.Dr. Janick Lalonde: Absolutely.Mr. Bob Zimmer: Thank you.

That's all I have.

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

We'll now go on to Mr. Casey, please, for five minutes.

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

I don't know, Dr. Lalonde, whether you've had a chance to review the testimony that was given at the last meeting by Louise Richard. Did you?

Dr. Janick Lalonde: Yes, I did.

Mr. Sean Casey: That's good, because I was worried that when I tried to paraphrase her evidence I might get it wrong.

I'm sure you heard what she had to say about the inoculation she received when she was posted—the level of disclosure that was given to her with respect to those inoculations and the suggestion that some of the inoculations were experimental drugs. If you've reviewed that testimony, if I haven't fairly characterized it, rely on your review and not my summary of it.

I'm interested in your comments, given your field of expertise, on her testimony with respect to the inoculation she was given when posted and the level of disclosure that she was given with respect to those inoculations.

Dr. Janick Lalonde: My area of expertise is not with the inoculations. As I do not know her personal medical file, I cannot comment on it.

Mr. Sean Casey: Another veteran testified before this committee by the name of Pascal Lacoste. I think you'd be aware that Mr. Lacoste's action was the catalyst that put us on this path and prompted this study. He produced for this committee some testing done on his hair samples. The samples disclosed some very high levels of uranium traces or radioactivity. I don't know the technical term, but I'm sure you do. What comments can you offer with respect to the reliability of the hair sample testing that he provided to the committee?

Dr. Janick Lalonde: I'm afraid I cannot comment on his particular case. What I can say, however, is that of the 230 CF members and VAC clients who have come forward for uranium and depleted uranium testing within the Canadian Forces, none tested positive for depleted uranium.

I can also say that these results are in line with those of all our other allies. The only consistent positive testing of depleted uranium —I would say around the world—is with a cohort of U.S. veterans that had been involved in a depleted uranium friendly fire. They were victims of it. Some of them have embedded depleted uranium fragments in their bodies.

Mr. Sean Casey: Are you aware that there's a court in Italy that in 2009 awarded damages against the Italian department of defence of €1.4 million with respect to the family of a Kosovo veteran? The court explicitly found that there was a link between depleted uranium and serious diseases, including Hodgkin lymphoma. Are you familiar with that case?

Dr. Janick Lalonde: I am familiar with the study. Our epidemiological cell actually looked at a potential link with this disease. They have found no increased evidence of lymphoma in deployed CF members. If I recall correctly, this study attributed this cluster of Hodgkin lymphoma to be a sporadic event that did not specifically affect the deployed personnel and is unlikely to be related to environmental exposures in the Balkans. I believe that was the conclusion of this particular study. Now, as to whether or not they were awarded a pension, I cannot comment, and I cannot comment on the reason why this particular individual was able to receive a pension and if it was for this reason or not. That I don't know.

• (0910)

Mr. Sean Casey: Doctor, you're talking about a study. I'm talking about an actual case that was litigated before the courts, where the judge found, on the basis of a legal test, that there was a link and accordingly awarded damages. I realize you're talking about an academic document. I'm talking about a legal decision.

Dr. Janick Lalonde: Yes, okay. I'm not aware of that specific case.

Mr. Sean Casey: If the evidence is so clear-cut, what do you make of the fact that the UN General Assembly and the European Parliament, in 2007 and in 2008, each passed resolutions with respect to the imposition of a moratorium on the use of depleted uranium weapons?

Dr. Janick Lalonde: I am not aware of the motivation of such policy or direction.

The Vice-Chair (Mr. Peter Stoffer): We have to move on, Mr. Casey.

We now move on to Mr. O'Toole, please.

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

Before I start, and it's not really a point of order, but Mr. Casey refers to an Italian court decision. I think it would be helpful for the entire committee to see that decision, or a translation he may be referring to. I think it would be germane.

The Vice-Chair (Mr. Peter Stoffer): I believe in the last committee meeting, Mr. O'Toole, we were given documentation.

Mr. Erin O'Toole: No, I mean the actual decision.

The Vice-Chair (Mr. Peter Stoffer): I'll check with the analysts.

It's in Italian right now, but we'll get it translated.

Mr. Erin O'Toole: Certainly there's a difference between the decision itself and the award. I think it's pertinent for all of us to see that.

The Vice-Chair (Mr. Peter Stoffer): Sure.

Mr. Erin O'Toole: Thank you very much, Dr. Lalonde.

One of the things I find refreshing about these witness hearings is that we've had some outstanding experts, both Canadian and American, and I appreciate the sharing of information between the scientific community, all focused on serving our veterans. That is just a comment before I start.

I have three questions.

Referring to your 200-person study of veterans, specifically for uranium levels, you stated that there was no evidence of increased uranium levels among Canadian Forces veterans. That was your conclusion.

Dr. Janick Lalonde: Yes.

Mr. Erin O'Toole: In any statistically significant study, there will be a potential for outliers, people outside of the statistical norm, and that's normal in any general population study.

Dr. Janick Lalonde: Yes, absolutely. Everybody in the general population excretes various amounts of total uranium levels, depending.... Mainly, when it comes to uranium in particular, a big portion of our exposure comes from our drinking water, actually, just naturally occurring uranium. So everybody does excrete uranium, but to various degrees, and the results of our testing were all within this natural distribution that you'd expect in the general population.

Mr. Erin O'Toole: So because there is the potential for outliers, the study shows that because of the population studied, the conclusion is there's no incidence related to being a part of this specific population of veterans. Maybe I'm not paraphrasing that the right way, but because there's no incidence within that defined population of veterans, a conclusion can be drawn that there is no higher incidence as a result of service.

Dr. Janick Lalonde: That's right, for those people who came forward, because it was voluntary testing.

Mr. Erin O'Toole: Building from that, my second question would be related to conclusion 7 in Dr. Morisset's report. There has been a lot of discussion about idiopathic illness and multi-symptom illnesses that aren't attributable.... In some cases, these have been called Gulf War syndrome or Gulf War illness. Most of the physicians and scientists we've heard from have said excluding DU,

given the results of this study, will allow other possible causes of these chronic symptoms to be studied.

Do you agree with that?

● (0915)

Dr. Janick Lalonde: Yes, I agree.

Mr. Erin O'Toole: I think conclusion 7 was carefully worded to acknowledge that there are veterans with real, serious, chronic issues. Dr. Morisset and others said that those symptoms can often be treated specifically, whether or not the cause of the symptoms is known.

Would you agree with that?

Dr. Janick Lalonde: Yes. I'm not a physician myself, but I would assume so.

Mr. Erin O'Toole: As my colleague Mr. Zimmer has noted, everyone here wants to ensure that our veterans receive adequate care and high-level treatment, and focusing on treating the symptoms can be a higher priority or can be a better service than trying to attribute those chronic symptoms to a general cause.

Can I have one last question?

The Vice-Chair (Mr. Peter Stoffer): You're right at the cusp, my friend.

Mr. Erin O'Toole: Okay. Finally, I was just very interested in your deployable health hazard assessment team. I found it very interesting. When was that unit formed, and what was its first deployment?

Dr. Janick Lalonde: The first deployment was in the late 1990s.

Mr. Erin O'Toole: So the Bosnia-

Dr. Janick Lalonde: It was in Croatia.

The Vice-Chair (Mr. Peter Stoffer): Thank you very much, Mr. O'Toole.

Thank you, Dr. Lalonde.

We now move on to Ms. Papillon, please, who will be sharing her time with Ms. Mathyssen, for five minutes.

Ms. Mathyssen go ahead and start, please.

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

Merci beaucoup, Madame Lalonde. I appreciate you being here.

I have some questions in relation to those American veterans who were exposed to depleted uranium. Are they exhibiting any of the symptoms described by Monsieur Pascal Lacoste and Madame Richard, which we've seen in Canadian veterans? ?

Dr. Janick Lalonde: Actually this cohort of victims of friendly fire from depleted uranium, despite their degree of exposure, do not exhibit any DU-related adverse health effects. The scientific publication that reports on their results is specific to depleted uranium and potential uranium adverse health effects. They do not list what their other ailments are, for example, so the comparison would not be possible.

Ms. Irene Mathyssen: Has anyone considered doing some kind of comparative analysis? It seems odd that there wasn't an effort made to compare and see if there's any commonality.

Dr. Janick Lalonde: I can't comment on that.

Ms. Irene Mathyssen: And yet it's very clear that our veterans are coming home with debilitating, chronic illness. There is this persistent chase after DU. You have said very clearly DU is not an issue. To your knowledge—and I want to pick up on what Mr. O'Toole was saying with regard to finding out and pursuing some help and support for these veterans. We're hearing from Mr. Lacoste and Madame Richard that they feel abandoned. Is work going on right now to address what happened to these veterans and how we can support them?

Dr. Janick Lalonde: I can't comment on Veterans Affairs policy.Ms. Irene Mathyssen: Thank you.

Madame Papillon, go ahead.

[Translation]

Ms. Annick Papillon (Québec, NDP): I would like to know whether you have read the report and agree with what it says.

Dr. Janick Lalonde: Are you talking about the committee's report?

Ms. Annick Papillon: I am talking about the report submitted by Dr. Morisset.

• (0920)

Dr. Janick Lalonde: I have read it and, yes, I agree with it.

Ms. Annick Papillon: Why do you say it is unlikely that the health problems of Canadian military personnel are related to depleted uranium when Dr. Morisset specifies that it is most unlikely that this is so. A certain nuance between your two points of view may be noted. Do you agree that this a very important nuance?

Dr. Janick Lalonde: I do not see a significant difference between these two formulations. To my mind, depleted uranium is not at issue.

Ms. Annick Papillon: One veteran who came here as a witness told us that these reports mostly stated what was not considered to be the causes, but that they did not try to find out more about what were the causes. To my mind, however, it is important to know more about what affects our Canadian military personnel and veterans.

It is important to know what we could do to make changes right now in the military milieu, especially for coming generations. As for the current generation, some tell me it is too late, that they have lost confidence and their health is so ravaged that they no longer know what might be good for them.

For the coming generations, what tests could be done immediately to ensure that military personnel do better and get better treatment? Would it not be possible to take advantage of the ties you have with the universities to develop more elaborate programs for studying the causes of our veterans' health problems in greater depth?

Dr. Janick Lalonde: Actually, my role here is to comment on the report submitted by Dr. Morisset. I agree with what the report says.

Ms. Annick Papillon: You definitely have no more to add concerning a deeper analysis that would enable this committee to determine whether some action might be taken to improve things?

Dr. Janick Lalonde: Unfortunately I do not think this is my role or that my background enables me to help you in this area.

Still, I wish you good luck.

[English]

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

We now move on to Mr. Hayes, please.

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

Dr. Lalonde, do you agree that the results of this study are not new but agree with the conclusions of other expert bodies in Europe and the United States?

Dr. Janick Lalonde: Absolutely.

Mr. Bryan Hayes: Dr. Lalonde, we heard testimony from Dr. Nicholas Priest, who confirmed his agreement with a paper he wrote in 2001, which stated:

Exposure to radiations emitted by uranium metal presents a negligible radiological hazard. Completely surrounding a worker with depleted uranium for 8 h a day for a year would not result in radiation doses that exceed the maximum annual occupational dose limit for radiation workers.

Do you agree that depleted uranium presents a negligible risk to human health even if humans come in contact with it?

Dr. Janick Lalonde: If humans come in contact with it.... As you know, adverse health effects are dependent on the degree of exposure. I have to say that I agree with Dr. Priest's position, absolutely.

Mr. Bryan Hayes: Do you agree that the study appropriately assesses all Canadian and international research in reaching its conclusions?

Dr. Janick Lalonde: Yes, I agree.

Mr. Bryan Hayes: Is there anything in the study that you felt missed the mark?

Dr. Janick Lalonde: No, not at all. However, I can add that just by chance last night, as I was reviewing for this case, a new report came out, dated April 2013. It was following on from the Gulf War veterans who were victims of depleted uranium friendly fire. In this new study, done by Dr. McDiarmid, it simply reconfirms the previous conclusions: that depleted uranium is not likely the cause of problems.

Mr. Bryan Hayes: I think you just answered my next question as to whether you feel the body of international and Canadian research reaches a conclusive determination or if the results are conflicting. I think you answered that.

Dr. Janick Lalonde: Yes, and even the brand-new research as of last night.

Mr. Bryan Hayes: Is there any more that we can learn about DU and its impact on human health, or have there been enough studies done that there's really nothing more we can learn, the results are conclusive, and it is what it is?

Dr. Janick Lalonde: I believe the results are conclusive.

Mr. Bryan Hayes: Could the same level of DU exposure, be it a low level or a high level, produce dramatically different symptoms in two different individuals?

(0925)

Dr. Janick Lalonde: I suppose so. **Mr. Bryan Hayes:** It is possible?

Dr. Janick Lalonde: There is variability. Every person is different. Yes, I guess.

Mr. Bryan Hayes: Thank you, Mr. Chair.

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

We'll move on to your colleague. Mr. Lobb is next.

Mr. Ben Lobb (Huron-Bruce, CPC): Thank you, Mr. Chair.

Thank you for coming here today.

We've been through this a couple of times, but for the benefit of the committee, could you tell us, from your experience and research.... Some people were exposed to depleted uranium in the Balkans; that's a fact. No Canadian Forces members are there, but certainly a population is there.

Can you tell us the immediate symptoms of somebody who's been exposed to depleted uranium?

Dr. Janick Lalonde: This may not be the answer you're looking for. The soldiers who have sustained the highest level of exposure are those who were involved in depleted uranium friendly fire. So their injuries would be related to fragments of depleted uranium. They would not be linked to chemical or radiological toxicity of uranium; they would be from the injury itself.

Mr. Ben Lobb: Okay. So you're saying there is really no reaction to the exposure or no overt symptoms that would—

Dr. Janick Lalonde: From soldiers, I would say no. Certainly adverse health effects from uranium were observed in occupational groups.

Mr. Ben Lobb: Okay, and what kinds of effects are the civilian population experiencing, or did they experience?

Dr. Janick Lalonde: According to UNEP and the World Health Organization, there were no significant measurable health effects in the local population where depleted uranium munition impact sites—

Mr. Ben Lobb: That being said, it's pretty much a 100% certainty that three years after somebody thought they were exposed, these symptoms—and there aren't any symptoms, from your comments—are not going to pop out of the blue sky? That would be a pretty safe bet.

Dr. Janick Lalonde: Yes.

Mr. Ben Lobb: Okay.

Ten years after a theoretical exposure to depleted uranium, is it scientifically possible that there would be high levels of uranium in somebody's hair follicles?

Dr. Janick Lalonde: The only people who test positive for depleted uranium are those who continue to have embedded

fragments of depleted uranium. So in those individuals, yes, of course-

Mr. Ben Lobb: Of course.

Dr. Janick Lalonde: —we continue to measure depleted uranium in their urine, for example.

Mr. Ben Lobb: Sure. But very specifically those are the ones who would—

Dr. Janick Lalonde: The only ones.

Mr. Ben Lobb: The only ones.

Dr. Janick Lalonde: The U.K. has done studies, our allies have done studies, and no—

Mr. Ben Lobb: Absolutely. So other than that, there's pretty well a zero per cent possibility that that would be—

Dr. Janick Lalonde: Minimal.Mr. Ben Lobb: Yes, very good.

Okay. I think that covers it.

When we started this process—when the minister kicked off this study, but long before the committee saw this—I think public opinion wanted us to look at how this has impacted a Canadian Forces veteran.

Now that the scientific facts have been presented, it must be a great relief to those who are sick from depleted uranium that they can now continue on their path toward wellness, looking for whatever that symptom is that's causing them to be sick, whether it's something deeper in their physical being or a mental issue that needs to be dealt with.

From my standpoint, the study's been helpful. Testimony like yours today reiterates the fact, for about the tenth time, that depleted uranium is not the cause of health issues for Canadian Forces veterans.

I'll leave it at that, Mr. Chair.

• (0930

The Vice-Chair (Mr. Peter Stoffer): Do you wish to comment, Dr. Lalonde, on his comment? Thank you very much.

Mr. Lobb, thank you very much.

We'll move on to Mr. Chicoine.

Very quickly, Mr. Chicoine. We'd like to give you, and then the parliamentary secretary, a chance to ask a quick question, because at 9:35 we must conclude to move on to our next witness.

[Translation]

Mr. Sylvain Chicoine: There are reports on depleted uranium that were not taken into account in the study. Recently I learned that several studies had been conducted by the military college in 2000-2001. A report was also published further to decontamination of the site on the base at Valcartier. These studies were not taken into account.

Are you familiar with these studies?

Dr. Janick Lalonde: No, I do not think so. I do not think they dealt with human health.

Mr. Sylvain Chicoine: They did not deal with human health, but they did deal with depleted uranium.

The Valcartier site was decontaminated in the 1990s, probably further to an exposure to depleted uranium. Recently I learned that a report had been produce on this, but I have not managed to consult it. I wondered whether you knew about these reports.

Thank you.

[English]

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

Very quickly, Ms. Mathyssen.

Ms. Irene Mathyssen: Mr. Chair, I don't have a question of the witness, but I do have a question of you. It's become abundantly clear that we are looking at a situation that is not realistic in terms of our study. Over and over again we've heard that depleted uranium is not causing the sickness of our veterans. I wonder whether there are future witnesses coming to this committee who could discuss the other issues, the other possible causes, and the things that we should be looking at.

The Vice-Chair (Mr. Peter Stoffer): That's a good question, Ms. Mathyssen. We did agree as a committee, or may not have agreed, that there would be a total of 12 sitting days. I believe that was the object of that.

How many days have we had so far? We'll have to double-check.

We can get back to you right away on that, Ms. Mathyssen.

Ms. Irene Mathyssen: I appreciate that, Mr. Chair, because I think we should be using the time wisely.

The Vice-Chair (Mr. Peter Stoffer): Ms. Mathyssen, I'll put that in referral right now and get back to you as soon as possible.

Ms. Adams, please.

Ms. Eve Adams (Mississauga—Brampton South, CPC): Thank you, Dr. Lalonde, for coming here today.

We've had the opportunity to hear from a variety of witnesses—from veterans themselves, from those who actually conducted this study, and from those who reviewed the study. And we're very appreciative to have you here today, someone who's external to this entire process, to provide your views.

Some of the veterans testified before us that when they came upon shelled sites, they inhaled the air in that area and that perhaps that might have exposed them to depleted uranium. Another witness testified that she wasn't certain who had brought into the compound where the soldiers were living a tank that had been shelled, and perhaps that had exposed her to depleted uranium. In your expert opinion, would this cause health effects?

Dr. Janick Lalonde: From what you're describing, these kinds of potential exposures would probably be more in line with a level three exposure, which we've heard about from Dr. Daxon, from the capstone study that was carried out. Potential exposure to uranium was categorized in levels of exposure, level one being the most exposed and level three being the least exposed. Just being in the same environment as a depleted uranium shell would either be a

level three or even lower than a level three. This level was shown not to cause adverse health effects from this kind of remote exposure.

Ms. Eve Adams: Thank you.

With respect to monitoring for depleted uranium and health concerns in Canadian Forces members, Dr. Pierre Morisset said, and I quote directly here, "The Canadian Forces have a good system, better, I have to say, than the civilian system in terms of monitoring. It is much better documented."

Do you agree with that statement?

Dr. Janick Lalonde: Although I'm not a physician myself, I would assume so.

Ms. Eve Adams: Are you able to share more about what steps the Canadian Forces takes with respect to health monitoring?

Dr. Janick Lalonde: In general, I do know, surrounding deployment anyway, that CF members fill out a pre-deployment health survey. After they deploy they fill out another one. They meet with their physician to discuss any kind of new adverse health issues they're feeling, and then a treatment is provided to them, regardless of the reason they might feel ill.

● (0935)

The Vice-Chair (Mr. Peter Stoffer): Thank you very much, Ms. Adams. I appreciate that.

Dr. Lalonde, thank you very much.

It's the chair's prerogative to ask you one question. I understand in a scientific study you need at least a minimum of 200 samples in order to come to some sort of conclusion as to what may or may not be the cause of a particular issue. Are you aware of any reports out there or any analysis, from the Gulf War to Bosnia to Afghanistan, of the civilian or military population who may have passed on since then, any autopsies being done on a mass basis on these individuals to determine possible exposure to DU or uranium levels or anything else of that nature? I notice most of the samples are done by urine testing and things of that nature. Has there been any sort of large analysis on autopsies on these individuals to determine what may have caused their premature deaths? Are you aware of any study of that nature?

Dr. Janick Lalonde: Linked with depleted uranium, no, I'm not.

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

On behalf of the committee and our regular chairperson, Mr. Kerr, who couldn't be with us, unfortunately, we thank you very much for your testimony today and we wish you the very best. Thank you.

Dr. Janick Lalonde: Thank you.

The Vice-Chair (Mr. Peter Stoffer): We'll recess for one minute to transfer to our next witness and say a proper goodbye.

Thank you.

| (0935) | |
|--------|----------|
| (0,55) | (Pause) |
| | (i ause) |

• (0940)

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

We're very pleased to welcome Rosanne and Steve Dornan from the beautiful province of Nova Scotia.

I just want to put on the record that your own member of Parliament, Greg Kerr—Greg is their member of Parliament—unfortunately, as you know, can't be with us. We hope he comes back very soon. We're very pleased that the two of you have made the trip up here. I know the weather out of Nova Scotia wasn't conducive to travel, but we're very pleased to see you here.

Susan Riordon, who was also on our list as well, unfortunately couldn't make it. She's the wife of a deceased veteran, Terry Riordon. She's from the Yarmouth area.

Unfortunately, she couldn't be here, but we're very pleased that the two of you are here with us.

Please proceed if you wish.

Mrs. Rosanne Dornan (As an Individual): Good morning.

My name is Rosanne Dornan. I'm very grateful to have this opportunity to speak here today. I'm the wife of Steven Dornan, who is here with me.

Steven retired two years ago this month after a 27-year career in the military. He served in both Bosnia and Afghanistan, and he actually did one part of these tours while on oral chemotherapy. I want to be clear on our focus today because there seem to be two issues: is depleted uranium causing Gulf War illness, or is depleted uranium causing lymphatic cancers, or that type of thing? Because Steven does have lymphatic cancer, we will be mostly addressing the DU-cancer link.

He was medically released due to his diagnosis of non-Hodgkin lymphoma and was awarded a pension for medical mismanagement, although we claimed for depleted uranium exposure causing or attributed to his cancer. This award was only settled after I staged a three-week sit-in at Greg Kerr's office in our local area.

Our personal lives and struggles with Veterans Affairs Canada and the Government of Canada are documented in the large amount of paperwork we've given you today. Of particular interest, which contains most of our background, is a letter or an e-mail that Minister Peter MacKay, the Minister of National Defence—and I think you have a copy of that, it's marked section 6, item 2—

The Vice-Chair (Mr. Peter Stoffer): I'll just put you on hold for one quick second. We did receive over 390 pages of documents from your folks, and we greatly appreciate that. Of course, the challenge was getting it translated for committee in order to be legally presented to the committee.

Our analyst is going through those documents and pulling out the very pertinent ones. Eventually he'll be working through the entire analysis to come to some conclusions so that the committee can have it in the near future.

Thank you so much.

Mrs. Rosanne Dornan: Certainly. Then you don't have it, but when you do get it, it offers a lot of background. It was a very indepth conversation with Minister MacKay.

Our story is public, was public, and will always be public. There has been no reduction in any of the papers we've given you.

I'd like to begin here. Captain Terry Riordon: positive test for depleted uranium; Pascal Lacoste, positive test for uranium; Frank Stansbury, positive test for depleted uranium; Captain Terry Riordon, dead; Master Warrant Officer John Michael Peace, dead; Sergeant Larry Robertson, dead; Corporal Ken Burneau, non-Hodgkin lymphoma; Sergeant Larry Robertson, non-Hodgkin lymphoma; Master Warrant Officer Steve Dornan, non-Hodgkin lymphoma; and Corporal Dave Sherbanowski, Hodgkin lymphoma.

All of these men with lymphatic cancer were under the age of 40 when they were diagnosed with lymphoma. It's a very unusual age to be diagnosed, as the median age for being diagnosed with non-Hodgkin lymphoma is 66. Are there more who we don't know about? We may never know, as Veterans Affairs Canada does not keep such records.

All of these men were either in the first Gulf War or Bosnia, or they served on Canadian ships where depleted uranium weaponry was proven to be used. Contrary to what Dr. Morisset said, that Canadians never used depleted uranium weaponry, it was used in testing—never in battle, but it was used in testing.

I have more names in my personal database. We've been doing this for 10 years; we know this stuff: more men and women who know they have been exposed to depleted uranium while serving in the Canadian military and are sick, dead, or dying.

There are some things I'd like you to think about. First, how does our government explain this? Surely this group cannot be considered a coincidence or, as Dr. Lalonde has suggested, a sporadic event. There are too many common factors for that. My second question is, how is it that my database of these men and women exists and no such database is available within Veterans Affairs Canada? To add to my last question, why are Canadian Forces members and veterans who self-report or are tested at their own expense not included in any database or Canadian cohort study, especially when the results are positive? Why doesn't Veterans Affairs Canada or our government pay for this DU testing at an external, non-governmental laboratory with mass spectrometry equipment sensitive enough to detect depleted uranium and isolate 238U, 235U, and 234U isotopes?

Lastly, how can such a report as this one we are here today discussing be written and not take into consideration those who have died, been diagnosed with cancer that is rare in young men, or have test results that state that they have been contaminated with depleted uranium? How can it be written without consideration of major animal studies or their results?

Had this been done, the argument presented to you in this report—and I quote from the report—that "It is unlikely that Canadian soldiers have been exposed to levels of depleted uranium which could be harmful to their health", would be heard with much more skepticism.

As for this report, I personally feel it is imbalanced, incomplete, misleading, and lacking in objectivity. You're not getting the whole story. You're getting what they want you to hear. Soldiers are dead. Test results are positive and depleted uranium is very likely the culprit. We have met the benefit of doubt.

Our son is in the military and we need to know that he and his wife, who is also in the military, won't have to go through what we did.

● (0945)

I just want to speak to something Peter MacKay said about autopsies. We have prepared, when Steven does pass away, to have an autopsy, a bone marrow—

The Vice-Chair (Mr. Peter Stoffer): May I correct you on that? You said "Peter MacKay". Are you referring to me?

Mrs. Rosanne Dornan: I'm sorry: Peter Stoffer. I have Peter MacKay on—

• (0950)

The Vice-Chair (Mr. Peter Stoffer): That's okay. We just want to make the record clear.

Mrs. Rosanne Dornan: Yes, certainly.

We have arranged for that in our wills. Steven's bone marrow, bones, etc., will be autopsied in a lab in England. We have arranged for that.

The Vice-Chair (Mr. Peter Stoffer): Let's hope that doesn't happen for 50 years from now.

Mrs. Rosanne Dornan: Thank you.

Thank you for listening. I look forward to your thinking about some of the questions I've asked.

The Vice-Chair (Mr. Peter Stoffer): Mr. Dornan, would you like to add anything, sir?

Mr. Steve Dornan (As an Individual): Yes, absolutely, and being the good former sergeant major, I'm going to do a little PowerPoint here as well.

One of the things I want to point out that was overlooked with regard to other soldiers who have had investigations with regard to this is that another soldier from the U.K., a Mr. Stuart Dyson, went before a court and a hearing. After he passed away, he was awarded a complete pension by the British, relative to depleted uranium. So apart from the Italians, there is another one, which is British.

To begin, I'm a veteran who is considered to be statistically insignificant. That's it, flat out. Rosanne and I are not doctors, but we've been doing this for 12 years now. We completed the database, which the subcommittee actually came to us for, and that database is 70 pages long. It is peer-reviewed scientific research on depleted uranium everywhere.

We see some of that in this report here, but it's not complete. It's cherry-picked, and that is a big problem. We know this subject. We believe this is not a balanced report, and I think some of your questions point that out. We also don't have a dog in this fight. I have a pension, so I'm not here to get anything out of this. My cancer will kill me: I have terminal cancer, late stage.

In regard to questions I asked of the scientific community, one was about the potential health effects of depleted uranium, and they answered it. It is potentially harmful, all right. We all accept that. The World Health Organization has come out and said that it is a confirmed class one known cancer to humans, by name, "depleted uranium".

Here's my question to you people: how do you deal with me, the one-off, the guy who was actually in the vehicle, breathing in the depleted uranium? Because that's what I did. I was a weapons inspector. Were there huge numbers of Canadian Forces members exposed? Probably not, but there were individuals who were, individuals like me and like those whose names were read out to you. The problem is that Veterans Affairs looks for cause and effect, and if you can't prove cause, there is no effect. It's a yes or a no.

So where are we?

In August 2012, Health Canada: level of risk depends on exposure and solubility. When depleted uranium burns, there are two types of oxides from it, soluble and insoluble. Not only does the World Health Organization classify depleted uranium as a confirmed human carcinogen, but so do the NTP, the International Agency for Research on Cancer, and OSHA, which works very closely with the labour program. They all agree. It's in the MSDS, the material safety data sheet, for depleted uranium. It is a carcinogen—simple.

I will read for you from the Royal Society report, which was cited:

The greatest exposure to radiation resulting from inhaled DU particles will be to the lungs and associated lymph nodes, and an increased risk of lung cancer is considered to be the main radiation risk. Using worst-case assumptions the predicted radiation doses to the thoracic lymph nodes are about ten times higher than those to the lungs....

If you had that written in that report, that would give it some balance. It was one of the reports cited, but anything that leads to depleted uranium and cancer is not there.

The last one here, which is very interesting, actually, from September 2010, was done by the French. They decided to compare apples to apples: let's look at the workers in uranium and let's look at workers in uranium reprocessing facilities. What they found was something completely different, and it was the first time they found it. They found that the highest risk was observed around workers exposed to slowly soluble reprocessed depleted uranium or uranium oxide. This study is the first that differentiates between natural and reprocessed uranium, and there is an increased risk of lung and hematological malignancies. The cancers tend to increase with decreasing solubility of uranium compound and the nature to which you were exposed to it.

That is a huge change, because up until then it had always been that we didn't have enough studies on humans, so it was, "Let's look at uranium workers." They were actually looking at uranium workers within a reprocessing facility. They looked at all of them over a long period and this was the conclusion they came to.

● (0955)

The VAC scientific committee said there is limited evidence of increased risk of cancer mortality. What does that mean? The context of government scientific committees conducting these has to follow the monograph. The World Health Organization International Agency for Research on Cancer, IARC, which is cited repeatedly through this document, actually lists what that means. What does "limited evidence of carcinogenicity" mean? There are four levels, from highest to lowest.

The first level, "sufficient evidence of carcinogenicity", means you dropped somebody in a vat of plutonium and they've died. That is cause-effect.

The second level is that we know there's enough out there and a causal interpretation is considered by the work group to be credible, and that's reflected its first conclusion.

Three is "inadequate evidence", and four is "evidence suggesting a lack of carcinogenicity". Prior to this study, Veterans Affairs was of the opinion that we were at three or four, which was that DU is not harmful, with an asterisk after it, and at the bottom it said, "unless inhaled or ingested", and that was it. That was what we waged a 10-year campaign against. It has now moved from a level four to a level two with this report. What it is saying is, yes, you can get cancer from this. That's what it says.

In the context of the Canada Pension Act, which is what we have to work with at Veterans Affairs, we have what's called presumptive causation under paragraph 21(3)(g), which deals with exactly what we're talking about here today. It's depleted uranium exposure that might reasonably have caused the disease or injury or the aggravation thereof. I noted that the mandate the Veterans Affairs scientific committee had left the last part off. All it looked at was cause. When you're doing a cause and effect, does depleted uranium cause cancer? It causes cancer about as much as smoking causes cancer. If you use the smoking analogy, if you took one puff on one cigarette, that would be the cause, and the effect would be cancer, but that's not what happens. The longer you're exposed, the more you're exposed, the higher the risk of developing cancer. That's what that deals with. This report dealt very little with risk.

Let's look at what the U.S. does. In the U.S., I would have a pension simply because I have cancer and I was in an area where depleted uranium was used. If I were a federal government employee working in any of the reprocessing facilities and developed cancer, and if had one of the 22 cancers the U.S. lists, I would be compensated and looked after. Because I'm a Canadian...we spend 10 years trying to prove this, only to be told, "It's not the absolute cause; therefore, you can't have a pension." That's what we're faced with as veterans.

The U.S. has spent \$8.3 billion to date on compensation for DU workers and veterans like myself. In our packet we actually provided the links to the U.S. veterans administration sites that clearly list depleted uranium by name as ionizing radiation, and veterans are entitled to a pension in the U.S. So why is Canada so different? What makes us so different?

I listened intently to the previous speaker tell how Canadians weren't exposed. Was there a big group not exposed? No, there

wasn't. Was I? That's what the VRAB actually said. After 10 years of arguing, it actually admitted, "Yes, you were." I was a weapons inspector inside vehicles at Han Pijesak and Hadzici, the two listed in the UNEP report, with areas that have 100 times the normal levels of uranium. That was 10 years after the fact. I was there months after. I was in the vehicles, full of the dust, doing weapons inspection, as the only Canadian there, which makes me basically insignificant. You can see from the picture that, yes, we didn't have any protective equipment, respirators, gloves, things that are required by the Canadian Forces and other agencies.

• (1000)

What does DU look like?

That is what it looks like on a lung. Do you see the stars? That's not normal. That's what individual particles of DU do to lungs. So make no mistake, it's not harmless. It is cancerous, and it is mutagenic, they've now discovered.

In this study—this was the French study, by the way, that was not referenced, and when you asked, it was not put forward—it says, "Hazard ratios and 95% confidence intervals for mortality from lymphoid and hematopoietic tissue malignancies...." This is on humans, by the way. This isn't animals; this is humans.

Up until now, until this report, natural uranium was considered the same as depleted uranium. We now know that's not true. You see natural uranium on the left, reprocessed uranium on the right. "F", "M", and "S" is fast, moderate, and slow solubility. These two charts should be the same and they're not—dramatically not.

The Vice-Chair (Mr. Peter Stoffer): We're up against the clock here. If we could wrap up, we'll be having questions from the members and possibly a lot of your continued summarization will be in answers.

Mr. Steve Dornan: It's perfect timing, sir, because I'm on my last slide.

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

Mr. Steve Dornan: How do you get there? Presumptive causation. We already have the mechanism within the Pension Act to do this. It's already done by the U.S.; it's already done in Canada. That's how ALS is listed as a presumptive cause. For the one-offs, like myself, and the people who worked with depleted uranium as Canadian Forces members, this is the only way we will ever get treatment and a pension through Veterans Affairs. This way is the only way.

Might I take your questions?

The Vice-Chair (Mr. Peter Stoffer): Mr. Dornan and Mrs. Dornan, thank you both very much for your presentation. I will go on to questions here.

The New Democratic Party will be starting first. I believe it is Mr. Chicoine, please.

[Translation]

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

I wish to thank the witnesses who are here with us today.

Mr. Dornan, Ms. Dornan, thank you for coming and sharing with us your perspective on this issue.

Since the beginning of the study – some sessions have already been dedicated to it – some veterans have told us they are sure that their health problems are linked to depleted uranium. Other witnesses have affirmed that, according to the studies they checked, it was possible almost certainly to dismiss the possibility that depleted uranium might be the source of the veterans' problems.

You were here earlier. You heard the testimony given by the toxicology expert. She said that, after the 2000s, veterans and military personnel were given the opportunity to have their urine tested by a firm. This firm, which she named, analysed the results and prepared a urine toxicology study.

Were you able to take part in that study or undergo those toxicological tests?

[English]

Mrs. Rosanne Dornan: I would like to answer the first part.

With no disrespect to anybody who has appeared before you, we have read everything. We chat even now, send e-mails, contact regularly world-renowned scientists on this. They taught us how to understand this so that when we went up against the Veterans Review and Appeal Board to Federal Court, we could speak about it with confidence. Like this report, the only reports referenced in this are the ones that are saying depleted uranium is bad. How many reports are cited in here that say the opposite? There is just as much information out there on one side or the other. I could take their references, write a report just as long, and give you the other side, from the same references. Again, it wasn't balanced. You're not getting the other side of it.

● (1005)

Mr. Steve Dornan: To answer your question, I asked and was told it wasn't available. The other thing we did in the research was that we looked at what the testing entailed and what was involved. We pulled up what's called depleted natural uranium in urine, a PPT laboratory analytical exercise. This was Defence Canada.

Los Alamos laboratories decided to research on the labs. It wasn't just one. There were four labs doing testing on the Canadian soldiers. What it found was that none of those four labs could accurately measure depleted uranium in the urine samples that were provided to them. None of them. No one ever told the Canadian Forces members that their urine samples were incorrect and inconclusive. They were all told that they were negative. Then they found out all of a sudden that these labs could not do the testing. The only testing would be ICMS, which used to be offered at Memorial University. It no longer is, and a lot of these labs at that time couldn't do it. You could go to the U.K., but you'd have to do it on your own.

This was offered in VAC right up to two years ago. It was on the website and on the Canadian Forces website, but if you asked about

it, they'd say that it didn't exist and that they couldn't do it. It has subsequently been removed.

The Vice-Chair (Mr. Peter Stoffer): Mr. Dornan, before you proceed, those four labs you talked about, was that part of your submission you gave to us?

Mr. Steve Dornan: Yes, it was.

The Chair: Thank you. We'll be getting to that.

Carry on.

[Translation]

Mr. Sylvain Chicoine: What type of analysis was carried out? I do not understand. You are the second person who has told us that. At the beginning of the week, another veteran told us exactly the same thing, namely, that the companies could not conduct an adequate analysis of uranium levels. I do not understand that experts come here to talk about these results but tell us they cannot conclude that the problems of veterans are linked to depleted uranium. Are you saying that these urine tests are not valid? I simply want to find out what is what.

You are the second person to tell us that these companies could not provide valid analyses to establish the presence and the level of depleted uranium in urine. So I am a bit confused by what you say. I would simply like you to tell me what the facts are because I have not at all understood. Though I find this question extremely important.

[English]

Mr. Steve Dornan: It is very important because this test was done. I have it right here from Defence Canada. In fact Canadian Forces health services were part of this. They tested with Los Alamos labs. Los Alamos labs is the leading uranium researcher in the States, and they're the ones that provided the spiked control group urine samples to be tested. The results were that the labs could not accurately measure depleted uranium in the samples provided to them by Los Alamos labs.

As to why I wasn't tested, when I found this out, I saw no point. I was going to get a result saying that I don't have depleted uranium in my urine when in fact they didn't have the equipment to test it.

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

We now move on to Mr. Lizon, please, for five minutes.

Mr. Wladyslaw Lizon (Mississauga East—Cooksville, CPC): Thank you very much, Mr. Chair, and good morning. Thank you all for coming here this morning, and my thanks to all the veterans here today for your great service to our country.

Before I ask my question, I would like to clarify something. There is a contradiction here. You asked for testing, and you were told that it was not available. Do we have records in the 392-page documentation that you provided? Is there any correspondence or e-mails in that regard?

Mr. Steve Dornan: When I was dealing with the hospital in Greenwood, I asked about it. They made inquiries to Ottawa, got back to me, and told me that it wasn't available. They checked with Canadian Forces Health Services Centre Ottawa, and the surgeon at that time said it was not available.

Mr. Wladyslaw Lizon: I suppose you wouldn't have any record of their inquiries?

Mr. Steve Dornan: No, I would not have a record of their inquiries, I'm sorry.

Mr. Wladyslaw Lizon: Okay. Thank you very much.

Mr. Dornan, can you speak to us about your military history? Can you just tell us what you've done over these 27 years of service to our country?

• (1010)

Mr. Steve Dornan: I've had a very eclectic career.

My primary job was as an airborne electronic sensor operator on a number of aircraft, and I know Mr. O'Toole is very familiar with them because we used to sit right beside him. I also did three years in command intelligence in Winnipeg, and in that time I was the field intelligence analyst in a number of countries.

I worked in Bosnia with the UNHCR, the United Nations humanitarian relief agency, doing airlift into Sarajevo. I was the air liaison to the French Foreign Legion in Sarajevo, doing anti-sniping work, and I went back two months later when we rebadged to IFOR. I was the air liaison to the British Army, 2nd Battalion Light Infantry, out of Banja Luka.

I was also the lead air defence weapon cantonment inspector. We were the weapons inspectors who ensured that the former warring parties had complied with the Dayton Accords. So we were the ones who actually went around and made sure all the weapons that were scattered through the country were put in places where we could monitor them. It was during that time that I became exposed to depleted uranium, because we were in the facilities doing the inspections, inside the vehicles actually struck by depleted uranium.

Mr. Wladyslaw Lizon: You already mentioned that you were deployed in Bosnia. Where else have you served?

Mr. Steve Dornan: I've also done two tours in Afghanistan subsequent to that. I was in Kabul setting up unmanned aircraft for the Canadian Army under the Sperwer program. I moved to Kandahar and worked on setting up the unmanned aircraft, the Heron, the Israeli product that we brought in to replace the Sperwer.

Mr. Wladyslaw Lizon: Can you tell the committee about your experiences in your deployments to those different places?

Mr. Steve Dornan: My experiences? Even though I have terminal cancer, even though it will cut my life short—I was given eight years to live 10 years ago and I'm still here—would I change anything?

No, I wouldn't. If I had been better informed of some of the risks at the time, I would have taken some precautions, but I wasn't, so I can't change that. In fact, my son is in the military, and I'm proud to have him in the military.

What I am not happy with is the way veterans like me have had to deal with Veterans Affairs, because once you leave the Canadian Forces and start with Veterans Affairs, you're a nobody. You have to prove that you exist to them to start. We fought for 10 years just to get a pension, because they looked for absolute causation. They did not follow the pension rules. They did not follow the Pension Act. In fact, the Federal Court wouldn't even take their case; they gave it to us, because they were so abysmally bad.

You may have seen us: we were on the national news with regard to that. My wife had to stage a sit-in just to get a pension, and we got it for medical mismanagement. You have 300 pages; VRAB got thousands, and none of it had to do with medical mismanagement, but that's what the minister—at that time Minister Blackburn—awarded us. It took two weeks for his legal people to look at it, look at all our evidence, and say, "Okay, this is medical mismanagement" and give us a pension.

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

Thank you very much, Mr. Lizon.

Mr. Wladyslaw Lizon: Mr. Chair, if you will allow me....

I would like to wish you all the best. We hope you will be around for not 10, but many, many more years, despite what medical professionals may be giving you.

The Vice-Chair (Mr. Peter Stoffer): Mr. Lizon, I'm sure I speak on behalf of the committee, that we would love nothing more than to hear more of your questions to all our witnesses as they come along. Thank you very much.

Mr. Casey, go ahead, please, for five minutes.

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

I want to start, Mr. Dornan, with the last slide you have up there. You talk about presumptive causation being the way ahead. This is a drum that I've been beating for a while. Essentially, you're saying that the burden of proof on claimants in front of Veterans Affairs Canada should be reduced. Is that fair?

Mr. Steve Dornan: Actually, no. What it is to meet that burden of proof is actually very well written within the Pension Act. The problem is, right now, that the Veterans Review and Appeal Board in our case did not follow that. They looked for absolute causality. There had to be no question that it was the depleted uranium and nothing else, and of course you can't do that. That's unrealistic. That's higher than what it is in a criminal court in Canada.

(1015)

Mr. Sean Casey: So they set the bar too high, and it should have been lower?

Mr. Steve Dornan: Absolutely, and the Federal Court agreed.

Mr. Sean Casey: You indicated that separate from the authorities cited in the study by the scientific advisory committee, numerous other experts hold a contrary view. We have been told otherwise.

Can you refer this committee to two or three of the most authoritative experts who hold a contrary view?

Mr. Steve Dornan: I can give you one right now. Dr. Chris Busby testified before the Italian Parliament and in Britain as well with regard to the Stuart Dyson case. You will see his name quite a bit on the Internet if you Google. He has done exceedingly well in his research, and his CV is pages and pages long. He is on many committees.

The other one is Dr. Asaf Durakovic. He won a Nobel Prize for his study of depleted uranium. He also is published in the Croatian Medical Journal as well as many other periodicals.

Those are two I can give you off the top of my head who we correspond with on a fairly regular basis.

Mr. Sean Casey: Thank you.

Did you have an opportunity to present to the scientific advisory committee?

Mr. Steve Dornan: I did. We are one of the only two veterans who did, mainly because they asked us about our database.

My presentation to them was very similar to what you received here today, including the report the French did that showed depleted uranium and uranium are different, and that you are six and a half more times likely to develop a cancer as a human from depleted uranium than you are from uranium.

They have that. It's in the references, but nowhere in the report.

Mr. Sean Casey: So presumably they read it but didn't write anything about it.

Mr. Steve Dornan: That's correct. We provided them with the information with regard to the Phalanx firing. They added the words "in battle". No, we didn't fire it in battle, but did we fire it? Absolutely. We fired it on workups. Were the members cleaning it without any protective gear? Absolutely, because it was considered harmless.

Mr. Sean Casey: You provided the committee with more than 300 pages of documentation, I understand. Our good analyst is going to take some of those documents and have them translated and summarized for us.

I don't want to suggest for one minute that we don't trust the very fine judgment of our analyst, but what are the key documents of all the ones you have presented to us? If there were a handful that you were to say were the ones we must read first, what would they be?

Mr. Steve Dornan: The one that provides you the most links is the DU database my wife compiled because it already has the summaries from each of the reports. It's in Excel. The link is there if you want to read the entire report. They are all dated. They are all peer reviewed. They are all from around the world. That's a really easy one to use and navigate through. You can use that one.

I know you're interested in the one on the analytical exercise conducted by the Canadian Forces on itself.

There are a number of other ones: the MSDS sheets on depleted uranium, the American study, as well as the animal studies, which no one has mentioned here.

It is unethical to inject somebody with depleted uranium, because of the risk, or have them breathe it. In 40 minutes my wife pulled up 43 animal studies with the links to it. Every one of those studies shows a negative health effect to depleted uranium.

• (1020)

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

Thank you, Mr. Casey.

We now move on to Mr. Zimmer for five minutes, please.

Mr. Bob Zimmer: Thank you for coming today. I know I can speak on behalf of my wife too. I know our wives are often a big part of our lives, and thanks for helping your husband, as mine has with my career.

I would like to start by saying that I care about veterans and servicemen. At the end of the day we want to make sure you're taken care of

I have cousins with experience in the air force. My son is an air cadet. I see my son sitting there, and I hope good care is given to him someday.

I want to ask you some basic questions about the Scientific Advisory Committee on Veterans' Health.

Are you happy that the study of Canadian veterans was completed?

Mr. Steve Dornan: I'm happy that there was a study, because that didn't exist for the 10 years we did it. I'm not happy with the conclusions, because a lot of them are out of line with what is actually written in the study. I know they sent it out for peer review to three different people. But if you read very carefully, they sent out draft copies for peer review; they didn't send out a final copy. I know if my name was going on something, I'd want to see the final copy before I put my name on it. Little things like that raise red flags for me

Am I happy with it? There are parts of it that apply, and then there are parts that are obviously cherry-picked.

Mr. Bob Zimmer: Okay.

The documents you provided to us, did you provide those same documents to the scientific advisory committee?

Mr. Steve Dornan: They were pretty much the same documents. In fact, we actually provided them with more; they were obviously looking at this over a year and you guys are looking at it over a few days.

Mr. Bob Zimmer: Sure.

Looking at the study again, are you happy with the approach of involving not just scientists but veterans and scientists in our survey?

Mr. Steve Dornan: It's a shame that only two veterans came forward to testify there.

Mrs. Rosanne Dornan: Three.

Mr. Steve Dornan: I'm sorry, three.

A lot of it had to do with the fact that nobody knew. We found out through a veterans' advocacy website that this was being offered. It wasn't published out there, asking for veterans to come forward; it was an actual veterans' website, run by veterans, that brought it to our attention.

Could they have had a larger number of people testify? Absolutely, if we had known about it.

Mr. Bob Zimmer: Okay.

Finally, what benefits are available to veterans suffering with conditions similar conditions to yours? Can you list those? I'm not a veteran myself, but for the record, what are the benefits?

Mr. Steve Dornan: When you're in the Canadian Forces, the Canadian Forces looks after you, and does a very good job of it. The day you leave the Canadian Forces or are released from the Canadian Forces, you are on your own. If you do not have a pensioned condition for Veterans Affairs, Veterans Affairs has nothing to do with you. If you're sick or not, it doesn't matter. You could be laying on a deathbed, and if you don't have what's called a "pension condition", you get nothing. There's no care for a veteran from Veterans Affairs.

This is the only way ahead for the one-offs like myself.

Mr. Bob Zimmer: Okay.

As my colleague Mr. Lizon stated, I hope you're around for another 50 years.

Mr. Steve Dornan: Thank you.

Mr. Bob Zimmer: I really wish you well, and thanks again for your service. We appreciate it, and continued good health.

Thank you.

Mr. Steve Dornan: Thank you, sir.

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

We're going to shorten up the rest of the questions because at 10:30 we do need to go in camera to discuss committee business.

Ms. Mathyssen, for a couple of minutes, or Ms. Papillon, please.

Ms. Irene Mathyssen: Thank you, Mr. Chair.

And thank you very much for being here.

I have a couple of questions and they have to do with the testing. Did I hear you correctly when you said that there was testing that was available at Memorial, but then it disappeared? Do you have any idea why it disappeared, and did VAC provide any explanation?

Mr. Steve Dornan: Patricia Horan was the doctor looking after testing at Memorial University. To do testing...I understand it's not like sending in a sample. There actually has to be a group of samples to be able to run this type of testing, whether it's 10 samples.... For them to cost-effectively do their studies, you need a group. So doing one-off samples isn't even available.

Why Memorial University stopped it, I don't know. It was actually done not only on Canadian soldiers, but Memorial was doing it on British soldiers as well. So you need to talk to her about that.

Ms. Irene Mathyssen: Okay.

There have been so many contradictions in what we have heard. For example, the U.S. reports that personnel exposed to DU in friendly fire haven't experienced any extensive or lasting effects, and yet you have in your work here a page that says that any worker, soldier, or civilian exposed to DU may apply for a federal government pension, that "Presumptive Causation" is considered, and that \$8.3 billion in compensation has been paid out to DU workers and yets.

If it's so harmless, why is the U.S. paying compensation, and why are they looking at exposures to depleted uranium?

(1025)

Mr. Steve Dornan: My wife just said, "Why don't you ask Dr. Morisset?"

I don't know. The U.S., by far, has thousands of soldiers who have been exposed, so their liability is far greater than ours is. The U.S. is only one of four countries that use depleted uranium. They're one of the only four countries that actually voted against the moratorium. We just had another moratorium in the UN vote. In 2012, Canada, again, did not vote to support the U.S. in this. We've never supported them. So our policies are out of kilter.

The Vice-Chair (Mr. Peter Stoffer): Thank you, Mr. Dornan. We appreciate that.

We'll now move on to Mr. O'Toole, please, for a couple of minutes.

Mr. Erin O'Toole: Thank you, Mr. Chair. I've written down to try to be quick, to use my time effectively.

First, to echo comments from both sides, thank you very much for appearing.

Steve, certainly as a young officer I learned a lot from the AESOps I served with, whether I wanted to learn something or not.

Mr. Steve Dornan: I know what you're saying, sir.

Mr. Erin O'Toole: Rosanne, as General Hillier once said best, the families serve on the family front as much as the folks deployed serve, so thank you for serving and for your advocacy.

It's very difficult for all of us here as MPs, particularly for an MP who's a veteran and passionate about these issues, and for Veterans Affairs, the minister himself. We have to use science and we have to try to get experts, and I think it's important.

Do you know why this report was commissioned?

Mr. Steve Dornan: We do. In fact, prior to Pascal Lacoste getting this going, we actually received a letter from Jean-Pierre Blackburn saying that he was going to start this scientific committee. In fact, I believe we submitted that letter to you.

Mr. Erin O'Toole: I'd like to express my appreciation, because I know, Rosanne, your advocacy in the chair's office and Pascal's led to this study. Minister Blackburn and Minister Blaney commissioned it. We have to rely on the science.

I have not seen your VRAB findings either, so they're probably getting translated.

Mr. Steve Dornan: They are all there.

Mr. Erin O'Toole: I'm going to have a couple of questions based on the report, two specifically, and I'd like the chair's indulgence.

Page 18 of the report deals with lymphomas, and their conclusion is that there is a lack of strong evidence. I would take it you disagree with that conclusion.

Mr. Steve Dornan: I do, and in fact you've seen it right here with regard to the study done by the French, which shows a clear.... And those are human studies, not animal studies. Those are human studies saying that, yes, reprocessed uranium or uranium oxides definitely will increase your risk of cancer.

Mr. Erin O'Toole: But the U.S. studies with DU did not show that incidence.

Mr. Steve Dornan: That's actually not correct. The studies they quoted are from the IOM studies. There are a number of studies, more than that, and in fact the president commissioned a comprehensive review to include the IOM studies and the studies that did not make it into the IOM.

If you look at the back of this, you'll see a list of different facilities that were tested. There are a number of facilities that were discovered that were not included and with the presidential order had to be included, and they all showed significantly higher levels of cancer incidence. When those came out, that is when the U.S. changed their policy and started a warning for their workers.

The Vice-Chair (Mr. Peter Stoffer): Thank you, Mr. O'Toole. We're already past the clock here, and I do like to give your parliamentary secretary a chance to bat cleanup, as we say.

Sorry, Mr. Dornan.

Ms. Adams.

Ms. Eve Adams: Mr. and Mrs. Dornan, thank you very much for coming before us today. I echo the comments of my colleagues in saying thank you very much for your service, but, more importantly, how profoundly sorry we all are that you are struggling with cancer. It's a terrible disease, and I'm sure every member here has someone in their family who they have lost to it. I am profoundly sorry for your struggle.

Thank you for being so detailed in reviewing the report. There are seven conclusions in the report. Do you mind if I run through them? If you could, enumerate for me whether or not you agree or disagree with the conclusions.

The first conclusion of the study was, "Depleted uranium (DU) is potentially harmful to human health by virtue of its chemical and radiological effects."

I would take it you concur.

• (1030)

Mr. Steve Dornan: We all agree with that, and all the scientific studies agree with that.

Ms. Eve Adams: The second conclusion 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.

Mr. Steve Dornan: Agree. That's A on the list.

Ms. Eve Adams: It sure is.

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

Mr. Steve Dornan: I disagree with that, and I could actually run through the numbers for what I exceeded when I was in that vehicle, because I have them.

Ms. Eve Adams: Four, "There is no consistent evidence from military cohort studies of adverse health effects that could be attributed to depleted uranium."

Mr. Steve Dornan: We disagree with that because the cohort studies are...they've admitted in those cohort studies that they were not complete, especially the Canadian ones.

Mrs. Rosanne Dornan: They weren't included in this report, many of them.

Ms. Eve Adams: Number 5: "There is no strong evidence of adverse health effects reported in larger civilian studies with longer follow-up periods of populations with increased exposure to uranium..."

Mrs. Rosanne Dornan: We disagree.

Mr. Steve Dornan: We disagree. In fact, right now the radiological and medical reporting out of Sarajevo shows a 10% increase in lymphatic cancers in those regions that we talked about.

Ms. Eve Adams: Number 6: "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."

Mr. Steve Dornan: We disagree. A lot of the expert bodies are actually coming forward. You saw the French saying yes, there is a risk

Ms. Eve Adams: Number 7:

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.

Mr. Steve Dornan: I agree with that.

"Effectively treated"...it may not be, because you won't get the treatment if you're a veteran. You have to have cause and effect for a veteran.

Ms. Eve Adams: If I can ask one final question, while I know that there was much in the report that you disagreed with, could you perhaps point to any aspects of the report that you liked or that you were in agreement with?

The Vice-Chair (Mr. Peter Stoffer): Very quickly, please.

Mr. Steve Dornan: Very quickly, on the parts that we liked, they did answer our question that we posed to them. They did cite studies. They just didn't cite all of the studies.

Also, they didn't include any of the animal studies, and we don't know why, because that's the only effective way of doing it. They referenced animal studies four times, but then said they couldn't use them. I don't know how they can get by with that. They're there. If you actually pull up the references and read the references yourselves, you'll find they're not in line with the conclusions, or with the finality of the conclusions, if I can put it that way.

Ms. Eve Adams: Thank you, Mr. Dornan. We wish you well.

Mr. Steve Dornan: Thank you.

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

In fairness to your travel here, I'd like to take 30 seconds to give your beautiful wife a 30-second summary.

If you could just give us 30 seconds...?

On behalf of the committee and Greg Kerr, the chair of our committee, Mr. Dornan, we wish you the very best in your continued health. We hope, as Mr. Lizon said, that you're here with us for another 56 years.

To let you know, you've filled up one of my filing cabinets, by the way, with all of the documentation—

Voices: Oh, oh!

Mrs. Rosanne Dornan: That's not all of them-

The Vice-Chair (Mr. Peter Stoffer): I know. I'm just kidding.

Mrs. Dornan, you get a chance to wrap up for 30 seconds.

Mrs. Rosanne Dornan: I do want to say that I am very grateful for former Minister Blackburn and the following Minister of Veterans Affairs for bringing this into a discussion. It needs to be discussed. But again, I'm hoping you will all understand that there's

depleted uranium causing cancer, and the other question is depleted uranium with Gulf War illness or the maladies and illnesses that are falling under that.

It has been very difficult, but as I've said many times to my husband, I'm very grateful, because we've learned so much and have talked to.... There's power in knowledge. I'm very grateful for that, because if you hadn't challenged us seven or eight years ago when we began this, I know we wouldn't be where we're at today.

I'm actually grateful for this opportunity, and I also hope he stays around for a very long time.

Thank you.

• (1035)

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

Thank you, Mr. Dornan, and thanks again for your service as well.

We have half a minute to say our goodbyes before we go in camera to very quickly discuss committee business.

[Proceedings continue in camera]

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