Transcript of the Information Session: WIND TURBINE INVESTIGATION, that took place on Tuesday, December 6, 2016, at 7:00 p.m., at the Huron County Health Unit

SPEAKERS: Dr. Erica Clark
Dr. Maarten Bokhout
Upon commencing the audio recording

DR. BOKHOUT: Apparently 60 people have registered for this meeting, and I think I counted about 55, so I think we've got a fair representation. And I thought that, instead of trying to reschedule the meeting at this time, with the winter weather coming onboard, I thought it would be best just to go ahead.

My name's Maarten Bokhout. I'm the acting MOH for Huron County, and this is Dr. Erica Clark. Erica is a fully qualified epidemiologist. I know something about epidemiology, because that's part of my training as a medical officer of health, but she is the expert. And --

AUDIENCE MEMBER 1: So what does that mean?

DR. BOKHOUT: An epidemiologist is a person who studies human diseases in humans using scientific methods. In medicine, in a whole healthcare field, in the study of human diseases, what we've developed over the past 150 years is a method for figuring out whether treatments work or not, and what we do is, when we do things like assess surgical procedures, test new medications, what we do is we try to figure out if this method, surgical method, actually makes things better or whether the drug actually works. And the methods we use are, in many cases, epidemiological.

So when you hear about, say, the influenza vaccine, the kind of vaccine that's prepared is based on study of disease, in influenza's case, have some authorities, and then the information is then disseminated,
and that determines what kind of formulation the influenza vaccine is brought forth. Now, if you don't like influenza vaccine, that's neither here nor there, but that's how it's done. It's done through this kind of a system.

And I can certainly tell you that there are many drugs which are being tested. One of the big issues that we're very interested in is to try to figure out how to deal with Alzheimer's disease, and we test drugs, and just recently I read that another one of the drugs that thought to have had potential didn't pan out because of the study and the testing with people with the drug versus looking at people that would have the same disease but didn't get the drug. They didn't find enough difference. Those are epidemiological methods to figure out how it's done.

So after much discussion, we are at the point now where we can look at doing a reasonably tight study to see what the effects of wind turbines are on human health.

Now, my role as medical officer of health means that I have some say about what goes on with the public health in Huron County, but nowhere else. My jurisdiction is limited to Huron County. So that means that the effects of wind turbines are going to be -- the wind turbines in Huron County are going to be the subject of study. And the people, of course, that are living near those wind turbines are people that are probably going to be most affected by it. I live about 15 kilometres away
from the nearest wind turbine, and I cannot say in good faith that my health has been affected by the wind turbine, but that's simply because it's far away. We think that there may be a problem with people living closer to those turbines. So that's what we're going to try to find out.

What we know so far about industrial wind turbines is that some people are affected by them; they don't like them. There certainly are complaints that are coming through health unit from people who live near wind turbines, and they cite various problems with their health. They think it's because of wind turbines. So what we're going to do is organize a study to try to figure out under what circumstances people's health or people are of the belief that people's health may be affected, and Erica has spent quite a lot of time working out the details, and she's going to give you the details of this study.

We will do probably all of the initial analysis within this health unit. After all, Erica is a fully qualified Ph.D., and with the use of computers that we have, we can do just about anything that can be done at the university level.

If it turns out that there are some significant findings, it will then give us an opportunity to take it back to -- in my case, I'd have to report back to the Board of Health -- that was part of the deal -- explain what we found, and then if the findings are of significant interest, I can certainly speak to that at the time once we find out. Then there will probably be great
opportunity to have a more exacting and more quantitative study done to try to precisely identify what's going on.

So that's what's happening, in a nutshell. I'm going to turn over this meeting to Erica who's going to explain what is happening, how it's going to be done. Then we hope to give you guys lots of time to ask questions, and we'll answer them to the best of our ability.

So, Erica, go ahead.

DR. CLARK: Okay. So, as Dr. Bokhout said, we are looking at doing an investigation in Huron County. The stage that we're at right now is developing the data collection tools. Once those data collection tools are finalized, we will be getting approval from a Research and Ethics Board, and once we have that, we'll be ready to start the investigation, so we're anticipating starting in early 2017. The exact date will depend on when the tools get finalized, when they get approved by Ethics.

What we are currently proposing for the investigation is that we would be looking at all dwellings within a 10-kilometre radius of the turbines, and those dwellings also have to be within Huron County, because that's our jurisdiction. So the 10-kilometre radius was something that was decided upon in consultation with some of the people that are actually in the room tonight, because we asked the local citizens group what they felt would be a good distance to look at in terms of capturing everybody that might be experiencing some difficulty. So that's how we determined that we wanted to go out 10
kilometres.

We will be inviting every household in that 10-kilometre radius to participate. So there will be an invitation given to each household to participate. We are not limiting the participation by age. So if it is somebody that is too young to complete the data collection tools themselves, a proxy may do it for them. So if we have a young child who is, say, for example, six years old, a parent or other legal guardian could complete the surveys on their behalf, because that was something certainly that we heard from the people that have been consulting with us, that they really felt it was important that information on young children also be included in the investigation. So that is our plan in terms of the participation of children is that a proxy who has the legal authority to consent on their behalf provides the information.

So I said we are on Draft 3 of our data collection tools, and what we're looking at is really narrowing the scope of the questions that we ask. So we're currently proposing that, when individuals register for the study, that we would ask them the following questions: We would need to know their first and last name. We would need to know age. We would need to know gender. We would need to know some contact information so that we can get ahold of you if there's something that we need to clarify in terms of the answers that we get. So the contact information, e-mail address, phone number, that would simply be so that we can contact you if there is something
that I need to clarify with your survey response.

So date of birth in order to get age; gender; have you ever experienced motion sickness? Because that is something that has been cited in the literature as being individuals with history of motion sickness may be at greater risk; and then also asking if somebody is a leaseholder for a wind turbine or if they receive money from a wind turbine question. That is all we will be asking at the point of registering for the investigation. You will be answering those questions once.

After that point, you'll be given an ID number, and the ID number is what you will use when you participate in either the absence report or the complaint tracking.

So just go down to the complaint tracking questions. Okay. So we've made the length of the survey much shorter than what was in Round 1 and Round 2, because the feedback we got was it was far too long and that some of the questions were downright offensive. So a lot of that has been eliminated. So now we're down to having just a few questions.

So if you are experiencing either some sort of symptom that is problematic, you're hearing something, you may feel something, that you are to submit a complaint form. You would enter your identification number and then answer the question about what are the complaints, what you are experiencing now or something that happened while you were trying to sleep.
If the complaint is about what is happening right now, then you would enter the date and time of your complaint, and then there are three optional questions asking, "What do you hear? What do you see? And what do you feel?" So the "What do you hear?" would be where you would describe if you're hearing noises that are not what you would expect in a rural area. So if it's a typical noise that is supposed to be in a rural area, then you don't need to report that, but if it's something like the tonal screeching, the whomping, that sort of thing, that would be what you could write there if you choose to do so, but it's an optional question. You don't have to answer that information to complete this.

"What you see?" That would be things like the shadow flicker, the flashing red lights.

"What do you feel?" This would be your symptoms. If you feel a vibration feeling, if you feel nauseated, if you have a migraine, if you have a headache, vertigo, that sort of thing. These are optional questions. So you do not have to answer them if you do not want to.

If the complaint is about when you were sleeping, what we want to know is what is the date and time you went to bed, the date and time you got out of bed, and how much was your sleep disturbed in anyway. Then the optional questions, if you want to provide additional details about your sleep disturbance.

And then the additional survey piece is if you're away from your home for a period of time, we want to
know that so that we know that the lack of complaint is
because you're away from the home, not because you weren't
experiencing any difficulties.

So the idea is that we want to keep this to
a very small amount of information that you need to
complete in order for us to find out: Is there a
complaint? Is there not a complaint?

What we will then be doing with that
information is, if I take a one-hour period of time, what
I'm going to be looking at is were there complaints. So
the "yes" complaints would be in one group; the "no"
complaints would be in another group, and then I would be
looking to see: Are there variables that are different
between the two groups?

So I would be looking at: Can I predict who
has a complaint? Does it have to do with the wind speed?
Does it have to do with where their house is located in
relation to a turbine? Does it have to do with the
efficiency that that turbine is operating at? Is cloud
cover a factor?

So what I'm hoping to do is to be able to
identify under what conditions do we get the most
complaints. So I'm not going to be looking at all of that
other quality of life data that was in the original draft
of the survey. It'll just strictly be: Is there a
complaint? Is there not a complaint? And what variables
are occurring when there are a lot of complaints?

And I want to be looking at that seasonally.
So one of the things would be for the winter season. For example, are there particular wind direction, speeds, operating efficiencies, cloud covers, et cetera, that are predicting when there are complaints? Are those conditions the same in the spring, or is it a different set of variables that predict that? What about in the summer when we've got the high humidity? Is humidity a factor?

So what we're hoping to see is whether or not there are patterns, because if there are patterns, then that can help us to understand: Why does one household experience difficulties but another one does not? Okay?

Because certainly what we hear from the community is that there are some households that are really struggling and others that aren't. So what we would like to be able to do with this investigation is try to figure out why is that. Why do we have some households that are reporting a lot of difficulties, and then down the road we have another household that isn't? Okay?

We are looking at things. We've been looking the compass rose information for the turbines that maps out where the optimal wind direction is to see if we can put together variables where we're looking at, you know, where a house is lying in relation to that optimal range and include that as a variable. So we are looking at different things that we can use.

All the weather data, cloud cover data, we're looking at taking that from Environment Canada, from the airport, because they do document cloud cover using
their octave scale. And then the wind operating
efficiency, that information is available online. The IESO
website has that information.

So what we are planning at this point is
that there would be interim analysis. So once we get
started and get collecting some data, that, at the end of
each season, there would be analysis done and that it would
be made public and that how that information is analyzed
would also be made public.

So we're going to the level that, in my
statistical program, all of the code that I use to do the
analysis that's going to go on our website. So there will
be, "This is what we found. This is how we did it," and
open it up for criticism in the hopes that, when we are
looking at the summary report, the interim analysis, that
any criticisms that we get on that, we can use that to
inform what we do in the next round. Okay? Plus we want
you to be able to see results in a timely manner instead of
waiting two years. So the intent is that, at the end of
each season, we will analyze and produce results.

The investigation is, of course, voluntary.

We are going to be giving an invitation to every household
that is eligible, and to be eligible, you just have to be
in Huron County and within 10 kilometres of the turbine.
Okay? But it is voluntary, and so each individual will
have the opportunity to decide do they want to participate
or do they not want to participate. There will be an
information sheet that outlines what's involved in
participating, and there will be a consent form.

I know that there has been talk about concerns around the confidentiality of the data, particularly due to what's happened in Québec with some proceedings there around some research that was done.

We are not taking ownership of your data. So when this investigation is done, it's being done under Dr. Bokhout's authority, and we are acting as a custodian of the information. That means that, when we take the information from you to do the analysis, we have to tell you exactly what we're going to do with that information, and we cannot do anything else. So if we tell you that we're going analyze it and report aggregate results -- that means group results -- that's all we can do. So we cannot take your data and give it to anybody else. Okay?

And it also means that at any time you can call us and say, "I want my data destroyed," and we destroy it that day. It also means that you can call up and say, "I want a summary of my data. I want a summary of all my answers," and we'll give you that summary. Okay?

So that's what it means when we say that we will be a custodian of the data, but we are not going to own it. So we must store it and store it in an appropriate manner, but we cannot do anything to your data that we do not have permission to do, and you are the only person that can give us permission to do something with your data. Okay?

So this is the point the point where I open
it up for questions, and Dr. Bokhout and myself will try to
answer them. Yes?

AUDIENCE MEMBER 2: If we had to move from
our house --

DR. CLARK: Okay.

AUDIENCE MEMBER 2: -- but we still own it.

DR. CLARK: Okay.

AUDIENCE MEMBER 2: I limit my visitation to
the home. We have it rented, and he seems to be fairly
okay.

DR. CLARK: Mm-hmm.

AUDIENCE MEMBER 2: So not everyone is
affected, and I'm aware of that. Now, we are within 10
kilometres. Is that correct?

AUDIENCE MEMBER 3: Five or ten kilometres.

AUDIENCE MEMBER 2: No, no, no. Where we're
living now.

AUDIENCE MEMBER 3: Yes.

AUDIENCE MEMBER 2: When we're still within
10 kilometres, so I can still go on that?

DR. CLARK: Yes. If you live within 10
kilometres, then you can participate.

AUDIENCE MEMBER 2: Now, can I give two
opinions?

DR. CLARK: Yes.

AUDIENCE MEMBER 2: One where I'm living and
one when I go and visit my home?

DR. CLARK: Yes. I will give you two --
AUDIENCE MEMBER 2: Because when I go there, I am lucky; I can stay 20 minutes.

DR. CLARK: I will give you two identification numbers so I can keep separate the two dwellings and so that I don't mix up the two dwellings. So you will be able to report for when you visit the home that you have vacated, and you will be able to report on the home that you are currently living in.

AUDIENCE MEMBER 2: Thank you very much.

DR. CLARK: You're welcome. Yes?

AUDIENCE MEMBER 4: I heard you say you changed the form because it was downright offensive. I'm hoping you change it again.

DR. CLARK: Okay.

AUDIENCE MEMBER 4: Because we live in Perth County, within a kilometre of the turbine, and you're telling us we cannot participate in the study. That's offensive.

DR. BOKHOUT: How close are you to Huron County?

AUDIENCE MEMBER 4: About right across the road.

DR. BOKHOUT: Oh, well. Okay. I think we can do a little wiggle room as long as you don't tell the MOH.

AUDIENCE MEMBER 4: So, I mean, like, why not every household within 10 kilometres?

DR. BOKHOUT: It's because --
AUDIENCE MEMBER 4: It's a problem that's being caused in Huron County. It's still a problem.

DR. BOKHOUT: The problem is my jurisdiction. I only have say in Huron County. But, I mean, I think, if you're across the road --

AUDIENCE MEMBER 4: If the cause of the problem is in Huron County, is it not affecting all the people that are being affected by it?

DR. BOKHOUT: You know what? I could raise that with the board and see what they say and see how they feel about that.

AUDIENCE MEMBER 4: Just where we are --

DR. BOKHOUT: Yeah.

AUDIENCE MEMBER 4: -- because we're right at the corner of Huron County.

DR. BOKHOUT: Yeah.

AUDIENCE MEMBER 4: And half the household will be outside of the town.

DR. BOKHOUT: Yeah, yeah. I realize that's a problem, but that's the reality that I'm facing too, but I can talk to the Board of Health in the meeting on Thursday. I can raise that and see if they have any problems with that.

There are a couple of steps I have to do, but yeah. But I think, you know, I can say that if you're literally across the board from the border, I think that's --

AUDIENCE MEMBER 4: But it's quite a thing
to say to somebody, "Well, you have health problems, but
you live in the wrong county, so we're not going to address
your problems at all."

DR. BOKHOUT: No, no. Let's look at it
slightly differently. We're looking at groups of peoples,
ot individuals; right? In this study, I can't look at an
individual. I can look at groups. And if your concern is
-- I'm not sure what your name is, but let's call you Mr.
A. If you have a unique concern, it's hard to correlate
that with anything, but if other people who are also in
Huron County have similar concerns to you, that will show
up in any case.

So we need information on groups of people
to find out where there is a problem group. And if you
have an individual who, let's say, has -- to use an
example, if you're close to a wind turbine and, let's say,
you get a rash, but you're the only person that complains
of a rash and you think it's because of your proximity to
wind turbines, it makes it less likely but not impossible,
but it makes it less likely that it's related to wind
turbine. But if your rash shows up with a variety of
people who live close to wind turbines, that makes it much
more significant from our point of view.

AUDIENCE MEMBER 4: So it's true that county
line is a disincluded.

DR. BOKHOUT: I understand your problem, and
all I can say is I can take it forward and see if we can do
something about that.

AUDIENCE MEMBER 5: Can we assume, Dr. Bokhout, that you will be the acting medical officer here for Huron County throughout this whole --

DR. BOKHOUT: I can guarantee that, unless the government tells me to go take a hike, that I will be in this position until the end of October of next year. That, I can guarantee. So you should be able to get at least three seasons before I'm gone, at least. Now, I mean, I was originally going to stay here in this capacity until we got the study going. That was my original plan. But the government actually asked me to stay a bit longer, so I said, "Okay. I'll give you another year."

And, you know, if we're getting some interesting stuff up here and if it makes a difference for me to hang out for another month or two after that in order to make this work, then I'm not going to say no. But I think probably, if we can get this sucker going in beginning of 2017, we should have some idea after three seasons of what's going on; right? And so I'm hoping that we'll be so far underway and we'll have enough data that, you know, whether I hang out for another two months or not won't make a lot of difference. But I certainly agree that it's important for me to hang around for long enough to make sure that we get some data and get some data analyzed, so that's for sure.

AUDIENCE MEMBER 5: I have a lot of questions, but if you want to take turns.
DR. BOKHOUT: Marvellous.


I'll do you, and then I'll come back and do another one.

AUDIENCE MEMBER 6: So to either of you --

DR. CLARK: Yes.

AUDIENCE MEMBER 6: -- our involvement in
the investigation is we sign on, get a PIN number, and
recognized. Are we giving consent, then, to continue with
wind turbine experimentation further?

DR. BOKHOUT: No. I don't think so.

DR. CLARK: No. We do not control what the
turbines are doing. So what we're doing is taking
advantage of what's currently happening and trying to find
out under what circumstances people are experiencing
difficulty. So by agreeing to be in the investigation, you
are not in any way making a statement that you accept the
turbines.

Further to that, your participation in the
study is confidential. I will not be releasing the names
of whoever participates. That is not something that will
be happening. So unless you tell somebody that you are
participating in the investigation, it will not be public.
So if you sign up for the study, I will know; Dr. Bokhout
will know. That's it. I won't be making a list of who's
in the study and making it public. That would be a
violation of the agreements that we have with the consent
form, because on the consent form, it will state that the
names are confidential and that no names will be released
and that we will not be sharing the data without express
written consent. So, no, participation in the study does
not mean you accept the turbines.

AUDIENCE MEMBER 7: So the reason Eric asked
the question is a few years ago a Health Canada study was
done where there was found to be a correlation but not
direct, and, therefore, there wasn't enough information or
evidence obtained from that that they can move any further.
So it dismissed everybody even if they had concerns or
health issues. So I think the concern has been raised to
me, and I'm bringing it is that we don't further want to be
getting picked for another study that will lead us down a
road where there wasn't enough of a base of evidence of
it's random and depending on how many people are involved
in the study. So I guess that's my concern is: Are we
continuing to be guinea pigs with no outcome?

DR. CLARK: That is always a risk when you
participate, and that will be one of the things that is
stated on the consent form is that one of the risks of
participating is that you may invest a lot of time and a
lot of effort into filling out the complaint form, and we
may not find anything significant. That is always a risk,
and I'm not going to lie; it is a risk here. We may do the
analysis, and we might not find anything significant. That
is a possibility, and that will be on the consent form.

So you have to decide: Are you going to
participate knowing the outcome might work out for you and
the outcome might not? I can't promise you that we will
find something significant. We are certainly going to collect the information, do the analysis, make the results public, and if we do find something significant, we will move forward and take the recommendations to the MOECC and the Ministry of Health. But I cannot promise you what the results of the study will be.

AUDIENCE MEMBER 7: Is there any other county health units going to start the same thing as what you're going to do here tonight?

DR. CLARK: We are currently the only health unit that is doing an investigation. However, the other health units are watching what we are doing.

AUDIENCE MEMBER 7: How are we sure that this is going to be carried through? Because back six or eight months ago, the other medical officer of health, that lady, it was going to be set up, and they were going to start then, and then she was dismissed of her duties. How's this going to be any different than that back then? It just gets going on.

DR. BOKHOUT: I understand.

AUDIENCE MEMBER 7: And the county health board sees this going on.

DR. BOKHOUT: We have received permission to do this part of the study. That's what we're doing. And I would suggest that, if Board of Health reneges on that promise at this point, you have every right to get extremely upset as a member of the public, because we are not doing anything that they haven't given us permission to
do. What I cannot say at this point is whether we will have permission to go on to another part should we find something of significance. I can't say that at this point. But what we are able to do is to find out what's going on and present our results, and I would suggest that, if something shows up that is significant, that you'd have to have a pretty good reason not to carry on and not investigate that further. You know?

We do that all the time in medical work. You know. If a surgeon, say, comes up with a procedure that seems to make a big difference, that surgeon will publish that information, and other people will say, "Well, let's try it and see what happens."

I've been a medical doctor for quite a long time, and I certainly have noticed changed over the years in the way things are being done. New drugs are coming out. New procedures are being introduced. And it's based on somebody somewhere or a group of people finding something out and saying, "Hey, this looks promising. Let's check it out."

And I see the same kind of process with what we're doing here. We're looking at something. We're trying to figure out what is going on. If we find something, we will inform people, and when people are informed and say, "You know, this is a problem, or these things need to be looked into further, and this is the basis on which we come up with these conclusions," they'd be hard pressed to not take an interest.
I think also, though, it's really important for you, all of you, to be vigilant, to look at what we're doing, to make sure you keep us informed about what's going on, to critique us, to ask for information, and that way we can all be on the same page, because we're very invested in not trying to -- we're not trying to come up with stuff that isn't true. We're also not interested in trying to snow anybody. We're trying to come up with some information that's reasonable.

DR. CLARK: Okay. So I said I'd go back to you, and then I'll do a question from someone else.

AUDIENCE MEMBER 8: Okay. Just for clarity, then, this survey is not a standalone kind of situation where we can expect a protective outcome at the end of a year. This would qualify furthering with Wind Concerns Ontario, Jane Wilson's proposed project with the University of Waterloo, which would be another quite a significant period of time before we could hope for any protective outcomes, specifically with people who are currently being harmed and know darn well what's happening.

DR. CLARK: So you're asking as to whether or not we can issue an order at the end of the investigation?

AUDIENCE MEMBER 8: Yes.

DR. CLARK: No, we cannot.

AUDIENCE MEMBER 8: So this is a prerequisite to going forward?

DR. CLARK: Any order written by a medical
officer of health can be challenged in court. A single
investigation will not provide enough evidence for it to
hold up in court. We know that. So if your sole reason
for participating in the investigation is because you're
hoping that Dr. Bokhout will shut down all of the turbines
at the end of the year, you are going to be disappointed
and very, very angry, because we cannot tell you that.

AUDIENCE MEMBER 8: Even if you get
significant evidence?

DR. BOKHOUT: If we get significant evidence
-- let's say we come up with something and it's s slam
dunk. Let's just use that as an extreme example. What I
can do as a medical officer of health is recommend if I
think that there is absolutely no question that a bunch of
wind turbines -- let's say just say, you know, somewhere in
Huron County -- are causing everybody who's within 5
kilometres of the wind turbine to get serious depression,
let's say, just as example, and I can demonstrate that it
started when the wind turbines came up and people have been
on medication ever since; they've got increased visits to
the doctor. Then I've probably got enough grounds to say,
"This is a public health hazard," but that's a very extreme
example. Anything less than that, I probably couldn't.

One of the things that I did in my previous
stint as a medical officer of health was I was able to
demonstrate that, when rain falls in this county, the water
courses are flooded with E. coli bacteria which go to the
lake, and the coliform bacteria are sometimes -- they can
cause, you know diarrheal illness in people who swallow
water. So there's signs up, and they came up as the result
of that investigation. There are signs up on the beaches
now that says, "When there's been a rainfall, don't drink
the water." So that's something that I was able to do
along with a bunch of my colleagues about 20 years ago, and
now signs are up all over the place with public beaches.
That's because we were able to identify potential health
hazards, so that's what I was able to do.

DR. CLARK: Okay. Yes.

AUDIENCE MEMBER 9: This sort of follows up.

One of the words that's being used quite often is
"significant." I'm wondering about the definition of
"significant," because some people -- I know in the drug
field if you have a half-dozen or a dozen people that have
a reaction to a drug, they have to do something about it.
Then we turn around and say, "Well, if 5 percent have a
problem, it's not too bad; 10 percent, not too bad; 20
percent, it's borderline."

What does "significance" mean in this
context?

DR. BOKHOUT: Scientific significance versus
significance.

DR. CLARK: So what I'm looking for in this
investigation is whether I can find conditions that are
statistically significant predictors of complaints. So
that means that it is better than chance that people would
be having difficulties with the wind turbines under those
conditions. If we have those kinds of results, we can take those to the MOECC, which is the regulator for the turbines, and see if they're willing or able to make some regulatory changes in regards to the operation of the turbines. That is what I would see as best case scenario.

AUDIENCE MEMBER 9: And if they don't want to do anything about it, then it's recommendations to the health board or something?

DR. BOKHOUT: Yes. And I think, also, if we can provide, you know, the public with some decent information, then you've got a bunch of regulatory agencies that don't want to do anything about it even though they've got the stuff staring them in the face, that gives you a pretty powerful argument to say, "Do something."

AUDIENCE MEMBER 9: Right.

DR. BOKHOUT: You know? We're going to do our best to provide you with information that you can also use yourselves; right? I mean everybody, I think, has a certain vested interest in doing something a certain way, but if you can get some backup for your ideas, you know, through some studies or some scientific evidence or something that other people have tried and it's worked for them, it strengthens your argument; right?

AUDIENCE MEMBER 9: Right. Well, I guess the other thing I was going to say follows up on that. So you have 300 people in here with cognitive issues out of, I understand, about 50,000 people. I'm not sure how many is in here in county.
DR. CLARK: Well, the denominator is actually not the population of Huron County.

AUDIENCE MEMBER 9: Okay.

DR. CLARK: The denominator is the households and the people in them that are within that 10-kilometre radius.

AUDIENCE MEMBER 9: Okay.

DR. CLARK: So that's what we're looking at.

AUDIENCE MEMBER 9: Okay.

DR. CLARK: Okay. So over there and then back to here, so at the very back.

AUDIENCE MEMBER 10: Yes. Did I hear correctly? One of the questions you wanted to ask is: Are you a leaseholder, or do you have wind farm interest?

DR. CLARK: Yes. So one of the questions --

AUDIENCE MEMBER 10: So I could -- can I continue?


AUDIENCE MEMBER 10: If all those people who are fill out those forms and overwhelm that and the ones who are scared to talk, because they want to still talk to their neighbour or their relative, because it's divided, the roads, so badly people won't even go to church now. So I'm just wondering: You'll take that into consideration if they are a wind holder or a leaseholder?

DR. CLARK: So, yes, I'm looking at whether or not somebody is a leaseholder or whether they received money from the wind turbine company. In terms of
overwhelming, the default is no complaint in the analysis. That's the default. And then if you're experiencing a problem, you make a complaint. So if somebody is a leaseholder and they don't experience any difficulties, they don't actually need to do anything, because they're just not submitting complaints. Okay? So they wouldn't be able to overwhelm the process.

If we have people participating in the investigation, the only way your neighbour will know you are participating in the investigation is if you tell them. We will not be publishing the names of who participates. You'll be filling out a survey. You'll be doing it online, or if Internet connectivity is a problem where you live, we'll give you a pen and paper option that you can submit to us. But you can participate in the investigation and not tell anybody. You could tell everybody, "I didn't do it. I didn't participate. I didn't want to participate."
The only way somebody finds out you're in the investigation is if you tell them. So someone can participate and keep that information secret.

AUDIENCE MEMBER 10: Okay. I do know people on our road who are ill and they were never ill before, and they will not admit that it is to do with the wind, because they are getting money.

DR. BOKHOUT: Right.

DR. CLARK: Well, ultimately, participation is voluntary. We can't force somebody to be in the investigation.
AUDIENCE MEMBER 10: But they don't know why they're sick. Why all of a sudden can I not travel because I have a heart condition? And I just came back from India the month before those wind turbines happened, and I had no trouble or nothing, and now I'm sicker than a dog.

DR. BOKHOUT: Other than to suggest that if you know people like that, try to convince them or get them to give me a call.

AUDIENCE MEMBER 10: Well, they -- yes.

DR. BOKHOUT: You know? Which I'd be happy to speak to them. You can't force people to do that.

AUDIENCE MEMBER 10: No. And I wouldn't want to.

DR. BOKHOUT: No.

AUDIENCE MEMBER 10: And I would not tell you their names --

DR. BOKHOUT: That's fine.

AUDIENCE MEMBER 10: -- because that is their privilege.

DR. BOKHOUT: Yeah. Yeah.

AUDIENCE MEMBER 10: And it's not my jurisdiction to --

DR. BOKHOUT: No, I agree.

AUDIENCE MEMBER 10: -- give someone else's name because I think they're a fool because they're not admitting it.

DR. BOKHOUT: One of the things -- and it's been inferred, but I think it's important to state -- if we
don't get data, we can't do a study.

AUDIENCE MEMBER 10: Well, I would try. I think we need more -- to make government --

AUDIENCE MEMBER 11: To add, sorry, you're going to be sending out letters to each household within that 10 kilometres?

DR. CLARK: Yes.

AUDIENCE MEMBER 11: So let's focus. If they've really got a problem, if they get -- you're going to be sending out an actual letter?

DR. CLARK: Yes.

AUDIENCE MEMBER 11: So they should get it in their mailbox. Then it's going --

AUDIENCE MEMBER 10: But will it tell them what are some of the symptoms?

AUDIENCE MEMBER 11: No.

DR. BOKHOUT: Probably not.

AUDIENCE MEMBER 10: Will it tell them that they -- why do they tendonitis now? Why do they have a heart condition? Why are they having palpitations? Why, when they go away to their daughter's somewhere else, they have nothing, and then they come home? They don't know the reason because they don't want to admit. And our Wynn government -- excuse me for being political -- is not telling the people that everything is fine. It's all in your heads. Well, I've got a pretty big head.

DR. BOKHOUT: Well, if we had taken that position, which would've been the safe thing to do --
AUDIENCE MEMBER 10: Yes.

DR. BOKHOUT: We wouldn't be sitting here and talking to you tonight.

AUDIENCE MEMBER 10: Right. Thank you very much.

DR. CLARK: Okay. You and then back to you. Okay.

AUDIENCE MEMBER 12: Okay. I'd like to know what we can with all the data we've collected on ourselves as guinea pigs right from the get-go when our projects have been turned on? Some of us have huge collections of personal data from health effects that we've been experiencing since they flipped the switch the very first day.

AUDIENCE MEMBER 13: That is data. That is almost more powerful and credible than what you guys might receive in the next while. What do we do with that stuff? Can it not be part of this? Can it not be part of another study? Because a lot of us have incredible self-data, and that's what was recommended is to keep watch of yourself, to report things. Is that all going to go to waste one day when we have thick piles of stuff that has happened in our households? So where can this fall into place? I'd like to know that.

AUDIENCE MEMBER 12: Will it? Can it?

AUDIENCE MEMBER 13: Other than for our own personal use?

DR. BOKHOUT: I think it's important to keep
track of it. I don't think there's -- you've gone through
all the trouble of making those, to recording that stuff,
so hang on to it.

AUDIENCE MEMBER 12: Of course.

DR. BOKHOUT: What may end up happening is
that -- and that happens from time to time; right? You've
been exposed to something. The official party line is it
ain't anything, but you hang on to those data; right? You
keep hanging on. And eventually it's been shown that, you
know, that maybe there was something, you know? And then
policy changes, and then all of a sudden the dam bursts,
and people say, "Yeah. We're going to recognize these
complaints from going back so many years." And here you've
got the documentation to show that you've got it.

We have examples of that kind of stuff
happening, you know. One of the things that -- you know,
I'm not sure I should be saying this, but what the heck,
you know? If you're in the military and you got a bad back
as a result of fooling around with tanks and armoured
vehicles and helicopters that jump around a lot and you get
a bad back or neck pain, it's extremely difficult to
convince the military that it's because of what you did by
being part of their personnel. It's an example. But I
think some of the other things that have been going on,
like I think you've heard about Agent Orange, you know,
being used in New Brunswick and stuff, and after years of
denial, the military has decided, well, maybe they should
compensate some of these people.
So I think it's very worthwhile to hang on to data, and you'll get backing if we can show that some of the things that you've been complaining about is not unique to you, but it's been demonstrated by a variety of people who live near wind turbines. You, then, have the document to be able to show, "Well, look, I've had this for years, and I was near wind turbines. It's all here." You know? And then, down the road, you know, maybe there will be something that will help you.

AUDIENCE MEMBER 14: Further to that subject, this question is about why the Huron County health unit has not published the list of symptoms that are well known that are caused by the turbines? Go on the Waubra Foundation website, and there are four pages of intricately-detailed symptoms prepared by a doctor of medicine who has a very good understanding of the complications that come about. So why has there been no education process in Huron County? People have had to do that research themselves to find out why this is happening to them.

DR. BOKHOUT: Well, as you've heard, there's people here who deny that they have problems, but there's also a difficulty with, basically, telling you, "This is what you should look out for," because it depends -- say we give everybody in this room, "Okay. These are the cardinal symptoms of problems within wind turbines," right, that immediately does something to the validity of your study. We're trying to find out what the problems are. But if we
give you a prepared list of problems that have been found in other areas maybe, maybe not, it contaminates the results.

AUDIENCE MEMBER 14: But in the course of time, say, for example, some of these people have been reporting what has been happening to them, it is a source of great comfort to know that this is -- not really great comfort, but that this is caused by the turbines and that do not, in fact, have some serious health issues that are arising from some other cause and that, when they go away from the turbines, these symptoms disappear. So if they knew what these symptoms are, it would at least be explaining to the individuals who are being impacted.

DR. BOKHOUT: Yeah. Yeah.
DR. CLARK: Are you asking for the health unit to publish diagnostic guidelines?

AUDIENCE MEMBER 14: I guess that's what it would be called. I don't know the terminology.

DR. CLARK: So I think what you're asking for is: Why isn't the health unit saying, "This is what wind turbine syndrome is, and this is what the doctor should be looking for"? Is that what you're asking?

AUDIENCE MEMBER 14: Yeah. Like, if it was flu symptoms, wouldn't you have that on your website what people can be looking for in members of their family?

DR. CLARK: It's not part of our jurisdiction to define diseases that can be diagnosed by physicians.
AUDIENCE MEMBER 14: Is it not --

DR. BOKHOUT: The way I would put it is this way: Look, you're going to give us some information. You're going to help us to answer the question whether and how these wind turbines are causing health problems. Okay? If we feed you a suggest set of answers, then people who look at that study say, "But you gave them the information." If we leave it that you tell us what's going on, that has much greater validity, because then we're not feeding it to you.

What we're trying to do is figure out what's going on. We have to be very careful in how we get information.

AUDIENCE MEMBER 15: Sued.

DR. BOKHOUT: Yeah. No, it's tricky. We have to find out from you guys what you are experiencing. And, say, everybody in this room is near a wind turbine and everybody says they're getting sick to their stomach, you know, that's pretty important stuff. But if we ask you, "We want to know whether you get sick to your stomach," you know?

AUDIENCE MEMBER 15: Coached.

DR. BOKHOUT: Yeah. You know, then we basically -- I don't know what the terminology is. We coached --

DR. CLARK: We've biased it, and, yes, we've coached. They say that's it's a leading --

AUDIENCE MEMBER 15: Coerced.
DR. CLARK: It's called a "leading question." So we can't put a list of symptoms and ask you to check them off, because it's considered a leading question and that we coached the answers.

AUDIENCE MEMBER 15: And you'd be getting sued.

DR. CLARK: Well, we wouldn't necessarily get sued, but the investigations results would have not very good standing.

AUDIENCE MEMBER 14: No validity.

AUDIENCE MEMBER 16: I disagree, because I think by not accepting how people are getting ill or what the symptoms are, you're sticking your head in the sand or you're not validating what people are telling you. You're not taking any ownership of any information that you're gathering, because it's like saying, "We don't know what a cold is. We've never heard of it. You tell us what it is."

AUDIENCE MEMBER 14: Who hasn't heard of colds?

AUDIENCE MEMBER 16: And at what point do you accept that there is a cold? Like, at what point do you say, yes, people are ill; they are getting symptoms from these turbines; and then let's do something about it?

DR. BOKHOUT: Well, that's what we're trying to find out, isn't it?

AUDIENCE MEMBER 14: Yeah.

DR. CLARK: Yeah. I see your point that you
feel that we're not validating what you're experiencing.

AUDIENCE MEMBER 14: Because people here
have sent copies of exactly what's happening to them to the
Huron County health unit --

DR. BOKHOUT: And I've seen them.

AUDIENCE MEMBER 14: -- to your address
already now for over a year.

DR. BOKHOUT: I've seen them. But that
was --

AUDIENCE MEMBER 14: Two years.

DR. BOKHOUT: It's been a long blinking
road, but that's why we're doing this study; right? If we
had no complaints from anybody, I couldn't be standing up
there to the Board of Health saying, "Let's do this study."
But it's because we got those complaints that we're doing
this study. And has been mentioned, we're the only health
unit doing it.

AUDIENCE MEMBER 14: Yes. I do appreciate
that. I do appreciate that.

DR. BOKHOUT: Yeah.

DR. CLARK: So it's --

DR. BOKHOUT: It's --

DR. CLARK: I realize that you're finding it
upsetting that we're not publishing a list of symptoms, but
we cannot do that.

AUDIENCE MEMBER 14: So people have to do
that for themselves.

DR. CLARK: If we do that, we will be --
pardon?

AUDIENCE MEMBER 14: People have to go to the Waubra Foundation website, do that for themselves.

DR. BOKHOUT: If you are a study participant, we're interested in knowing what your symptoms are and how you define those symptoms, and where you get the information to make you decide what you should report is entirely up to you.

DR. CLARK: So, I mean, those three questions are optional. It's up to you as to whether or not you want to tell us what you feel, what you hear, and what you see. That's optional, because some people don't want to spend the time writing that in every single time. But if you want to tell us what your symptoms are, that's fine, but I cannot publish a list of symptoms and say, "Check all that apply," because it would be considered a leading question, and it would be coaching.

DR. BOKHOUT: Yeah.

DR. CLARK: And all of the work and all of the effort that goes into the investigation would go nowhere. Okay?

Okay. Yes.

AUDIENCE MEMBER 17: I'm going to throw a fast one at you here. From the time that I was originally learning, or anybody in my household, some of those symptoms have changed. So I might not get what I got over a year and a half ago or almost two years ago, but now I'm getting something different. And like I said before, all
that data I've collected from my household, it sucks
because I might not feel that when the study starts next
week, but yet I've gone through living hell, and I damn
well know it wasn't from any other factors other than when
they flipped the switched on these things.
So that's where I get mad is all that data,
that stuff that happened since they first turned on, it was
incredible, especially the first three months. They were
insane. So there's not accountability for those feelings.
When this thing starts in, let's say, February of next
year, I may have totally different symptoms now from what
I've had since when we first started, and that kind of
sucks because that's something that's just crippling me,
but now I've gone to other side effects. So there's
nowhere for me to report that, either, because, you know,
it'd be lying if I said certain thing that was hurting me
at the beginning of this project, when you turned it on, is
not affecting me.
I think our bodies have gotten used to a lot
of this shit too, honestly. We've become immune to it
because we're in that house 24/7, seven days a week, and
we're farmers, and we don't get to leave, and I'm a
housewife and a mother of kids, and we don't get to leave.
So I think a lot of the things we
experienced at the beginning of the first year and the
first few months, our bodies have been evolving, and that's
part of something you scientisty people's do is like --
what do they call it? Paul, what do they call it?
Pathologist -- not pathologist, people that study people's traits and their bodies, how they get used to things and whatever you want to call that. I can't think of the word. But I'm angry because I know it's happened. I know my body best. So, like I said, when I start this study that we waited so long for now, I might not even be getting now those things; I'm getting something else --

DR. BOKHOUT: Well, let me --

AUDIENCE MEMBER 17: -- because we've been guinea pigs for a long time, so it's frustrating.

DR. BOKHOUT: Well, you've been told initially that, "Oh, wind turbines don't cause any problems," right, "with your health"? That's what you were told? "They're safe. We'll just set them back 500 metres. Everything is going to be wonderful."

AUDIENCE MEMBER 17: I've got them just over 500 metres.

DR. BOKHOUT: I know. But, I mean, that's what you were told. Isn't that what you were told by the government?

AUDIENCE MEMBER 17: Oh, probably.

AUDIENCE MEMBER 18: Exactly.

DR. BOKHOUT: You know, it's no problem. It's all been sorted, you know? And then, behold, a whole bunch of turbines show up, and then we've received complaints to health unit by a variety of people. I'm sure you would've complained.

AUDIENCE MEMBER 17: I'm No. 1. I'm the No.
DR. BOKHOUT: That's right. So there you go. See? And that says, "Maybe it's not quite that way, you know, maybe not." And then it's a question of -- well, you know how the story goes from there, eh? How long did it take us to get to where we can actually this stuff?

AUDIENCE MEMBER 17: But I'll be dead by then too.

AUDIENCE MEMBER 18: But we have to start somewhere, and this is a place to start, and we're going to move forward from this beginning.

AUDIENCE MEMBER 17: Yeah. But I've lived through sheer hell, and like I said, I've got everything documented at home.

AUDIENCE MEMBER 18: So that sheer --

AUDIENCE MEMBER 17: But it's frustrating because our bodies are becoming immune to this. I'll tell you that. Definitely.

AUDIENCE MEMBER 18: So other people who are just starting will have those symptoms recorded in the study, and those of us, like Rosemary, your symptoms will be recorded also, your new symptoms. So it's going to make it better for people five or ten years from now who will look at this study.

AUDIENCE MEMBER 17: I don't want to be doing this for five or ten years.

DR. CLARK: Keep your data. Don't throw out your data. I do not have the capacity to do anything with
it right now, but I cannot predict what we'll be doing a
year from now. Okay? So keep the data.

AUDIENCE MEMBER 17: I understand. It's
just very frustrating.

DR. CLARK: I realize that. I realize that
this is a incredibly frustrating process. I'm not going to
deny that. And I know that for those of you that were here
in the spring with such hope and then had such a let down,
and then now we're in a position to start again. So I
realize it has been a very frustrating process, but please
keep your data. Don't throw it out, because we don't know
where we'll be in another year.

Okay. So I'll start there.

AUDIENCE MEMBER 19: Yeah. Erica, you've
been getting a number of calls for this past quite a
while --

DR. CLARK: Yeah.

AUDIENCE MEMBER 19: -- about people with
issues --

DR. CLARK: Yes.

AUDIENCE MEMBER 19: -- living within
turbines. Has there been any people calling you in
confidence to say they're having issues and they have wind
turbines on their property? In other words, they're
leaseholders. Has there been anybody?

DR. CLARK: I cannot comment. When I get
information, I keep that confidential. I can't answer that
question.
AUDIENCE MEMBER 19: You ask them if they're leaseholders when they call you about problems?

DR. CLARK: Well, when we do the registration for the study, we will be asking that question.

AUDIENCE MEMBER 19: Yeah.

DR. CLARK: But I'm not answering questions about things that people have called up and told me.

AUDIENCE MEMBER 19: Okay. So when they phone you about issues, you don't ask them, "Are you a leaseholder? Do you have wind turbines?" When they phone you, you don't?

DR. CLARK: I have not been routinely asking questions of people that call me.

AUDIENCE MEMBER 19: Yeah. Okay.

DR. CLARK: If someone calls with a complaint, we take the complaint. But when we do the registration for the study, right now that's our plan. I mean, this is Draft 3, and it's currently out for review. So there's a group -- I think some of them are here now -- that are going to be reviewing it, and then there are some others that are reviewing it. So there may be some changes yet to come, but this is the draft we're working with right now that does ask, "Are you a leaseholder? Do you receive money from a wind turbine company?"

Yes?

AUDIENCE MEMBER 20: Why did you decide to include leaseholders and people who are not being harmed?
And if I may ask a further question all in one, what's the ratio that you're going to accept of people being harmed versus people saying they are not?

DR. CLARK: Okay. So the design that we're using for the investigation is what we call a "case-control design." So in a case-control design, your case group is the people that are having a problem. Your control group are the people that are not having a problem. And then the analysis is looking at what's different between those two groups. Why is this group having a problem and this group not?

So what we're doing is, within that 10-kilometre radius, we're asking everybody to participate, and then we're saying: On this day and this hour, who is a case? Who's got a problem? Who does not? What's the difference between those two groups? Why is it that this group is having difficulty? Does it have to do with their location? Does it have to do with the wind direction? Does it have to do with the efficiency of the turbine that's close to them? Why is this group different from this group? That's what we do with a case-control design.

In terms of ratio, we're doing what we call a "census sample." So we're taking everybody in that 10-kilometre radius, and we're inviting them all to participate. We're not saying, "We need 10 people who look like this, 10 people who look like this, 10 people who look like this." We're inviting everybody in that 10-kilometre radius because we want to figure out what is different
between those who have a complaint and those who don't in a period of time and what are the conditions and what is the physical environment looking like at that point.

AUDIENCE MEMBER 20: So you won't know the ratio until people register?

DR. CLARK: Yes. When we report on the percentages. So let's one of the things that we'll be reporting is, say, for example, what percentage of households have at least one person experiencing difficulties. The numerator will be the households within that 10-kilometre radius that have at least one person experiencing a difficulty. The denominator is everybody in that 10-kilometre radius, all those households. And then we can say that, in 5 kilometres, what's the percentage? In 2 kilometres, what's the percentage? So that's one of the things that we're going to be looking to report for each season. So what is the percentage of households? What is the percentage of people? Okay?

The denominator is everybody eligible for the study, not the population of Huron County. We're not interested in the people who are 50 kilometres away. We're interested in the ones who are within that 10-kilometre radius. Okay?

So who I say next? You. Okay.

AUDIENCE MEMBER 21: One question that came up is the time limit of the symptoms, when some people had symptoms for two years. What is going to be in effect for this study? Does it have to be after the study starts on
February 17th, whatever, or can it be things beforehand?
I'm just trying to get it defined because there seems to be
some confusion of how they can use old data and new data.

DR. CLARK: Okay. So if you have been
journalling what's happening to you over the last couple of
years, that is your personal data. I don't want you to
throw it out. Definitely keep it. At this point, I don't
have --

AUDIENCE MEMBER 21: Use for it?

DR. CLARK: Not right now.

AUDIENCE MEMBER 21: Yep.

DR. CLARK: Right now, I have a very narrow
scope that I'm looking at. Right now, what we're looking
at is we'll be collecting data starting in early 2017, and
the complaint will be realtime. So let's say April 2,
2017, at one o'clock in the afternoon, you are really --
you know, the turbines are making noise or something
doesn't feel right. You feel panic; you feel overwhelmed.
So you make a complaint. You fill out the form, and then
that is documented as a complaint for that hour. If you
feel something an hour later, you document another
complaint. If you feel something an hour after, you
document another document.

When I do the analysis, what I'm planning to
do is to take that hour and say, "Who had a complaint in
that hour?" That's my case group. Who did not have a
complaint? That's my control group. Why is one group
different from the other group? What are the things that
may be predicting why those people are having difficulties?

AUDIENCE MEMBER 21: Okay. One thing is time. I understand time.

DR. CLARK: Yep.

AUDIENCE MEMBER 21: Wind direction is another thing that affects it. So you could have two households that were being affected and 10 that weren't.

DR. CLARK: Yep.

AUDIENCE MEMBER 21: Is that going to conflict with what you just said?

DR. CLARK: So wind direction is one of the variables that we're looking at. We're also looking at the direction that the turbines are facing. So if you have four houses, the two houses in the middle, the wind turbine is facing them.

AUDIENCE MEMBER 21: Yeah.

DR. CLARK: That's something that we want to look at in the analysis. We also want to look at the efficiency of the turbines, because there is the theoretical output, and then there's the actual output, and we want to look at: Is the turbine operating efficiently in that period of time, or are there things going on that are causing the turbine to be inefficient, like wind shear, wobbling of the blades, things that might be making it more difficult for people to live near them?

AUDIENCE MEMBER 22: One other thing you mentioned as far as people getting money from a turbine through a lease, we do know the people that are leased are
having trouble, and their children are having trouble.

DR. CLARK: Mm-hmm.

AUDIENCE MEMBER 22: I don't know if they'll turn around and put it in. They're under contract not to say anything, financial contract not to say anything.

DR. BOKHOUT: So they're basically saying they can't speak out.

AUDIENCE MEMBER 22: They can't speak out, but they could anonymously.

DR. BOKHOUT: Yes, of course.


DR. BOKHOUT: That's my hope, anyway. That message should go out there for people. If you know somebody, say, it doesn't preclude -- you know, if you know somebody in that situation --

AUDIENCE MEMBER 22: Yeah.

DR. BOKHOUT: -- it doesn't preclude them from participating in the study. It's just that they don't want to tell the company that they're participating.

AUDIENCE MEMBER 22: Right. Right.

DR. CLARK: Yep. And it's why it's so important that we maintain confidentiality.

AUDIENCE MEMBER 22: Yeah.

DR. CLARK: Okay? If someone participates, that is confidential. I will know. Dr. Bokhout will know. That's it.

AUDIENCE MEMBER 22: Mm-hmm.

DR. CLARK: Unless you telling your
neighbour you're participating, nobody else is going to
know.

Okay. So there are some questions over
here, so in the beige sweater.

AUDIENCE MEMBER 23: So if I'm registered
and I have company and somebody reacts, are they able to
participate, or do I record it for them?

DR. CLARK: That's a good question. I'll
have to think about it some more, but my reaction would be
to document it and get ahold of me, and I'll see what I can
do, but I'll think about that. I hadn't --

AUDIENCE MEMBER 23: If we go golfing and we
get close to the turbines and somebody's heart starts
palpitating --

AUDIENCE MEMBER 24: Which has happened.

AUDIENCE MEMBER 23: -- which has happened,
where is that going to be recorded?

DR. CLARK: Okay. I'll have to think about
a visitor form. Thank you.

AUDIENCE MEMBER 23: I'll give you an
example. Like, we have two farmhouses. I can go in one; I
might be fine. If we drive next door to go to the next
farmhouse to visit there, bam.

DR. CLARK: I would want to --

AUDIENCE MEMBER 23: So I'm just telling you
the variables on these things. It's incredible.

DR. CLARK: Yep. I would want to be giving
you an ID number for each farmhouse.
AUDIENCE MEMBER 23: Well, there should be somebody registered in that house already because they're a victim in there too, so whatever, but I'm just telling you how incredible this can be, my experience.

DR. BOKHOUT: Are you on good terms with that person? Do you know whether they'll register for the study?

AUDIENCE MEMBER 23: It's family. It's family. It's all family.

DR. BOKHOUT: Oh, okay. Good.

AUDIENCE MEMBER 24: But you do have custom workers on farms that are going into farms that are close, and they have trouble working in the fields close to the turbines. That's another group.

DR. BOKHOUT: Well, it's the same, yeah.

AUDIENCE MEMBER 24: Yeah.

DR. CLARK: Okay. So a couple more questions on this side.

AUDIENCE MEMBER 25: Go ahead.

AUDIENCE MEMBER 26: How are you going to take into account sensitivity? I was living 650 metres away from the turbine and had to leave six months ago. I lived there for 18 months. I'm living in town. I'm still affected, but I've become really sensitized to almost everything else in my environment. So I'm still living in town. My neighbour might not be affected because they aren't sensitized to it. So I think that that's a really big piece, because we know that some people are more
sensitive.

DR. CLARK: That's a good question. At this point, I'm not sure if I can deal with the sensitivity issue in this particular investigation. In the previous drafts of the surveys, we were asking a lot of questions around sensitivity, chronic health diseases, all kinds of other things, and there were a couple of issues there. One was that the surveys were just too long, and it would have been -- I tried completing them myself on an ongoing basis and couldn't keep it up, and I'm highly invested in doing surveys.

AUDIENCE MEMBER 26: I have 18 months of journalling every single day, so I'm looking at that as well, so I would know, because this shows that it's still happening to me even though I'm no longer there where it was.

DR. BOKHOUT: Just as a by the way, are you still within the 10-kilometre radius?

AUDIENCE MEMBER 26: Yes, I am.

DR. BOKHOUT: Okay. So --

DR. CLARK: Then you're still participating.

DR. BOKHOUT: -- you can --

AUDIENCE MEMBER 26: Symptoms are very different, as she's stated.

DR. CLARK: Yep.

DR. BOKHOUT: Fair enough, but report the symptoms. You know, like --

AUDIENCE MEMBER 26: I guess I'm just sort
of looking at that and going, well, if you saw that or if that popped up, you'd have no way of knowing that this person has left the vicinity because of the turbines but is still being affected. You know? Like, there's a piece missing there that you will never know that I had to leave where I was living.

DR. CLARK: One of the things that we do want to look at is if there are empty households within that 10-kilometre radius. We want to know live households are empty.

AUDIENCE MEMBER 26: Well, we sold that house.

DR. CLARK: Okay?

AUDIENCE MEMBER 26: Somebody bought our house, and, you know, they're not being affected.


AUDIENCE MEMBER 27: My question is not only for you. It's the media in the room. How is this going publicized? How is it going to be a government come in, and it's going to go in the recycle box before it's even read? How do we get this out to everyone that they need to be concerned?

DR. CLARK: So are you talking about the results?

AUDIENCE MEMBER 27: No.

DR. CLARK: The invitation?

AUDIENCE MEMBER 27: Mm-hmm.

DR. CLARK: So the invitation is going to be
going in the mailbox of every eligible household. We will also be doing a media release when we're ready to start the investigation. Typically the media in Huron County reports on our media releases, so we're fairly confident that it will go out over the media when we're ready to start the investigation. We will also have the information on our website. It will go on our Facebook pages, and we'll be asking people to spread it by word of mouth as well.

Our experience so far has been that, when we make an announcement related to the wind turbines, that the word spreads fairly quickly. We had over 4,000 hits on our website and on our Facebook when we announced that we were going to do a public meeting tonight. So we're not worried about not being able to spread the information, because our experience has been that it spreads pretty quick.

So when we do publish the interim analysis, it will be on our website. It will be publicly available to anybody who accesses our website. Anybody will be able to download it, print it, share it, send it around. We're not going to be keeping it secret, and we're going to be saying, "This is the interim findings. This is how we came to them." You will actually be able to look at how I did the analysis, and if you know somebody that knows statistics or has worked with the Stata program, they'll be able to do a line-by-line critique of what I did. And if somebody has a problem with how I did the analysis, I want to hear about it, because if I hear about it, then we can use that information for the next round of the process. So
certainly we are interested in having the information
widely available.

AUDIENCE MEMBER 27: There's a tremendous
amount of cottagers and part-timers. They don't all have a
mailbox. How do we get to those people? Because they'll
be living here maybe three months, maybe six months. There
are a lot of snowbirds in Huron County, tremendous amount,
because they don't like the snow.

DR. CLARK: Yeah. We are looking at a
strategy for capturing the cottagers and the part-time
residents. We know that there is a wave of people that
comes in after the May long weekend, so we will be
reissuing the invitation at that time. We also know that
we have a beach Twitter account that we can use during the
beach season to remind people that the investigation is
ongoing. If you are in an area that fits the eligibility,
that we want to talk to you.

So we are working on a strategy for getting
the part-time residents that show up in the spring. So,
yes, your point is very well taken. We do have an influx
of people in the spring, and we can't forget about them,
because if they're in that 10-kilometre radius, they will
be eligible.

DR. BOKHOUT: There was a question over
here.

AUDIENCE MEMBER 28: Yeah. She kind of
asked the same question, but I'm the owner of Hirschmark
(ph) Trailer Park.
DR. CLARK: Mm-hmm.

AUDIENCE MEMBER 28: So on the weekend, I'll have, you know, 100 seasonals. Then I have quite a few that stay there during the week. You know, they're all seasonal, so they're there six months, but they go home for five days. So they come for two days; they leave for five. Are they all going to be eligible?

DR. CLARK: Yes.

AUDIENCE MEMBER 28: I'm just going to post some up?

DR. CLARK: Yep. Well, you'll probably be hearing from us when we get to the point where trailer parks are opening up. Yep.

AUDIENCE MEMBER 29: Let's talk about mapping. Are you going to put out a map of what is 10 kilometres, that you are considering is 10 kilometres?

DR. CLARK: Yes.

AUDIENCE MEMBER 29: I live in Goderich Township, and we have them to the north and south, and I think people would like to know if they're within that circle or not in case they get missed.

DR. CLARK: Oh, yeah. We will absolutely be doing that. Yep.

AUDIENCE MEMBER 30: I just wanted to ask: For legal reasons, considering the fact that no one in Huron County gave consent to being a subject of the turbine experiment, I'm wondering if the people who are being harmed and who decide to participate in this survey will be
signing a legally binding disclosure document of informed consent because they will be remaining in their home and subject to more harm.

DR. CLARK: Oh, no. We are not releasing any information, no. No, no, no. Participating in the investigation does not mean you are consenting to turbines. When you sign the consent form in the investigation, you are only giving your consent to being in the investigation. That's it. That's it. That is all you are signing. All you would be agreeing to is what's on the consent form. That's it. So you would be agreeing to give us permission to analyze your data and to report summary aggregate results. That's it. You are not giving us permission to spread far and wide that you signed up. We cannot release that. Okay? You are not consenting that you accept the turbines. When you sign the consent form, you are only consenting to the investigation. That's it. That's all.

AUDIENCE MEMBER 31: Doctors, can you -- and maybe it will solve the issue of not leading people and telling them what the symptoms are. Can one of the questions be -- and I don't think it's in there: Thinking back to when turbines were turned on, has the status of your health improved or worsened?

And then the second question, and then I'll stop, is: Are you doing an overlay of where the turbines are now placed in Huron County on the map?

DR. BOKHOUT: Oh, yeah.

DR. CLARK: Oh, yeah. Yep. When we do up
the map, we'll be showing where the turbines are. The reason we no longer have the question about compared to a year ago or compared to before the turbines started, is your health good, better, or worse, we did have that kind of a question on a previous version of the survey. The challenge is, when you start looking at that self-reported health measure, you then have to look at what are other variables that might influence that, because the research literature is quite clear that there are things that influence self-reported health that have nothing to do with wind turbines: your gender, your ethnicity, how much money you make, whether you consume heavy amounts of alcohol, whether you have a whether chronic disease. So if we try to talk about what your self-reported health is, I also have to ask all these other questions that nobody wants to answer when we're talking about wind turbines, and that was where people were getting upset with the previous versions of the study.

AUDIENCE MEMBER 31: You'd have to qualify large amounts of alcohol.

DR. BOKHOUT: Just before we go on, it's 20 to nine, about. How much longer do you guys want to keep this going? Officially, we were supposed to end at 8:30. Take a few more questions and call it quits?

AUDIENCE MEMBER 32: I have two more questions, if I may.

DR. BOKHOUT: All right. He had one, so it's now your turn again. Go ahead. Why don't you start
AUDIENCE MEMBER 32: Will you be providing a risk and benefit statement to everyone participating?

DR. CLARK: Yes. Yes.

AUDIENCE MEMBER 32: Detailed risk and benefit.

DR. CLARK: That is part of the information sheet, part of the consent form. So there will be a very clear list of the risks and the benefits.

So as we were talking about earlier, one of the risks to participating is that you may invest a lot of time in filling out the survey and tracking your complaints and then we may not have significant results. That is a risk, and that is going to be listed on the information sheet and the consent form.

AUDIENCE MEMBER 32: Okay. And, if I may, just one more: You are going to be asking a question about pre-existing health concerns or health symptoms?

DR. CLARK: No. We got rid of that.

AUDIENCE MEMBER 32: You got rid of that?

DR. CLARK: It's gone. We got rid of that when we got rid of the self-reported health questions. We're not asking about pre-existing health conditions. We're not asking about alcohol consumption. We're not asking how much money you make.

AUDIENCE MEMBER 32: I heard that, but I just wanted to be sure --

DR. BOKHOUT: It's not there.
AUDIENCE MEMBER 32: -- that there was going
to be, you know, the dignity that is provided to children,
elderly, special needs people, and people with pre-existing
health conditions.

DR. CLARK: Yep. We're not asking any of
those questions. We're just strictly the questions that
were listed up there. That's it. That's all we're asking.

DR. BOKHOUT: Go ahead.

AUDIENCE MEMBER 33: Yeah. There's two
different sizes of windmills out there. Are you going to
kind of compare the data between the two?

DR. BOKHOUT: Two different sizes of what?

AUDIENCE MEMBER 33: Windmills.

AUDIENCE MEMBER 34: Wind towers.

DR. BOKHOUT: Oh, I see.

DR. CLARK: That is one of the variables.

AUDIENCE MEMBER 33: That wind farm is the
largest one out there, like the tallest, so the blades are
bigger. They're taller. They catch more air compared to
one of the ones that are smaller.

DR. CLARK: Yep. So we do have information
on the specs for the wind turbine, so I can easily put that
equation or, sorry, put that variable into the model. Yep.

AUDIENCE MEMBER 33: And you know the
efficiency that they're actually running?

DR. CLARK: Yeah. On the IESO website, the
electricity something operators. There is a website.

AUDIENCE MEMBER 34: Independent Electricity
System Operator.

DR. CLARK: There we go.

AUDIENCE MEMBER 33: But even the 2.4s in South Huron, they're actually only set up to run way less, like at two, is what one of the contractors told me.

AUDIENCE MEMBER 34: It's probably true.

AUDIENCE MEMBER 33: And then they even run at different spinning speeds.

DR. BOKHOUT: Well, the thing is that, when you start looking at those data and you're trying to -- let's say you're living near one of those turbines and you find when they're running at, say, 80 percent efficiency, you're A-OK. When they're running at 20 percent efficiency, you're not A-OK. You know, and that comes out in your report, and that stuff, that would be obviously something that we could look at. You know, that was one of the things that we look at, if you've got something that ain't running at full efficiency and changes to the turbulence.

DR. CLARK: Yep.

AUDIENCE MEMBER 35: You mentioned something about an ethics committee approval.

DR. CLARK: Yes.

AUDIENCE MEMBER 35: Would you like to explain that to the people?

DR. CLARK: Sure. So when we do any type of research, we want to make sure that we're doing it ethically and that we comply with the Tri-Council Policy
Statement, Second Edition. And the process that we go through to ensure that we're doing that is we write up all of our methods, and we take a copy of our information sheet, our consent form, all the data collection tools, our analysis plan, and we give it to a committee of people with special training in ethics, and they comment on it and decide whether they approve or disapprove of the study. If they disapprove, they tell you what you need to change in order for it to meet their ethical standard, and if they give approval, they're saying, as an accredited ethics board, they're saying that it is an ethical piece of research. They are not commenting on whether or not turbines are ethical. Okay? They're only commenting on whether what we're doing in the investigation in ethical. So are we violating your rights with the way we collect the information? Are we putting you at undue because we're collecting your information? But they're not commenting on the turbine operation. They're only commenting on the methods of the investigation.

AUDIENCE MEMBER 35: Can you identify who these people?

DR. CLARK: Yep. We're using the University of Waterloo Research and Ethics Board. So at the health unit, we do not have the capacity to do ethics review ourselves. There's just myself and a couple of other individuals that have any training in ethics, and you can't review your own research.

AUDIENCE MEMBER 35: Right. Right.
AUDIENCE MEMBER 36: It's like the police investigating their own crime.

DR. CLARK: Yeah. So you have to find an independent body to do your review. So we're using the University of Waterloo board.

AUDIENCE MEMBER 35: So that has yet to be done?

DR. CLARK: Yes. Before we send it to the University of Waterloo ethics board, the data collection tools have to be finalized, because you can't change them after you get approval.

DR. BOKHOUT: Which is part of the reason why we had this meeting tonight; right? To make sure that you guys are okay with what we've proposed. And if you're basically comfortable with that, that gives us an opportunity to move ahead with that.

AUDIENCE MEMBER 35: The other question is: You mentioned several meetings in the future. Is there going to be more meetings like this, or is it for the results after three months or something?

DR. BOKHOUT: Oh, I have no problems with more meetings. I mean, the more, the merrier, but I think, if you guys are okay with what we've proposed and you're comfortable with it, we'll proceed, and then I would expect that there may be some interest in running a little info meeting once we have the first set of data. You know, I think that would be a logical time to have a meeting.

DR. CLARK: Yeah. We're certainly
interested in doing more meetings.

AUDIENCE MEMBER 35: I was just wondering because some people wouldn't know that this was actually happening. When you said out an envelope to them in the mail or something, then they won't know what to do with it.

DR. BOKHOUT: That's where you guys come in.

AUDIENCE MEMBER 35: Yep. Okay.

DR. CLARK: Yeah. And when we announce that the investigation is going to start, there will absolutely be a series of meetings. Okay? There will be more than one, because we recognize that we're unlikely to be able to get everybody in the room if we just do one meeting.

AUDIENCE MEMBER 35: So show of hands?

DR. BOKHOUT: Sorry?

AUDIENCE MEMBER 35: How are you going to do this? A show of hands?

DR. BOKHOUT: Well, if you want, sure. If you're comfortable with what we proposed, just raise your hands. That's simple.

AUDIENCE MEMBER 35: Simple.

DR. BOKHOUT: Yeah. Yeah. Anybody opposed violently?

DR. CLARK: Or just call the health unit tomorrow if you want, if you have any concerns that you don't want to express tonight.

DR. BOKHOUT: Okay. Well, thank -- sorry, go ahead.

AUDIENCE MEMBER 36: Just one question: Is
a non-response to the survey still weighted in the final results?

DR. CLARK: Yes.

AUDIENCE MEMBER 36: Okay.

DR. BOKHOUT: Thank you very, very much for coming out.

AUDIENCE MEMBER 36: Thank you.

DR. BOKHOUT: Be safe going home. Hopefully it's not snowing too hard.

--- Whereupon the audio recording concludes