Action No.: 2001-14300
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Appeal No.: ____________________

IN THE COURT OF QUEEN'S BENCH OF ALBERTA
JUDICIAL CENTRE OF CALGARY

BETWEEN:

REBECCA MARIE INGRAM, HEIGHTS BAPTIST CHURCH, NORTHSIDE BAPTIST CHURCH, ERIN BLACKLAWS and TORRY TANNER

Applicants

and

HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF ALBERTA AND THE CHIEF MEDICAL OFFICER OF HEALTH

Respondents

H E A R I N G
(Excerpt)

Calgary, Alberta
February 14, 2022

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1 Proceedings taken in the Court of Queen's Bench of Alberta, Courthouse, Calgary, Alberta
2
3
4 February 14, 2022 Morning Session
5
6 The Honourable Justice Romaine Court of Queen's Bench of Alberta
7
8 J. Rath (remote appearance) For R. Ingram
9 L. Grey, QC (remote appearance) For Heights Baptist Church, Northside Baptist
10 Church, E. Blacklaws and T. Tanner
11 N. Parker (remote appearance) For Her Majesty the Queen in Right of the
12 Province of Alberta and The Chief Medical
13 Officer of Health
14 B. LeClair (remote appearance) For Her Majesty the Queen in Right of the
15 Province of Alberta and The Chief Medical
16 Officer of Health
17 N. Trofimuk (remote appearance) For Her Majesty the Queen in Right of the
18 Province of Alberta and The Chief Medical
19 Officer of Health
20 M. Palmer Court Clerk
21
22
23 **Discussion**
24
25 THE COURT: Okay. Good morning.
26
27 MR. PARKER: Good morning.
28
29 THE COURT: Good morning.
30
31 MR. RATH: Good morning, Madam Justice. This is Mr.
32 Rath. I'm here with Dr. Newton (phonetic) again this morning.
33
34 THE COURT: Okay. Thank you. Thank you. And I Ms. Grey
35 (sic), Mr. Parker -- or, sorry, Mr. Gray, Mr. Parker, and (INDISCERNIBLE). Is there
36 everyone we expect this morning?
37
38 MR. PARKER: Yes. Trofimuk should also be present, as well,
39 on the screen.
40
41 THE COURT: Okay. Madam Clerk, do you have him on?

1
2 THE COURT CLERK: Yeah, I do.
3
4 THE COURT: You do? Okay. It's just not on our screen
5 (INDISCERNIBLE). Okay. I'm ready to continue the cross-examination of
6 Dr.Bhattacharya.
7
8 MR. PARKER: Yes, we are. I just want to (INDISCERNIBLE)
9 on some (INDISCERNIBLE) discussions we had over the weekend.
10
11 THE COURT: Okay.
12
13 MR. PARKER: We had to -- (INDISCERNIBLE) since we are
14 (INDISCERNIBLE), we also (INDISCERNIBLE) indicating how much
15 (INDISCERNIBLE). I'll listen to the Court's thoughts on this, as well.
16 (INDISCERNIBLE) to Dr. Hinshaw and had obtained (INDISCERNIBLE) more
17 necessary for her. And we've (INDISCERNIBLE) other witness (INDISCERNIBLE)
18 with my friend. I think our (INDISCERNIBLE) not a position to do -- to do that.
19
20 THE COURT: Okay. I can actually -- I was going to do that
21 (INDISCERNIBLE).
22
23 THE COURT CLERK: Your Honour, I just (INDISCERNIBLE).
24
25 THE COURT: Oh, okay. I don't know if you heard that.
26 Madam Clerk has a --
27
28 (PORTION OF PROCEEDINGS NOT RECORDED)
29
30 THE COURT: -- until we have resolved that.
31
32 THE COURT CLERK: Okay. I think (INDISCERNIBLE) now.
33
34 THE COURT: Okay. Okay. Thank you. I have prepared an
35 endorsement on the Peckford matter, and I was going to give you -- it would -- I should be
36 able to -- to give the endorsement on Wednesday at the latest. But I'm going to give you
37 my -- a summary of my decision.
38
39 I find that Mr. Peckford's proposed expert evidence is inadmissible. Even if the excuse
40 offered for its significantly late application to admit is reasonable, admission would cause
41 prejudice to the respondents and delay in the proceedings. Mr. Peckford's opinion

1 evidence is inadmissible, as it offends the principle that legal expert opinion that applies
2 relevant law to the facts of a case, thus purporting to provide legal opinions is
3 inadmissible. Mr. Peckford undoubtedly served honourably as premier of Newfoundland
4 at the time of the enactment of the Charter. But his opinion about his intention at the time
5 and his interpretation of Section 1 of the Charter is not admissible evidence. Mr.
6 Peckford is now a member of the public, with an opinion on the measures that have been
7 taken in Alberta to address the COVID-19 virus. The applicants in this action more than
8 adequately represent that opinion.
9
10 And, as I say, you'll get the written decision by Wednesday, I hope.
11
12 Okay. I hope that helps with the scheduling.
13
14 MR. PARKER: Yeah, It certainly does, from our perspective.
15 And having cleared up that issue, I expect we're in a position to forward you the proposed
16 reschedule with some dates in it and -- and witnesses. The idea is what we had proposed
17 and what we're hoping to do is get all the evidence within the existing timeframe, by
18 February 24. We had two to three days at the end for argument. And if we can get all the
19 evidence in and then adjourn, we were looking to come back in April to argue the matter,
20 if that would be appropriate for you, Justice Romaine.
21
22 THE COURT: Okay. That's -- that sounds just fine. I -- you
23 know, during the break, I'll -- I'll tell you what dates I have available in April so that
24 everybody can consider that. Okay.
25
26 MR. RATH: Thank you.
27
28 THE COURT: Yeah. Okay.
29
30 MR. PARKER: Okay. And that was it. Ready to proceed, then,
31 with Dr. Bhattacharya, I think.
32
33 THE COURT: Okay.
34
35 MR. GREY: Madam Clerk, sorry, Madam Justice, it's
36 Leighton Grey here.
37
38 THE COURT: Right.
39
40 MR. GREY: As has been -- as has occurred previously,
41 Dr. Bhattacharya has logged into the other room. So if we could perhaps just have

1 Madam Clerk let him in so that he can continue his testimony, please.
2
3 THE COURT: Of course. Okay, Madam Clerk?
4
5 MR. GREY: Thank you.
6
7 THE COURT CLERK: He should be admitted now.
8
9 THE COURT: Okay. Dr. -- Dr. Bhattacharya, are you -- have
10 you joined us?
11
12 **JAYANTA BHATTACHARYA, Previously Sworn, Cross-Examined by Mr. Parker**
13
14 THE COURT: Thank you. Go ahead, Mr. Parker, when you're
15 ready.
16
17 Q MR. PARKER: New headphones today I'm trying out, so there
18 will be a few slips there when I haven't muted it when I should. Dr. Bhattacharya,
19 how are you this morning, Sir?
20 A I'm doing well. How are you?
21
22 Q I'm very well. Thank you. I wanted to go back to briefly touch on the issue of a
23 symptomatic and presymptomatic transmission that we ended up with on Friday. And
24 I'm going to take you to the affidavit of Dr. Natalie Dean. We were going through that
25 affidavit. And so we'll bring that up. And you will recall that Dr. Natalie Dean is the
26 supervising author for the Madewell study that we had been discussing. And I just
27 wanted to put this back into context, your evidence into context before we go through
28 Dr. Dean's -- finish going through her affidavit. To summarize your views on a
29 symptomatic and presymptomatic transmission, at least as of May 2021 when you
30 testified in the Manitoba matter, I think it's fair to say, Sir, that when you saw the
31 Madewell study -- and that was published, I believe, December 14, '20 -- this cinched
32 your view -- that was your word -- cinched your view that asymptomatic transmission
33 was very low, and that presymptomatic transmission, while it occurred, was also very
34 low. And the Madewell study showed that the total of the symptomatic and pre
35 symptomatic was .7 percent, and your view was that is the upper boundary for
36 presymptomatic, with the asymptomatic being close to zero. Is that the fair summary
37 of your evidence -- sorry, on your views of this topic in around May of '21?
38 A I don't know if I would say an upper bound on the presymptomatic. I would say the --
39 what you said earlier. The earlier sentence is correct, though. I agree that the
40 combined effect of presymptomatic and asymptomatic spread is somewhere in that
41 order, .7 percent.

1
2 Q Thank you.
3 A Based on the evidence I've seen.
4
5 Q Thank you. And then in terms of the Madewell study cinching your changing view.
6 As I had understood it when we discussed this last week, we spoke about a study that
7 you had participated, and it was published on December 1. That showed some of your
8 earlier views on the symptom -- asymptomatic and presymptomatic transmission.
9 Albeit, as you pointed out, although that study was published on December 1, it may
10 had been written earlier in the year, perhaps May. And so your view, as I understand
11 it, on -- on the importance of this transmission had been changing through 2020. And
12 again, what cinched it was the Madewell study. That's fair?
13 A Yeah, the Madewell study played an enormously important part in my thinking, or at
14 least up until then. And actually (INDISCERNIBLE) now.
15
16 Q Sure. And if we go to the Dean affidavit now. And I want to go to page 4, please.
17 And paragraph 8(h). And I want to see if you disagree with anything Dr. Dean says in
18 this paragraph. And she says, "In December 2021, there was a growing body of
19 evidence that asymptomatic individuals are less infectious, but the presymptomatic
20 transmission does occur." Would you agree with that statement, Sir?
21 A Yes.
22
23 Q And then she continues, "Even if an asymptomatic person is far less infectious, if a
24 person without symptoms has more contacts than someone who has symptoms, then
25 the advantage against infection provided by the lower infectiousness of the
26 asymptomatic person may be lost." Would you agree with that statement, Sir?
27 A Yes.
28
29 Q I'd like to go on to the next paragraph in her affidavit now, so paragraph 8(I). And
30 Dr. Dean here discusses, "The state of the knowledge on the transmission of
31 SARS-CoV-2 virus, and that it's continued to evolve and grow since December 2020
32 when the Madewell study noted that some studies report the timing of peak
33 infectiousness that approximately is the period of symptom onset." Would you agree
34 with the statement I've just read to you, Sir?
35 A Yes. I think since Madewell, we've learned more about the presymptomatic spread.
36
37 Q And what more have you learned sine Madewell? I know you spoke about the
38 Omicron but -- impacting your views on this. But ignoring Omicron, what -- what
39 more have you learned on this issue since the Madewell study that is important, Sir?
40 A Well, we discussed it actually Friday. We -- there's a decreasing infectiousness so that
41 the -- the -- there's a decline in infectiousness as the -- as the infection proceeds. So

1 the first couple of days is the probably the -- is -- is higher than later in the infection.
2
3 Q The first couple of days before symptom onset, is that what you're saying, or --
4 A No, the first couple of days when you're infected. I mean, usually that's without
5 symptoms, but yes. It's -- it's just exactly what we discussed last week.
6
7 Q I see. So you're saying that your understanding is that the peak infectiousness is the
8 first couple of days after infection? Is that what you're --
9 A I mean, it's -- to say "peak" is hard to say. I mean, it could be lower, and then goes up,
10 and then down. But, yeah, I think it's higher and then declines, is my understanding.
11
12 Q I see.
13 A It is consistent with what Dr. Dean wrote here.
14
15 Q Right. And she continues in the next sentence, then, of this paragraph, "Now there are
16 many peer-reviewed articles showing a person is infected with SARS-CoV-2 virus. In
17 the presymptomatic, it can be highly infectious." Do you agree with that statement,
18 Sir?
19 A Yes.
20
21 Q And then she cites four articles, which are all in the evidence that she says show this.
22 I don't know if you have any comment on -- on her -- on what she says there, relative
23 to these articles that are in the evidence? Any response on that, Sir?
24 A (INDISCERNIBLE). I agree with it.
25
26 Q You do? Okay. Thank you. And in terms of how the -- how the knowledge on the
27 transmission of SARS-CoV2 source had -- has evolved during that time, would you
28 agree, Sir, that, as I think is discussed here by Dr. Dean, there was a view previously
29 the peak infectiousness was around symptom onset. But again, the evolving
30 knowledge shows that peak infectiousness actually occurs prior to symptom onset.
31 That -- you would agree that statement, Sir?
32 A No, I don't agree with that. That -- I think, I mean, Madewell made this clear. You
33 have very, very high transmission rate after symptom onset. 20 percent.
34
35 Q Okay. So --
36 A I mean, when the peak occurs I think is still at issue. But I think early on when
37 symptoms happen, that's when a -- it's my understanding now, based on the evidence
38 that I've seen to date, that is when it happens. So it's not that you are -- it's -- it's
39 exactly what Dr. Dean wrote. During -- when you're not -- when you have no
40 symptoms in the early days. If you're infected but have no symptoms, are you less
41 infectious than if you are -- if you have symptoms. It's just that you may interact with

1 more people, and so that, you know, it depends not just on the virus, but the behaviour.
2 So if you're interacting with 10,000 people, and the probability is .7 percent, you may
3 pass the disease on more to if -- if you interact with, you know, two people, and the
4 transmission rate is 20 percent.
5
6 Q And, of course, if you're in a household setting and you're not using any of the
7 approaches to reduce or mitigate against transmission, you might, outside of the
8 household setting, and you don't know that you have symptoms. Then it would be
9 quite feasible or quite understandable that people would, as a result of that, be
10 spreading the virus in such a setting because they simply don't know that they have --
11 that --
12 A Yes.
13
14 Q -- that they are infected?
15 A Yes, that's true.
16
17 Q Sorry, I just wanted to understand this point, your view on this peak infectiousness.
18 And I hear what you're saying, peak is -- is difficult to -- to pin down I think is what
19 you're saying. I'm just looking at Dr. Kindrachuk's evidence on this, as I understand it.
20 I won't take you there. I'm not planning to. And he -- he's looked at some studies and
21 said "the highest risk of transmission fell from a few days prior to symptom onset to
22 five days post-onset." Would you agree with that statement, Sir?
23 A I'm sorry, can you read the statement again? I didn't -- I didn't follow it.
24
25 Q "The highest risk of transmission fell from a few days prior to symptom onset to five
26 days post-onset." Would you agree with that, Sir?
27 A I don't know if that's true.
28
29 Q Thank you.
30 A Once again, it's mainly because I don't know how many people that people interact
31 with for -- in what context, what the -- whether they are in -- in an environment where
32 there is good ventilation and so on.
33
34 Q I see. Thank you. Sir, have you -- are you aware of a -- of an update to the Madewell
35 study?
36 A No.
37
38 Q So if I show you an article "Factors Associated With Household Transmission of
39 SARS-CoV-2, an updated systematic review and meta-analysis" by Madewell and the
40 same authors, you wouldn't have seen that before, Sir?
41 A No, I haven't seen this paper.

1
2 Q Okay. This was -- if you scroll down just to the bottom of this page, Mr. Trofimuk,
3 please, and you'll see --
4 A Now, so I'm clear, this is -- this is published when?
5
6 Q I'm just showing you the date, Sir. August 27, 2021. It's the same day, actually, that
7 Dr. Dean's affidavit was sworn or affirmed in this matter. And so I understand you
8 haven't seen this before. I'm just going to briefly show you some highlights of it and
9 get your views on the -- on how that impacts, if at all, on your opinion on
10 asymptomatic, presymptomatic spread. But just -- just before I get to that, Sir, this --
11 this issue of asymptomatic and presymptomatic spread, obviously it's an important
12 part of your opinion that you filed in this matter. That's fair?
13 A Yes.
14
15 Q Is it an important part of the overall approach, the focus protection that we find in the
16 Great Barrington Declaration, Dr. Bhattacharya?
17 A I mean, it's consistent with -- let me put it this way: If I -- if asymptomatic speak is
18 higher, then the sorts of things that you would do for focus protection of the -- of the
19 older population would be -- would be different, but not -- not categorically different.
20 You would just apply them more. So, for instance, you might do more frequent
21 checking in nursing homes for -- for visitors. Or more, you know, more application
22 of -- of high-quality mask and staff and visitor -- or who work there. You might
23 change the -- the -- the direct -- not the direction of what you do, but the -- the extent
24 to which you do those things.
25
26 Q It would make, however, that is if asymptomatic and presymptomatic transmission
27 were higher than you had concluded from Madewell, it would make symptom checks,
28 though, much more difficult or potentially not particularly helpful, correct?
29 A No, because I still think -- well, I mean, we'll see what -- what you -- what this shows.
30 But I think that the -- I think that the symptom checks can still provide a very strong
31 approach to try to -- to protect against places where are the -- where vulnerable people
32 are not. So symptom checks might be useful in work settings where there are not
33 many older people. Symptom checks might be useful in settings where, you know,
34 in -- in household settings, in other places. It would depend on the -- the -- the cost
35 and the benefits, the harms from the false positives. So, for instance, if you isolate
36 somebody who doesn't have -- who is not positive, you can cause harm on them. So
37 you can account for that in your policy. So the question is the harms versus the
38 benefits in each setting. And I think it's just the balance of harms and benefits. But I
39 don't -- again, it would have to be -- you would have to carefully think through what
40 those harms and benefits are to -- if you're going to do appropriate public policy on
41 this.

1
2 Q But obviously if you want to check for symptoms and folks don't have symptoms
3 because they are asymptomatic and presymptomatic, then it's hard to -- it's hard to
4 make use of symptom checks in those circumstances, right?
5 A Yeah. Although you could -- what you could do is you could use PCR testing, for
6 instance. Lots of PCR testing has been used. But then account for how many cycle
7 times are necessary before you find a positive. So if you require many doublings in a
8 PCR test before you get to a positive, that means that you were probably not
9 symptomatic to begin -- or infectious to begin with, based on lots of evidence. So
10 there are alternate policies available, if you -- even if asymptomatic spread -- or
11 presymptomatic spread is very high.
12
13 Q Sure. And just before we go through Madewell and show what they found, I just
14 wanted to kind of contextualize this and just -- we don't need to go there. But we
15 talked about the Chiu, I-U. And you will recall that Madewell directs us to the Chiu
16 study to say, well, this is a study where asymptomatic and presymptomatic, where
17 separated. And if you look at the -- I'm just going to put it to you, Sir, that Chiu --
18 asymptomatic was found to be one percent secondary attack rates; presymptomatic
19 was seven percent; and symptomatic was six percent. Do you accept that those are
20 the -- the correct findings from Chiu on those matters, Sir?
21 A I don't remember exactly the numbers, but I think I cited it in my -- in my -- in my
22 declaration.
23
24 Q It was in your sur-rebuttal, and it was also in Dr. Kindrachuk's report. And so, yeah,
25 this is in evidence, and those are the -- those are the secondary attack rates that Chiu
26 found. Again, one percent is asymptomatic; presymptomatic, seven percent; and
27 symptomatic, six percent. So let's go now to Madewell two. And if we go to page 4
28 of 15, please, Mr. Trofimuk. Actually, maybe let's go to 7 of 15. That's probably the
29 easiest place to see it. And go down to where it says "index case symptom status,
30 please." There you go. And maybe if you could blow that up so Dr. Bhattacharya can
31 see that a little bit more. We need to see the right-hand side of the page, if we can, so
32 that we can see the secondary attack rights. There we go. Now, Dr. Bhattacharya, are
33 you able to see what's on the screen there? My apologies if you can't.
34 A I am, yes.
35
36 Q And so the conclusions on this part of the -- from this part of the study were that
37 symptomatic was 20.2, percent; asymptomatic was three percent; presymptomatic was
38 8.1 percent; and then the category of asymptomatic and/or presymptomatic where I
39 understand they were not able to separate out asymptomatic and presymptomatic, was
40 3.9 percent. And then obviously next to those numbers that I've just read from the far
41 right column are the range that was found for those various symptom status cases. So,

1 Doctor, those are the findings from Madewell two. Any thoughts on that, as it impacts
2 on your opinion, Sir?
3 A Well, I would have to look at the paper more carefully, but it's -- it's -- there's also the
4 (INDISCERNIBLE). Then what that means is that I should revise -- revise my
5 estimate upward from .7 to 3 to 3 or 3.9, depending on which one I believe.
6
7 Q For the asymptomatic.
8 A For asymptomatic, correct, yeah.
9
10 Q Okay. Yeah. And then -- depending which one you believe. And the pre --
11 A I can't -- don't know what the asymptomatic and/or presymptom -- I need to read the
12 paper to see what they mean by it.
13
14 Q I completely understand that, Sir. And I have just shown this to you, and as you said,
15 you haven't seen this before. And then presymptomatic is 8.1 percent. And so that's
16 significantly higher, I would suggest, than what was the finding in the -- in the
17 Madewell number one from that subanalysis we looked at with -- with the -- the
18 smaller group of individuals. Any thought on 8.1 and presymptomatic? Does that
19 impact your -- your assessment, your evidence?
20 A I think, as I said, in the sur-rebuttal, the relevant number is the asymptomatic overall,
21 asymptomatic spread. So the 3 or the 3.9 is the key number because what you -- you
22 don't know, when you see somebody, whether they are either presymptomatic or
23 asymptomatic, if they are positive. They have no symptoms. So you -- the key
24 question from a policy point of view is what do you do with somebody who is positive
25 that has no symptoms? I -- and when do you test and what -- what -- how do you
26 decide on quarantining and so on? The relevant number, then, is not the
27 presymptomatic. You don't know if someone is presymptomatic when they are
28 presymptomatic. You just know they are asymptomatic. So the relevant number is 3
29 or 3.9.
30
31 Q Thank you, Sir. I -- I don't have any further questions for you on this -- this study, Sir.
32 So we'll -- we'll move on. Thank you very much for your evidence on that. Just
33 before we get to move onto another topic, I just wanted to circle back to it's the
34 question of assessing effectiveness of NPI's, non-pharmaceutical interventions that we
35 discussed last week. And it's fair to say, Sir, that this trying to assess the effectiveness
36 of NPI's is very difficult. Fair?
37 A Yes.
38
39 Q And there are many factors that have to be considered in that assessment. Fair?
40 A Yes.
41

1 Q And, Sir, I just wanted to understand, when you're assessing the effectively of N --
2 well, maybe I'll -- I won't go there, actually, so thank you for that. Let's move on to
3 another area of your evidence now, Sir. And this is dealing with protecting the
4 vulnerable, which is part, as I understand, the Great Barrington Declaration, which is
5 an approach that you say to focus protection. Are you able to put his report up,
6 actually? I want to go to page 8. Okay. So we're just going to go to page 8 of your
7 report, Dr. Bhattacharya, your primary report. And, Sir, I'm looking at page 8 of your
8 primary report filed in Alberta. And the statement in the middle of the page there
9 you'll see in summary. And I wanted to ask some questions about this now. What you
10 say in this part of your report is that, "In summary, COVID-19 does not pose a real or
11 immanent, serious threat to the health of the population in general, but only to the
12 health of a specific part of the population: The elderly and a limited number of people
13 with certain chronic conditions." And you indicated, "Age is the single most
14 important risk factor." And then you use some infection survival rate statistics. In
15 terms of a limited number of people with certain chronic conditions, do you have any
16 estimate as to the number of people in Alberta who would fall into that limited
17 number of people with certain chronic conditions, Sir?
18 A I guess the question is a qualitative one rather than a quantitative one. The questions
19 is what is an acceptable level of risk from -- from disease in -- in the population? And
20 the answer can't be zero because, you know, people are going -- people die because
21 that's -- that's what -- how life, you know, what life goes. And so -- and the question
22 to me is one of is -- is it a -- a public health emergency over the entire population, or is
23 it a public health emergency for part of the population? I believe that the -- that -- that
24 in order to answer that, you have to ask whether the interventions imposed themselves
25 impose costs relative to the things you're protecting against. So it's -- the -- the set of
26 people who have chronic conditions that warrant saying, you know, a public health
27 emergency, in my view, includes the elderly for certain because the infection fatality
28 rate is so high for them. You know, five percent or above. But there are some people
29 that are not elderly that are -- that have that kind of level of risk, but it is not, you
30 know, 40 percent of the population or anywhere near that. There are chronic
31 conditions, like obesity, that raise the risk of infection fatality, should you get sick. So
32 roughly speaking, the evidence indicates that if you are obese relative to someone who
33 is thin, you will double the infection fatality relate. But that is true for aging seven
34 years. Every seven years of age, you roughly, again, roughly speaking, you double the
35 infection fatality rate. So age is the single most infect -- risk factor. So the answer to
36 your question is I don't know the specific number. And it would depend on what you
37 deem is appropriate for -- for what a -- what a public health emergency is. I think
38 five -- five percent infection fatality rate would cause -- is a public health emergency
39 for that group. And I don't know exactly the number of people that are not elderly that
40 fall into that, but I don't believe that it's -- it's tremendously high.
41

1 Q Thank you, Dr. Bhattacharya. That's -- that's very interesting. So I asked specifically
2 to Alberta, and I think you don't know the answer as to this question when we're
3 looking at, as you say here, a limited number of people with certain chronic
4 conditions. Have you -- have you -- have you made that assessment, that is when you
5 say a limited number of people with certain chronic conditions, are you able to give
6 what percent of the population that might be in another jurisdiction outside of
7 Alberta? Have you looked at it North American wide? Anything you can give me on
8 that, Sir?
9 A Well, what I can tell you is that the number of people who have a high infection
10 mortality rate that are not elderly is limited, is nowhere near -- so I've seen estimates,
11 like, 40 percent because the -- the fraction of portion of the population is obese is 40
12 percent. If a young, obese -- if a young person is obese, they have nowhere near a five
13 percent infection mortality rate from the disease. The infection mortality rate is high,
14 primarily for the older population and for, again, for a limited number of people who
15 are -- who are younger. Primarily people with -- with diabetes and -- and obesity.
16
17 Q And if -- so then are you -- are you -- well, when you wrote the Great Barrington
18 Declaration, it's fair to say, then, that you were assessing who was vulnerable and who
19 wasn't by the infection fatality rate. That would be the cut off?
20 A That's -- that's -- it correlates very strongly with hospitalization, and it correlates
21 strongly with -- with the morbidity from the virus. So, yes, the primary -- primary sort
22 of marker for whether you're vulnerable is -- if you're effected, will you
23 (INDISCERNIBLE) of your reaction to the virus. And age is the single most
24 important risk factor.
25
26 Q And at the time you wrote the Great Barrington Declaration and you were putting
27 forth this approach to focus protection that you and your colleagues were advocating
28 jurisdictions should use instead of you referred to as lockdown approaches, did you
29 have any estimate at that point as to how much of the population would be covered,
30 would need to be protected by -- by governments if they did choose to use your focus
31 protection approach? Any -- anything you can give me on that, Sir?
32 A I mean, the primary group was elderly. If you -- 80 percent of the deaths were among
33 the elderly. There are other groups, again, that are younger. So 20 percent of the
34 deaths are younger, younger than the elderly in -- in North America. The -- the key --
35 the key question, then, is how do you apportion the limited resources that we have?
36 Where do you put them? Seem to me the primary thing was protecting the people that
37 are dying at the highest rates, which is the elderly. And, again, we failed at that, since
38 80 percent of the deaths are among the elderly. The -- and then secondarily, in -- in
39 accordance, but still quite important is protecting the people that are younger that
40 actually do have a high infection fatality rate, should they get infected. So primarily
41 people that are morbidly obese and -- and -- and have some severe diabetes or

1 uncontrolled diabetes. There are other groups, as well. But I don't have a number
2 specifically because it varies so much from different region to region. For instance,
3 it's very different in Africa, but only three percent of the population is elderly, than it
4 does in North America where a much larger fraction of the population is elderly.
5
6 Q So if -- how old would I have to be to have -- to fall into a five per section -- five
7 percent IFR if I was morbidly obese? Are you able to tell me that?
8 A So just so we're clear, I don't mean to say that five percent is the number I would
9 necessarily pick. I mean, I've just picked this number for this paper and discussion.
10 And different governments may choose to have a different number for that, depending
11 on, you know, the -- I mean, you -- you might have a -- I mean, if you're a proof
12 African country, you might want to focus your attention on people who have a ten
13 percent infection fatality rate. It will depend on the resources available in the country.
14 The -- the -- the answer to your question specifically. If you're morbidly obese and
15 you're 55, you may have an infection fatality rate in someone in the order of five
16 percent.
17
18 Q What about if you're 55 and diabetes. Would that raise to that level of IFR, do you
19 know?
20 A I don't know specifically for diabetes, but it would -- it would be something along that
21 order, 55. It may be -- the -- the -- yeah, something -- something like that. 55 and
22 diabetic.
23
24 Q And I know we've got the -- the Great Barrington Declaration --
25 A Actually I just -- sorry, I apologize. I actually think it's probably a little older for
26 diabetes. So 60 and diabetic. I mean, I -- it would -- because the IFR at 70 is not five
27 percent; the IFR at 70 is lower than five percent. It's just the average above 70 is -- is
28 five percent.
29
30 Q And I don't recall if it is in the Great Barrington Declaration, and we can look there, if
31 necessary. But is there a specific age cutoff for the elderly? Is it 60? Is it 62 in there
32 or --
33 A No.
34
35 Q There isn't? Okay.
36 A No. The argument is a general principle; not a -- not a detailed plan. It's a single-page
37 document. The principle is focus protection. And how you implement on it would
38 depend on the resources of the governments. And we -- we meant this as a worldwide
39 document -- well, and be convincing people to change strategies away from
40 suppression of the disease entirely, which couldn't protect the vulnerable, toward a
41 policy specifically aimed at protecting the vulnerable.

1
2 Q So depending upon the policy approach, if a jurisdiction were to choose to adopt this
3 focus protection, they might choose to cut off the vulnerable at 60 and up, as opposed
4 to 65? That would be an appropriate approach, in your opinion?
5 A Yes. I mean, it depends on what -- for society -- depending on the resources it has,
6 what it -- what risk its willing to accept, versus the -- the harms of the policies
7 implemented. So the lockdown policies are not costless in terms of health. They
8 themselves have also imposed health harms on the population. So it's always a
9 balance. This is a terrible pandemic. There's no way around the fact that it's going to
10 cause harm to the population. But the question is whether the harms from the -- the
11 marginal benefits from the harms from the interventions are worth -- are worth it
12 because there are harms from those interventions, relative to the -- the gains that you
13 supposedly get from them.
14
15 Q Right. And you -- you agree, Sir, that in addition to age, that is older people being
16 vulnerable, that people of any age with chronic medical conditions, such as lung
17 disease, heart disease, hypertension could also fall into the vulnerable category that
18 may need protecting using (INDISCERNIBLE) protection. Fair?
19 A It's possible. I think the evidence on hypertension, for instance, is that -- is that it only
20 has a small increase in the infection fatality rate, relative to -- I think the primary ones
21 are the -- I mean, the primary one, the one that is by far the most important in terms of
22 the risk rating is age.
23
24 Q Sir, other chronic conditions that could make people at risk of more severe disease or
25 outcomes would be kidney disease, liver disease, dementia, stroke, correct?
26 A Okay, so what seems -- the kidney disease, it does pose a some elevated risk. But
27 it's -- again, I think, if I remember, the -- I would have to look at the papers. But the --
28 the -- relative to the obesity or morbid obesity, it's not so important. A lot of those
29 diseases are correlated with each other. And so patients who have multiple of -- who
30 have multiple of those conditions are -- probably have the most risk from -- from each
31 of those things, but from those things, as opposed to patients who have a single one or
32 other. A lot of people have treated hypertension, for instance. I don't believe that is a
33 particularly elevated risk.
34
35 Q Would you agree that people of any age who are immunocompromised, including
36 those with an underlying medical condition, such as cancer, or taking medications that
37 lower the immune system, such as chemotherapy, would be at an increased risk of
38 more severe disease or outcome?
39 A Oddly enough, that's actually a big point that's under -- under considerable
40 investigation in this scientific literature. In fact, I just read a paper the other day
41 suggesting that -- that people who are immunocompromised are not actually at a

1 substantially higher risk, in part, because the -- what causes death in this disease is an
2 overactive immune response as opposed to an under-active immune response to the
3 virus. So, you know, (INDISCERNIBLE) storm, which leads to a lot of the death,
4 happens in over -- by over-active immune response. So I don't -- I don't know the -- I
5 don't know that the answer to that question is settled, at least not in my mind from the
6 medical literature I read.
7
8 Q No, fair enough. You would agree, though, that if we looked back at what was being
9 said in the second and third wave, that certainly there was a message from the
10 Government of Canada that people who are immunocompromised, is having
11 underlying medical conditions, or taking medication that lower the immune system
12 would be at a higher risk of severe -- severe disease or outcomes. That's fair, Sir?
13 A I mean, I think government -- I've seen government say that, including Canadian
14 Government. But I don't -- I don't think the evidence based on which that was based
15 was -- was sufficiently thick to actually warrant raising an alarm that brought public
16 health emergencies. I believe it -- the best evidence by far from the earliest days of
17 the epidemic is that it was really the old that was -- that it was most severely at risk.
18
19 Q And the question on the obesity, you said morbidly obese, it -- would you accept that
20 people living with obesity, that's a BMI of 40 or higher? Would that be the -- would
21 that be morbidly obese?
22 A I mean, I wouldn't have a cutoff exactly. It's -- it -- it is a continuous variable. But it's
23 morbidly obese, certainly I think I've seen definitions on as high as 40. It could be 35.
24 The question to my mind isn't -- is not the -- the cutoff based on BMI; the question in
25 my mind is the totality of -- of -- of conditions that a patient has, does it place them at
26 high risk or not high risk from infection? That would -- that's what determines
27 vulnerability, in my mind.
28
29 Q Right. I see what you mean. So if you would look at individual patients and whether
30 they are vulnerable, and that would determine whether they are protected or need
31 protection. Is that what you're saying?
32 A I don't know about protected, but need protection, like, need protection on a level of
33 a -- the protection that you would -- you would adopt would depend on what harms
34 does that protection would impose on them and others. So the right way to think
35 about this isn't protect and unprotect; the right way to think about is the level of
36 protection necessary, considering both the potential benefits of the protection versus
37 the potential harms. Like, closing schools, I don't believe, protects very many people
38 relative to other actions that you could take for protection, like protecting nursing
39 homes.
40
41 Q You would agree that schools mirror community transmission. That's fair?

1 A Yes.
2
3 Q And so if you have schools with children, and they are mirror community
4 transmission, and the children are a large segment of the population who are
5 unvaccinated, then it may be beneficial in times of community spread to close schools
6 to reduce further community spread. That would be -- you would be in agreement
7 with that, Sir?
8 A No. I don't believe -- I believe they mirror, but they do not drive community
9 transmission. Children -- you know, we're talking about early -- especially early in the
10 pandemic, it was freely clear that children were not primary drivers of the disease
11 spread. There was a fantastic study out of Iceland, for instance, that I cited in my
12 evidence from the earliest days of the pandemic suggesting that children -- like, based
13 on -- based on the very detailed contact tracing study, as well as a -- a study that -- as
14 well as genetic sequencing studies of the virus to -- to distinguish who passed the virus
15 to who. The Icelandic study found that children were much less likely to pass the
16 disease on in -- in -- I think the study is in April of 2020 to -- to older people, than the
17 other way around. So children are not primary drivers. If you close schools, you're
18 not going to have a substantial effect on community transmission. There are -- they
19 mirror but do not reflect -- but they do not drive community transmission.
20
21 Q But does that matter whether you're talking pre or postvaccine rollouts? I mean, if
22 we're in the second wave when there was limited vaccinations in the population
23 compared to the third wave, where there's considerably more vaccinations in the
24 population, but children haven't been able to take vaccination yet. Does your opinion
25 change in those circumstances, whereas they say you've got a significant proportion of
26 the population, children, who are not vaccinated at that time?
27 A So it doesn't really change my view, for a large part because I don't believe that
28 vaccines stops disease transmission. The vaccine is a fantastic tool for focus
29 protection. It protects against severe disease. But it is not a tool that can be used to
30 stop disease transmission. The fact that children are unvaccinated does not make them
31 a higher risk of disease spread than a population of vaccinated people. It would
32 depend on how long since the vaccination occurred, how long the child is. I think
33 children are intrinsically less likely to spread the disease to begin with. And so it's --
34 it's a complicated question. It's not at all true to say that children, by closing schools,
35 just because kids aren't vaccinated, you have addressed a risk -- you have -- you have
36 substantially limited community spread. That just is not true. In fact, what you said
37 earlier is true, I agree. It mirrors community spread; it doesn't drive community
38 spread.
39
40 Q I'm -- not -- part of an exhibit to Dr. Hinshaw's affidavit before you, Sir. You had put
41 the same table or the same information from Alberta's statistics in your report. This is

1 the -- this is an updated version of that information as of July 6 of last year. And it
2 shows a number and percent of health conditions among COVID-19 deaths in Alberta.
3 I take it, Sir, and as you can see, there's the condition in the count number of people
4 who have died, and then with this comorbidity, and then the percent. Anything about
5 these statistics that surprise you, Sir?
6 A No. I mean, unfortunately in North America there's high rates of metabolic syndrome,
7 and that's what this reflects. Now, of course, this correlates with age right? So many
8 of the people with renal disease, dementia, diabetes that are older, so that -- that -- the
9 fact that it's we'll say diabetes is 45 percent of the population, the question is, as far as
10 focus protection goes, is what fraction of the population is un -- is -- has a high risk of
11 death if they are infected, has a high infection fatality rate? That -- this table by itself
12 doesn't answer that question.
13
14 Q Right. Thank you. Sir, I'm showing you a document that you haven't seen before. It's
15 a document that I've obtained from the chief medical office of health, as for some
16 information on the presence of risk factors among the Alberta population. And I have
17 provided it to my friends this morning. Now, I appreciate you haven't seen this before,
18 Doctor, but if you could just spend a moment looking at this document. You'll see that
19 it breaks down the age groups on the left-hand column, and then it gives ten risk
20 factors in the columns moving from left to right. And then the last column on the right
21 indicates the percentage of the age groups in Alberta with at least one of these
22 conditions. Do you understand what's in front of you, Sir, with that description?
23 A Yes. I've seen similar tables in other -- in other settings in the United States, and it
24 looks very similar to this. There's a few notes about this table. The -- at least one
25 condition is not the right statistic to think about. The question, again, is what is the
26 elevated risk for each age group? So let's take the 50 to 59 group. Most of the people
27 that 50 percent that have at least one condition, most of them it's either hypertension
28 or asthma. Those do not a pose a substantial increase in the risk of infection fatality.
29 If you have controlled hypertension or even if you have asthma, I mean, asthma, it
30 turns out, people were worried that it's an elevated risk, but it doesn't substantially
31 elevate the risk of mortality if you get COVID. That (INDISCERNIBLE) does. So
32 it's -- that 50 percent is not the right number; the question is -- is some of those other
33 things, like diabetes, 12 percent. That's -- I mean, it would -- depending on how
34 uncontrolled the diabetes was, it could -- it could actually potentially increase your
35 risk or mortality if you get COVID.
36
37 Q And so we've got in Alberta, according to this, the 50 to 59 population, 12.54 percent
38 have diabetes. Are you able to tell us, would that population fall into needing focus
39 protection? Or I take it that that is ultimately a policy decision for the jurisdiction to
40 make, based on resources and a number of other factors. Is that fair?
41 A I mean, yes, I mean that's always true if you just -- I agree with that. But I think the

1 question -- the medical question is do they have a substantially elevated risk of dying
2 if they get COVID? I think that they do, but it's not as high as, for instance, as an
3 80-year-old without diabetes. Not close.
4
5 Q What about not on here is pneumonia. I know pneumonia is one of the most common
6 comorbidities that -- along with dementia, I believe, that those who pass away from
7 COVID-19 are suffering with. If you've got somebody, let's say, your age, 53, 54, 55,
8 who's had pneumonia in the last couple of years or maybe a couple of bouts of
9 pneumonia in the last couple of years. Would they be -- would that sound like
10 somebody who needs -- they are vulnerable and need protection, focus protection?
11 A That's a complicated question because it would depend on what caused the pneumonia
12 and what underlying factors. Someone 53, 54, 55, I guess two bouts of pneumonia
13 probably has some different underlying conditions that led to that being vulnerable to
14 that. And, of course, it's challenging to answer that question, in part because COVID
15 itself can cause pneumonia. It's the -- the main pathway that leads to death, actually, if
16 you are -- if you do -- if you are going to die from COVID. And that happens at much
17 higher rates in older people who get COVID than in younger people.
18
19 Q Just moving onto on this topic to the Great Barrington Declaration. I know we spoke
20 about this previously. But the fundamental premises of the Great Barrington
21 Declaration, first, the elderly and those with comorbidities that are more likely to die
22 from this disease. Is that one of the fundamental premises of the GBD?
23 A Yeah, the protection of those populations that -- that face a high risk of morbidity and
24 mortality, should they get infected with COVID.
25
26 MR. RATH: Madam -- sorry, Madam Justice, it's Mr. Rath. I
27 don't want to interrupt my friend's cross-examination. But I just -- I -- I note, for the
28 record, because my friend isn't marking documents that he's putting to the witness as
29 exhibits, I would like the Court to mark this document that my -- that -- and this is the
30 table from Alberta Health -- my friend has just put to the witness for future reference. I
31 would like to note, for the record, that this is a document containing data from 2022 from
32 the (INDISCERNIBLE) 2022. And we'll be referring to that later in these proceedings.
33 And my friend hasn't marked it as an exhibit, so I don't know how else to refer to --
34
35 MR. PARKER: Okay, so can I just address this, Justice
36 Romaine?
37
38 THE COURT: Okay. No, Mr. -- Mr. -- no, Mr. -- Mr. Parker,
39 just a moment, please. I'm assuming that every document that is put to the witness is
40 going to be marked as an exhibit in the cross-examination.
41

1 MR. PARKER: Right.
2
3 THE COURT: Mr. Rath, okay?
4
5 MR. PARKER: Exactly, yeah.
6
7 THE COURT: Okay. One other thing I want to say, though.
8 It's very difficult with respect to this Webex hearing to deal with -- with objections. And I
9 certainly don't mind anybody interrupting, Mr. Rath, that's -- that's good. But I think we
10 should be very careful to stay with the usual procedure, which is after -- after a -- an
11 objection has been made, give me some time to consider it and make sure I understand it,
12 and then I'll call on -- on the other party to respond, okay? Everybody clear?
13
14 MR. RATH: Thank you.
15
16 THE COURT: Okay. Thank you.
17
18 MR. RATH: Thank you, My Lady.
19
20 MR. PARKER: Thank you. And, yeah, we were going to catch
21 up on exhibits. We know we've got a few things, and we -- we need some time to catch
22 up. And we are planning to do that right away here.
23
24 THE COURT: Right.
25
26 MR. PARKER: And get some materials out to my friends and
27 make sure we're in agreement on what we are proposing to mark and how. And certainly
28 this was going to be part of that. I had explained to my friends, actually, that I recently
29 obtained this information, that I thought it would benefit the discussion today and the
30 Court to put this in front of the witness, and that I invited them to then use it, if they
31 wanted to, in their cross-examination of Dr. Hinshaw, who would be table to authenticate
32 what this document is. And we would be seeking your leave to introduce this document
33 then, as we need that leave under the scheduling order. So that was what I proposed.
34 And, yes, we'll mark it as an exhibit, of course.
35
36 THE COURT: Okay. Thank you, Mr. Parker. And I do want
37 to say that I have -- when we're finished this cross-examination, I have some -- some
38 comments I want to make on process that might make this a lot easier for all of the
39 parties. But go ahead now.
40
41 MR. PARKER: Thank you.

1
2 Q The next fundamental premise of the GBD that I wanted to confirm is that we will
3 never eliminate COVID-19. It will circulate, like other viruses. Chickenpox, Ebola.
4 Is that fair?
5 A Ebola, it doesn't circulate commonly. Chicken -- but it's more like -- it's more like the
6 other common viruses, yes.
7
8 Q And so we will never eliminate it? It will circulate?
9 A That's correct.
10
11 Q Now, what was the premise of the GBD that most people will not get infected?
12 A No. The question is who -- who -- who will -- ultimately can you protect from getting
13 infected? If you choose a policy to protect -- if you choose a policy to stop disease
14 spread by lockdowns, the effect of it is to protect the people and truly for the
15 lockdown. Generally younger, generally richer. If you choose a policy to protect
16 older people, then you might -- might have a component of people who -- who will not
17 get infected. It's been made much harder by extending the pandemic over a longer
18 period of time and with a more transmissible variant, like Omicron, a lager of the
19 fraction of the population will ultimately be infected.
20
21 Q The -- no matter what strategy a government adopts, whether it's focus protection,
22 whether it's a suppression strategy, whether it could be said to be a combination of
23 those two, the ultimate goal is herd immunity. That's correct?
24 A No, it's not a goal. Herd immunity is just scientific fact. It's the end point of the
25 epidemic, no matter what we do. The goal is is reducing the morbidity and mortality
26 from the disease and from the mitigation measurers we take in some over -- until --
27 until we reach some -- some kind of equilibrium.
28
29 Q Right. So the goal is to reduce the suffering until we get to that equilibrium, which
30 would be when we -- when we're treating it like -- like it's endemic and not pandemic.
31 Is that fair?
32 A I mean, even when it's endemic, it will continue to infect people. So even after it's
33 endemic, the focus protection principles will still be quite important. It's true for -- for
34 lots and lots of -- of infectious deceases. The question is who is the most vulnerable?
35 What recourses should we put to protecting them? And how should we think about
36 the -- the harms of the -- of the mitigation? You always need to balance those harms
37 against the benefits. And the key idea the GBD is the people who would most benefit
38 are the ones that have a highest morbidity and mortality for infectious from being
39 infected. That is the old and some people with certain chronic conditions. And then
40 at the same time, for lockdowns and the other mitigations factors (INDISCERNIBLE)
41 adopted have posed enormous harm to the health of -- of populations generally. And

1 adopt -- doing those lockdowns while ignoring those harms is bad public health polity,
2 especially if those harms -- if those -- if those mitigation policies do not actually
3 protect the vulnerable.
4
5 Q But you don't know that Alberta has ignored these harms, right? You -- have you no
6 basis to suggest that Alberta has ignored harms, right?
7 A Alberta closed schools. I think the -- the closure of schools harmed the children. And
8 I don't think that that -- that -- that public health -- I mean, I say this not just about
9 Alberta, but in many places, including California, where they closed schools. They
10 did not adequately internalize how harmful the closure of schools were -- physical,
11 in-person schools is to children, especially poor children.
12
13 Q Back to the question, though, Sir. You said I think ignoring the harms of the
14 lockdown. And my question was you -- you have no information that Alberta simply
15 ignored the harms of the lockdown in -- in putting in place the various chief medical
16 officer of health orders that are impune in this proceeding. That's correct, right?
17 A I mean, I've looked at the Alberta public health web page, and I don't find a lot of
18 discussion about the -- the harms from the mitigation policies. This is not, again, not
19 just specific to Alberta. I've seen this over and over again. There's a lot of
20 information about COVID, the statistics about -- about the -- infection rates of
21 COVID, trends over time, hospitalization from COVID. That by contrast, almost no
22 information about the harms from the mitigation strategies.
23
24 Q Sorry, you're saying -- you're saying no information where? Where are you talking?
25 A On the -- like, on the Alberta public health web page? I don't -- I didn't -- I mean, you
26 know, I didn't look at every single page, but I'll tell you, I don't -- it's -- it's really clear
27 from looking at that -- those pages that that where most of the unilateral energy has
28 gone, and most of the unilateral energy, the vast majority of it has gone to thinking
29 about the spread of COVID and who is infected and what it does to hospitals, with --
30 with relatively little -- and I can actually say I can't find any, although, I didn't look at
31 every page -- effort to look at what put -- harms those mitigation strategies have the
32 population at large. Quarentine --
33
34 Q But obvious --
35 A I'm sorry. Go ahead, Sir.
36
37 Q No. If -- you haven't finished, Sir. Go ahead.
38 A Yeah, so quarantining populations, you (INDISCERNIBLE) the health populations,
39 closing schools, the -- the psychology effects of -- of essentially creating an
40 atmosphere of fear. All of those have consequences. And I don't find in -- in
41 Alberta -- and, again, this is not -- I don't mean to specifically criticize Alberta

1 because I think this is common to any public -- to almost every public health
2 jurisdiction. A lot -- you know, (INDISCERNIBLE) efforts that should have gone into
3 thinking about those harms before the policies were adopted. I don't find evidence of
4 that in the -- on the -- in the public communications about it on the -- on the web page
5 and in Alberta or elsewhere.
6
7 Q So that's your basis for saying that Alberta, your understanding, is hasn't taken account
8 of the harms in making these various orders that you've looked on the Alberta health
9 website, and you can't find anything? So that's your conclusion? That's correct, Sir?
10 A I've also heard about some of the public statements made. I don't -- I wouldn't say that
11 they haven't; I'd say that they have not adequately accounted for the harms.
12
13 Q And what's your basis for saying that they haven't adequately accounted for the harms,
14 that you can't find anything on the Alberta health website?
15 A No, I'm going to say I've listened to public statements, but primarily it's by the policies
16 that are followed. I think any -- any adequate accounting for the harms would have
17 led to a decision to not close schools.
18
19 Q So you're concluding from the policies followed as implemented by various orders,
20 that there was not a proper consideration of the harms of enacting those orders. That's
21 what you're saying?
22 A Yeah.
23
24 Q Got it. Thank you. Let's -- let's discuss focus protection a bit more. Focus is on the
25 vulnerable, and you talk about creative ways to protect them. And you acknowledge
26 that the death rate is significant in the vulnerable population, right?
27 A Yes.
28
29 Q One thing you would agree with is protecting long-term care facilities where elderly
30 people reside, correct?
31 A Yes.
32
33 Q You would agree with policies that limited visitors to those facilities?
34 A Yes, although that needs to be balanced with the needs of -- of the elderly people
35 living in these facilities for social connection, especially with loved ones. So that
36 needs to be done in a humane way.
37
38 Q Of course, Sir. And then you would agree with policies that limited staff to working in
39 one of those facilities, Sir?
40 A Yes. Although, I think they could have done more. Many jurisdictions could have
41 done more. For instance, they could have asked staff to -- to actually reside on the

1 facility for, you know, two, three weeks at a time, as so that they -- they would limit
2 the number of times they went out into the community at large, kind of like how
3 medical residents' once upon a time actually used to live in the hospital.
4
5 Q You would agree with policies that limited the number of staff that residences came
6 into contact with, Sir?
7 A Yes.
8
9 Q You would agree with policies around personal protective equipment for staff in those
10 facilities?
11 A Yes.
12
13 Q Policies around having meals in rooms instead of communal dining area?
14 A There, again, I have to be -- I'm -- I think you have to balance the need for social
15 connection, in addition to the -- against the need for protection of -- against COVID. I
16 think that social connection is quite important. And isolation, social isolation harms
17 the health of older people, especially older people who need memory care. So I think
18 there it's -- it's, again, a balance. I wouldn't make a blanket prohibition against meals
19 together, but maybe work on improving ventilation in the spaces where those common
20 meals happen; limit the number of people who -- who can eat together, rather than
21 forcing older people to just eat alone in their rooms.
22
23 Q So it would be appropriate to put a -- a limit on the number of people that could be in
24 the communal dining area is one approach, and you would approve of that?
25 A So, yeah. I mean, I think, again, it needs to be balanced based on the resources each
26 facility has. It can -- it's going to be a local matter. I don't think a blanket prohibition
27 against -- or blanket orders requiring older people in nursing homes to eat alone in
28 their rooms is necessarily a wise one.
29
30 Q Hospitals are a location that would need protection, Sir?
31 A Yes.
32
33 Q You would support limits on visitors, then?
34 A Again, I think that needs to be humane, right? So if -- I think it's actually quite
35 important for the health of hospitalized patients to be able to have family members
36 visit. So I think demising ways to try to make that safer is -- I completely approve of.
37 I'm not sure -- I don't think I approve of a blanket ban on it, no.
38
39 Q You would agree with the requirement for personal protective equipment in hospitals?
40 A Yes.
41

1 Q Enhanced cleaning?
2 A Yes.
3
4 Q People are vulnerable if they live in communal settings, such as prisons or group
5 homes, Sir?
6 A So there, the -- the question is -- is more challenging to do focus protection. And it
7 would depend on the -- on the specific, again, resources and -- and living conditions of
8 the people, and also the -- who -- which people are there. So gaols that have primarily
9 young people would need a different set of protections than gaols that have older
10 people that are there. Intermingled population of old and young make it much more
11 challenging, of course. So there, I would -- I would support, you know, the policies
12 that would help protect the older -- older gaoled populations. For instance, when the
13 vaccines came out, I think you should prioritize giving vaccines to the older gaol
14 populations first, things like that. It's -- it would -- it's hard to answer that question in
15 a general way because the arrangements for each gaol or each facility will have very
16 different resources available, and you have to manage those resource wisely. The
17 principle is how do you protect the people who are at highest risk? And I would call
18 for people around those facilities to be very creative about that, given the limited
19 resources they have available to them.
20
21 Q The -- in the Canadian context, Sir, would you agree that a particularly vulnerable
22 group is the Indigenous population?
23 A I think that the Indigenous population is a -- is a -- is a vulnerable group, in part
24 because of their poverty, but also because of their -- their presence of -- of conditions,
25 like diabetes and obesity make them more vulnerable.
26
27 Q And so the focus --
28 A I'm sorry.
29
30 Q Sorry.
31 A Do you mind if I finish it off? I don't think being Indigenous in and of itself is -- is the
32 key thing. The key thing is the presence of chronic conditions. I don't think their race
33 is -- is what drives the vulnerabilities. It's the chronic conditions and poverty.
34
35 Q Yeah, I understand, Sir. Thank you. And so we've gone through a number of groups
36 of people, those with -- those who are older, those with comorbidities, and those who
37 live -- those who are in a hospital, those who might be in prison, the Indigenous
38 population. And ultimately what I've heard you say, Sir, that it's really a matter of
39 policy decision for the jurisdiction as to who they are going to determine is vulnerable
40 for the purpose of implementing a focus protection approach. I'm correct so far, Sir?
41 A Yes.

1
2 Q Where that jurisdiction decides to cut off or is able to cut off, based on its resources,
3 the -- the -- when I say "cut off," I mean determine who will be protected and who will
4 not be protected under a focused protection approach. Wherever that line is cut off
5 will influence ultimately the mortality from this disease, right? So if you -- if you
6 protect more people with focused protection, then you would expect less mortality.
7 And obviously if you put the cutoff line somewhere else, so less of your population is
8 protected, then you would expect an increased level of mortality. Fair?
9 A So I don't really agree with that characterization, actually, because the -- it's only half
10 the story. The harm from the lockdowns themselves can also -- should also be
11 accounted for, and they can happen -- and can have health consequences for people.
12 And so I think, for instance, when you say that there's a threshold of -- above who you
13 protect and you don't protect, well, focus protection against COVID is not the same
14 thing against protection. I believe that the entire population needs to be protected.
15 The younger population, for instance, should be protected against the harms of
16 lockdown.
17
18 Q M-hm.
19 A Now, so I think it's -- it's always a balancing; not simply -- if you think of it as just
20 simply the goal of policy is protection against COVID harms, you're going to end up
21 causing more harm than good, unless you -- so the right way to think about it is a
22 balance, a balance of what that -- the harms the lockdowns do, to whom it does it,
23 versus the risk of harms from COVID, which as we said, there are -- I think we agree,
24 it sounds, like a -- an enhanced population is at enhanced risk of -- of death and
25 morbidity, if they should be infected.
26
27 Q Your focus protection would require that all of these groups be provided with a variety
28 of creative approaches to protect them from the disease, though, right?
29 A Yes. I mean, I'm so sorry, I should be clear. I'm not sure what you mean by all of this
30 (INDISCERNIBLE), all of this --
31
32 Q Well, if -- if the government or if a jurisdiction determines and is a matter of policy
33 that it's going to protect a certain group is vulnerable, and if those groups include older
34 people and those with comorbidities and the Indigenous population and those in
35 hospital and those in prison and any other groups that might fall into the vulnerable
36 category as being more at risk of severe outcomes from COVID-19, then if you're
37 going to protect those groups, then the -- then the jurisdiction doing so under GBD has
38 to come up with a variety of creative approaches in order to do so, right? That's what
39 the GBD says?
40 A Oh, absolutely. I agree with that. Yeah, I think that that -- that -- protecting those
41 groups requires creativity. And as I said earlier, it also requires balancing that -- those

1 interventions impose harms on -- on people that we'll call non-vulnerable, then that
2 also should be account for.
3
4 Q You would agree with workplace safety laws that require employers to make sure all
5 staff have a safe work environment?
6 A Yes.
7
8 Q You would agree with providing personal protective equipment to employees?
9 A So, again, that depends on -- on who -- who is -- what the nature of the work and --
10 and where. So, like, work outdoors I think is much less important. I don't think the
11 disease spreads very particularly efficiently outdoors. Then I guess I wouldn't say that
12 you -- it would -- I wouldn't agree with that in a blanket way. It would depend on the
13 workplace, the nature of the work, who is working, whose health -- who is vulnerable
14 there and who is not.
15
16 Q You would agree with the laws that let people work from home?
17 A I guess that -- maybe can you -- could you clarify what you mean by laws that -- that
18 let people work? I don't know what that means.
19
20 Q If you recommend or mandate that people work at home, that would be a way of
21 providing focus protection -- or protection for those that are vulnerable
22 to (INDISCERNIBLE) severe outcome from the disease?
23 A No, not necessarily. And I think the -- the work from home is not a focus protection
24 strategy, in my mind. Recommending that people work from home, first of all, their
25 estimates that suggest that only -- well, in the United States, anyway; I imagine it's
26 true in Canada, as well, in Alberta -- that only about 30 percent of the population work
27 in jobs that could be replaced with work from home. So we're not talking about the
28 entire population. It's -- and much of the -- the working age population is under the
29 age of 65 and actually finish very low in the infection fatality rate. So I don't believe
30 that that would be a focus protection kind of strategy.
31
32 Q You would agree with employment laws that require employers to give work a sick
33 leave, if it is dangerous for them to work during COVID?
34 A Yes, I support sick leaves, even before COVID.
35
36 Q Let's look at -- I want to go -- sorry, Mr. Trofimuk, we can take the document down.
37 If we could go back to Dr. Bhattacharya's report, his primary report. And I would like
38 to go to page 33, please. Sir, you've got -- there we go, Sir. I'm just bringing you to
39 this part of your report where you say "requiring older essential workers and members
40 of the working class that cannot afford not to work be put in work situations where
41 they may be exposed to the virus." And you said, "this is a concrete example of the

1 failure." I think you're saying failure of approach taken in various Canadian
2 jurisdictions to addressing the COVID pandemic. Is that what you're saying there,
3 Sir?
4 A Unfortunately not just Canadian, but yes.
5
6 Q Did you look at Alberta's Employment Standards Code?
7 A I did not look at their code, no.
8
9 Q Would you agree with the workers' compensation programs to provide income from
10 people who get sick at work?
11 A Yes.
12
13 Q Would you agree with paid sick leave?
14 A Yeah. I mean, I thought you asked me that earlier. Yes.
15
16 Q You would agree with employment insurance payments and other benefit payments
17 and income assistance payments that are given to persons who cannot work, due to
18 COVID?
19 A Yes.
20
21 Q You would agree with human rights laws that require employers to accommodate
22 people with health issues so they can safely do their jobs?
23 A Yes.
24
25 Q You would agree with house -- the housing being provided to people who have had to
26 isolate and do not have a place to do that?
27 A Yes.
28
29 Q We -- the respondents filed affidavits from to assistant deputy ministers, ADM
30 Shandro and ADM Hedley, that exhibited various programs that the government of
31 Alberta and the federal government have put in place to address the pandemic. Did
32 you read any of those or did you review either of those affidavits, Sir?
33 A No. Can I have a -- can I -- can I tell you what I had in mind with that when I wrote
34 that first point?
35
36 Q Sure.
37 A It -- I think that, especially before the vaccine, older workers should have been
38 provided sabbatical time, that -- that it's older workers that should have been provided
39 alternative work-from-home arrangements. Older workers who should have been --
40 again, depending on the job and depending on the -- the nature of the work, that not
41 been asked to -- to go into -- to go to work. A lot of essential workers in Canada and

1 elsewhere did go to work, they had to go to work because they were not working in
2 jobs that could be replaced from work from home. The (INDISCERNIBLE) you're
3 asking about, I -- I completely approve of. I don't believe were sufficient to protect
4 older workers who worked -- who worked in jobs that couldn't be replaced with work
5 from home.
6
7 Q When you say older workers there, are you talking 60 or are you talking 65? What age
8 are you using in that sentence?
9 A I mean, it's the same -- I guess I should just say "vulnerable workers" instead of older
10 that -- who -- whoever you, you know, we deem vulnerable, based on the conversation
11 we had. You can see the nuances in that. But whoever is vulnerable I think should
12 have been provided those kinds of opportunities so that they didn't -- resources so that
13 they didn't have to -- they didn't have to work during times of high community spread
14 or didn't have to work in -- in public environments that would have exposed them to
15 COVID.
16
17 Q Sir, you would agree with physicians offering virtual appointments, if appropriate, so
18 that vulnerable patients can stay at home when it is safer?
19 A That would depend on the nature of the condition. I mean, it's very difficult for some
20 conditions to do a good job as a physician virtually. So but if -- if it's -- if it's a, you
21 know, triage is determined, that i -- you have a condition that can be assessed
22 adequately, based on telemedicine, then yes.
23
24 Q You would agree with the grocery stores and pharmacist offering free delivery to keep
25 people safe?
26 A It would depend on who the workers are at those groceries that are doing free delivery.
27 If they are vulnerable, you then not necessary.
28
29 Q Well, no, you don't want to send out the vulnerable people delivering the groceries.
30 No, that wouldn't be good. You -- you would agree, Sir, with curbside pick-up to keep
31 people safe?
32 A I don't think that that necessarily is a focussed question. I mean, it might be in some
33 communities, if that's the right -- right way to -- you mean curbside pick-up of
34 groceries?
35
36 Q Groceries and other essential -- yeah, exactly.
37 A I mean, I think that a lot of that is not necessarily focused. I do think that food
38 delivery to older peopler living alone at home, those kinds of resources, I absolutely
39 agree with. And so I think I'd say the general thought of -- of trying to reduce the --
40 the level of exposure of older people in their normal, everyday life during times of
41 high community spread, including grocery shopping, the policies that aim at doing that

1 I completely agree with. In fact, I very strongly recommend it in lots of places.
2
3 Q That -- I think, in fact, the recommendation is government would pay for the grocery
4 delivery, as required. Is that fair?
5 A I mean, I would be in favour of that. But, you know, it depends on the -- on the -- on
6 the location. So I imagine there would be -- if you -- if you asked people with living
7 in neighbourhoods where they know older people live alone to -- to offer to take care
8 of the groceries for -- deliveries for people, that you -- a lot of people would volunteer.
9 But, yeah, I'm in favour of government paying for it, if need be.
10
11 Q You're in favour also of, as much as possible, maintaining access to things like cancer
12 screening, cancer surgeries, cardiovascular surgeries, doctor appointments,
13 vaccinations, keeping those open as much as possible with -- within the goal of focus
14 protection?
15 A Yes. And because closing those kinds of resources -- access to service, closing those
16 services causes enormous publish health harm. COVID is not the only health risk that
17 people face. I mean, we showed you that table with metabolic disease and other
18 conditions. The population of Alberta and population of basically everywhere on
19 earth has lots of health conditions that -- that place them at risk. And reducing the --
20 the availability of health services that address those conditions harms the health of the
21 population.
22
23 Q You would agree that keeping many parts of Alberta's economy open would fit within
24 the goal of the Great Barrington Declaration?
25 A So the -- the -- so the economy is not just simply about the money; it's actually
26 fundamental to the health of the population, right? So if you -- if you have economic
27 harm, if you have high unemployment, there's a strong (INDISCERNIBLE) article that
28 shows that -- that it correlates very strongly with -- with poor health outcomes. And
29 the -- the speech specifically coming out of the 2009 recession, there was a -- a
30 literature on -- spearheaded by a Nobel Prize winning economist. His names is
31 (INDISCERNIBLE) and (INDISCERNIBLE) at Princeton, which found that there --
32 that deaths of despair rising out of unemployment themselves increases in depression,
33 substance abuse, and so on very strongly correlated with -- with high unemployment.
34 So I think those -- that also is a health -- is a health -- I think it was a public health
35 goal to -- to limit the -- the harm to populations arising from that kinds of death of
36 despair.
37
38 Q You would agree with prioritizing for vaccinations long-term care facilities, staff and
39 residents', and the elderly?
40 A Yes.
41

1 Q And --
2 A I'm sorry, I missed the list. So the elderly? I'm agreeing with the elderly. Are you
3 saying do I agree with prioritizing vaccination for the workers there?
4
5 Q Long-term care facility staff and the elderly, yeah.
6 A I mean, I think given that the -- that the virus doesn't -- or the vaccine does not stop
7 transmission of the disease, it's less important than it would have been if you had a
8 vaccine that did stop transmission. I think the primary -- the primary goal should be to
9 vaccinate the older population first because that vaccination effort then will reduce the
10 mortality risk, should they be infected. So I think I -- I do -- I do support the
11 vaccination of people who care for the elderly, in part, because I think it -- it does
12 reduce transmission of -- for a short time afterwards. I think that's a benefit, but it's
13 not the primary reason why -- it's not the primary benefit, I think. I think the primary
14 benefit comes to people who are older and are protected by the vaccine against
15 (INDISCERNIBLE) disease.
16
17 Q And you would -- so I think you agreed with prioritizing the vaccinations there. What
18 about for -- for other vulnerable people and for front-line workers? Do you
19 appreciate -- you would agree with prioritizing vaccinations for those groups?
20 A For other vulnerable people, for certainly, yes, for the reasons we just discussed. For
21 front-line workers, again, mine -- I'm a little more ambivalent just as I was with the --
22 with the -- with the prioritizing people who care for the elderly in the long-term care
23 facilities simply because the vaccine does not stop transmission. The reason why you
24 would prioritize front-line workers, in my mind, is because you protect the patients
25 from getting infected by them if they have COVID. But the vaccine unfortunately
26 does not do that after a short -- after -- after a few months, it does not stop
27 transmission.
28
29 Q So, sorry, has your opinion changed on that at all over the last year or so?
30 A It has, yes. So in January of 2021, I though that it -- it's likely, but not certain that it
31 stopped transmission. By say March or April, I forget exactly the date, I started to see
32 evidence from places like the (INDISCERNIBLE) Islands and other places that were
33 heavily vaccinated where the disease spread, that I realized it does not stop
34 transmission.
35
36 Q Thank you. And GBD has policies it recommends, and frequent testing of staff,
37 presymptomatic -- sorry, frequent testing of staff. That's one of the recommendations
38 from Great Barrington?
39 A Staff and nursing homes, you mean? Yes.
40
41 Q Yeah. And try -- try your best to keep the virus out. That's another recommendation,

1 right?
2 A I mean, in places where there's especially common living facilities there's lots of and
3 lots of older people, that -- it's quite important. You want -- you don't want to expose
4 vulnerable people to the virus. That's -- that's a major principle of focus protection.
5 How you do that is going to depend on the resources available, the -- with the local
6 living situation and so on.
7
8 Q You recognize, Sir, that not all elderly people --
9
10 THE COURT: Sorry. Okay, please continue with your -- your
11 line of questioning on that issue, Mr. Parker. But I do note that it's -- it's 11:00. You have
12 been going for about an hour and a half. So wherever it's convenient to take the morning
13 break, let me know.
14
15 MR. PARKER: This would be a really good time, actually,
16 Justice Romaine. Thank you.
17
18 THE COURT: Okay. Okay. Thank you. We'll take a 15
19 minute break. Thank you.
20
21 (WITNESS STANDS DOWN)
22
23 (ADJOURNMENT)
24
25 THE COURT: Thank you. Before we resume, I just want to
26 make sure that there doesn't seem to be any problem with feedback from any of the people
27 on Webex; is that correct? Mr. -- Mr. Rath, I see you on camera. So are you okay with --
28 without -- are you troubled by feedback at all this morning?
29
30 MR. RATH: No. And the Court will be pleased to hear I was
31 on mute so --
32
33 THE COURT: Oh, okay. Okay, then. Mr. -- Mr. Parker, do --
34 and I'm assuming that everybody else is okay.
35
36 Mr. Parker, do you want to continue? Thank you.
37
38 MR. PARKER: Yeah. Thank you. I will. Everything is good. I
39 haven't heard much feedback today at all today, so wonderful. Thanks for checking.
40
41 THE COURT: Okay. Good.

1
2 (WITNESS RE-TAKES THE STAND)
3
4 Q MR. PARKER: And, Dr. Bhattacharya, we were just going to
5 turn to the issue of multigenerational homes. And how do you protect elderly people
6 that are living in multigenerational homes? And the -- I'm going to bring up
7 frequently asked questions to -- which is one of the documents you would have seen
8 before, Great Barrington Declaration, frequently asked questions, and go to page 5 of
9 11 of that, please, Mr. Trofimuk, to the question of "how do we protect older people in
10 multigenerational homes?" And this is one of the -- this is one of the toughest parts, I
11 think, of focus protection and finding the solution is this multigenerational homes. Is
12 that fair, Dr. Bhattacharya?
13 A Yes.
14
15 Q And one option is for the younger people to move out and live with friends or stay in
16 hotel rooms. Is that one approach to this?
17 A I think that would be an extreme option. But if -- if all else fails, I guess. I mean, I
18 would -- I think the key thing there is when younger -- younger people live together
19 with older people, resources should be made available so that when there is high
20 community transmission and also there is potential exposure that the younger people
21 know they have had in their -- in their activities, they can -- you can provide resources
22 for the older people living in those homes, either to -- to move out temporarily or to
23 move -- potentially, as you say, you could move the younger person out temporarily.
24 The key thing is it's going to be a local decision. So the -- a family would know better
25 when that exposure has happened or potential exposure has happened, as long as
26 public health communicates with the family and makes those resources available. I
27 think that's about as well as you can do. It's a very difficult situation. I'm sorry, I can't
28 hear you, Mr. Parker.
29
30 Q Sorry. My new -- my new headset for the day. My apologies. One of the -- one of the
31 solutions in the frequently asked questions to this issue, Dr. Bhattacharya, is that older
32 family members might temporarily be able to live with an older friend or sibling with
33 whom they can self-isolate together during the height of community transmission.
34 And you had -- I think the GBD had estimated a three to six month period. Is that
35 fair?
36 A I'm sorry, I don't know what you mean by three to six month period.
37
38 Q The temporary period that these people might have to relocate for. I think -- I think
39 three to six months was the time period. Am I wrong in that?
40 A I don't remember making any kind of estimate like that. I think during times of
41 community transmission, alternate arrangements should be -- should be made

1 available. Resources should be made available. And a lot of that maybe be private
2 resources, you know, if you have a family member, like we said here. But I -- I didn't
3 make any estimate about how long it would be. It would -- it -- it depends, of course,
4 on how long the -- how long the -- the high community spread lasts.
5
6 Q Okay. Sorry, Ms. Trofimuk, could you go to the next page of this document, page 6 of
7 11 at the top. And here, Sir, is the next page. And that's where I got the three to six
8 months from. It says "if focus protection is used, it will likely only take three to six
9 months." And that's why I thought from that time period when you were talking about
10 temporary measures in the last question, that's where I got the three to six months
11 from, Sir. But you're saying you -- you did not estimate a three to six months period
12 when you were discussing these issues and -- and solutions under the Great Barrington
13 Declaration; is that right?
14 A Well, as you can see in this question, the answer to this question, the question is how
15 long must high-risk individuals be careful and/or self -isolate. So this is a more
16 general question than just simply, you know, in multigenerational homes. The
17 question is how long are high-risk individuals going to be at risk, and it depends partly
18 on the policy. A -- a multi -- you can see in the answer to this question that I believed
19 at the time that -- and I think this still is likely true -- that -- that measures that extend
20 a period of the lockdowns, that attempt to reduce spread of the disease, can extend out
21 how long the period of isolation or being careful lasts, extending the time of
22 vulnerable people are exposed to risk.
23
24 Q Would not -- well, sorry, Sir, so let me just go back to this: And so just reading --
25 sorry, I'm reading the full answer that the three to six months comes from. It was for
26 how -- so the question is for how long must high-risk individuals be careful and/or
27 self-isolate. And so I think this frequently asked questions comes from --
28 A October.
29
30 Q There's no date on it, that I could find. But it talks about at the end of 2020. So it
31 looks --
32 A It was October, October of 2020 when we wrote this, right around the time we wrote
33 the Great Barrington Declaration.
34
35 Q Okay. There's -- there's earlier on in the piece there's a paragraph that begins at the
36 end of 2020, so I thought it was maybe subsequent. But you're saying the FAQs were
37 from the same time as the GBD?
38 A Yeah.
39
40 Q Got it. Thank you. And so then it seems to me, then, from reading what I see here
41 that at the time that you wrote the GBD, you were envisioning that -- I think you

1 already confirmed it -- those who need to protect themselves would be likely having to
2 do for just three to six months, right? The vulnerable.
3 A If focus protection is used. If -- now, at the time I think I had a -- a more expansive
4 view of whether lockdowns are particularly effective in stopping community spread,
5 October 2020, than I do now. I think now I don't think that the lockdowns are -- I
6 think, at best, they stop spread in a -- in a subset of the population, that the population
7 can actually lockdown, stay at home. So at the time, based on that, the idea was that if
8 you do lockdown, that you would -- you would extend the time that older people
9 would have to be self-isolating or -- or being careful because of the diease is still
10 going to be circulating. Remember what the theory of lockdowns are is to -- is to
11 move infections into the future, thus extending the time to get your equilibrium.
12
13 Q And as I understand it, until vaccines were widely available and as they became
14 during the latter part or during the second wave and in through the third wave, right?
15 That's part of the -- the approach that Alberta has taken to -- it's suppression strategy,
16 right?
17 A Yeah. I mean, I think a suppression strategy, if it works, it extends the time that
18 people are at risk from the disease, that -- the time that -- to spend until the disease
19 sort of starts to settle into the equilibrium. The -- the vaccines, I think, are a vital tool
20 for focus protection. They were great for focus protection. It makes the problem of
21 protect individuals in a multigenerational home so much easier. You just vaccinate
22 the vulnerable members of the people living in those homes, and you've provided them
23 protection, probably the best protections available. The -- the vaccines don't change
24 the fundamental principle. The vaccines can't -- we just talked about earlier -- can't be
25 used to stop the spread of the disease because they just don't have that property. So it
26 shouldn't be used as an suppression strategy; it should be used a focus protection
27 strategy.
28
29 Q The -- if -- if some individual in a multigenerational home, an older, vulnerable person
30 was relocated temporarily under the focus protection, would they not still have to be
31 protecting themselves now in Alberta two years later?
32 A I'm sorry, just so we're clear, I don't -- nothing in the GBD was forced. We weren't
33 arguing for force relocations. This would be voluntary resources provided when
34 people were at high risk during times of high-community spread.
35
36 Q Right.
37 A There hasn't been high-community spread in Alberta through the entire pandemic. It's
38 been periods of high-community spread. So I don't -- I guess I don't follow the
39 premise of your question, Mr. Parker.
40
41 Q Okay. You would agree, Sir, that many people over 60 are still in the Alberta

1 workforce?
2 A Yes.
3
4 Q And that if we -- if those people need protecting, then we would be removing many
5 essential workers, potentially, out of the workforce?
6 A I think that during times of high-community spread, providing workers who are
7 vulnerable resources so they don't have to be exposed is part of the focus protection
8 approach. I think that would be a humane thing to do.
9
10 Q This could including nurses, doctors, police officers, firefighters?
11 A I mean, I think for those -- those professions, there are people who are vulnerable.
12 And making alternate arrangements so that they can do their work as best they can
13 remotely during times of high-community spread, the vulnerable will be -- would be a
14 good idea -- would have been a good idea because there's certainly -- using the
15 vaccines to protect them is -- that is -- and prioritizing them, the vulnerable workers,
16 is -- is a good idea. I do think that the vaccine mandates, the way that they have been
17 used in -- in -- in Canada and the United States, for that matter, where there have been
18 requirements to be vaccinated, even for people in those situations don't want to be,
19 have remove -- have resulted in -- or contributed to the staff shortages in those kinds
20 of -- the -- in hospital and other facilities.
21
22 Q I just want to go back to this three to six months, Sir. The GBD was based on herd
23 immunity occurring within three to six months, right? Is that what this says?
24 A No. The question -- the how long it takes to get to herd immunity is a question -- is a
25 question of policy. That's what the GBD is based on. The -- the length of time, the
26 not whether you get to herd immunity. It's going to happen regardless. The premise
27 of the GBD was that if you -- if you work on the -- if you -- if you protect the
28 vulnerable, you will have less damage and harm to the vulnerable during the time --
29 until it gets to that. One of the -- one of the ideas that -- that we -- we address is how
30 long might it take to get to that equilibrium. And under a suppression strategy, again,
31 based on the theory of lockdowns that we discussed probably the first day, it's going to
32 take longer. So you have to -- you have a longer time during which vulnerable people
33 are exposed to the risk if you follow a suppression strategy.
34
35 Q But just reading -- reading the question we've been looking at for how long this
36 high-risk individuals must be careful and/or self-isolate, in reading it, it says, "When
37 herd immunity is reached," and the it finishes, "if focus protection is used, it will
38 likely only take three to six months." So am I not reading to say that herd immunity
39 will take three to six months to reach? Isn't that what that says in that paragraph, Sir?
40 A No. You mean the middle sentence? This (INDISCERNIBLE) wide lockdown
41 measures to try -- used to suppress disease, it would take a year or two or three,

1 making it very difficult for older people to protect themselves for that long.
2
3 Q Right.
4 A (INDISCERNIBLE) happen. We have extended out the -- the time, during which the
5 disease is -- is -- has taken to get to endemic status with the -- the suppression strategy
6 to follow, I think. And it's made it much more difficult for the vulnerable population.
7 That's partly why we've had so much death among the vulnerable population.
8
9 Q So the -- and I think you've -- you've -- you've already alluded to this, Sir. There is
10 nothing mandated to protect the vulnerable in the GBD, then? It's all optional. It's up
11 to the individuals involved, whether they want to do it, correct?
12 A Yeah, that -- I'm very strongly in favour of the state providing resources and good
13 information to vulnerable people. I don't see -- I don't think that -- I think that would
14 build public trust and public health, and more people would take advantage of those, if
15 they are available. I don't think people are stupid. I think they are very, very smart
16 about these kinds of risk. And it's the role of public health to provide resources and
17 good information to help them protect themselves against -- against all kinds of risks.
18 And for the vulnerable population for COVID, that -- the -- I think it's certainly within
19 the capacity of public health to provide those kinds of resources, even without a
20 mandate. Again, just so we're clear again on this, because I know we have -- the
21 discussion we had earlier, Mr. Parker. The mandate -- I guess I would have to ask you
22 what kinds of mandates you have in mind here.
23
24 Q Well, I -- I'm going to ask the questions. And to be fair, it is a question about the
25 Great Barrington Declaration, Sir, which is really, you know, are you -- it's the same
26 discussion we had last week, which does any of this move past, okay, we're no longer
27 recommending vulnerable people protect themselves in the way that we have
28 suggested. We are now -- we are now -- the Great Barrington is also approving that
29 governments might mandate those who are vulnerable must isolate to protect
30 themselves. GBD never does that, right?
31 A No, it does not.
32
33 Q And so if people are not cooperative, if focus protection of the kind you're talking
34 about had been taken by Alberta, if people were not cooperative, it could be very
35 dangerous for vulnerable people because a lot of virus would be circulating in the
36 community, right?
37 A I mean, I think there, the question is how much trust does the population have? I think
38 in October of 2020, there was actually a considerable trust by the population at large
39 in public health. I don't think that if the -- if public health had made recommendations
40 and provided good resources, recommendations based on solid -- solid evidence
41 available at the time, that people would -- would not have agreed. I mean, there may

1 be some, but there -- yet, the principle of informed consent applies, just as much to
2 NPI's, I believe, as it does -- and that nonpharmaceutical interventions as it does to
3 pharmaceutical interventions. That -- I don't think that that kind of mandating had in
4 mind when your aim is protecting somebody should be forced or mandated. I think
5 that should be with consent of the individual, and the informed consent of the
6 individual receiving those resources and acting on the recommendations.
7
8 Q The -- you mentioned October 2020, Sir. And I think I -- I just want to go back to that.
9 Were you saying that you thought that there was good or basically saying that there
10 was good -- there would have been good uptake at that time because people were
11 confident and supportive of public health measures? Is that what you're saying?
12 A No. I think that the trust in public health -- what I'm saying is that the trust in public
13 health has eroded during the course of the epidemic, in part because of the mandates.
14 I think in October of 2020, the -- the disease had gone on for, you know -- the
15 emergency had gone on for six months, but yet people were still looking to public
16 health for the -- for advice and information and resources. And then the Canadian
17 population, in particular, I think there was strong trust in public health and public
18 health authorities at that point. I don't think that mandates would have been necessary
19 to achieve protection in must vulnerable people. I think --
20
21 Q Do you have any -- sorry. Go ahead.
22 A Oh, I apologize. Yeah, so I don't -- I don't -- I mean, I think, to me the key -- the key
23 element is public trust and public health. And I've -- my view from -- or from -- by
24 admittedly saying the United States is that the Canadian population has had an
25 amazing level of trust in public health through much of the epidemic, which -- though
26 it's eroded now. And I believe in October of 2020 it was -- it was -- it was, in my view
27 then, both in the United States and in Canada was it was quite high.
28
29 Q It was certainly earlier, much earlier, obviously, into the pandemic, within the first
30 year still. But you don't have any specific knowledge about whether there was good
31 public trust in public health in Alberta at that time; you're just generalizing from --
32 well, you have no specific knowledge about Alberta on that, right?
33 A No.
34
35 Q Okay. And so just to carry on on this. And so if, again, people are not cooperative
36 under a focus protection approach, then it would be dangerous for the vulnerable to go
37 to a restaurant or a concert, right?
38 A I mean, I think it's in times of high-community spread, vulnerable people who are
39 not -- who are vaccinated would be -- it would be not advisable for them to go out into
40 public like that.
41

1 Q So those people, to be fair, then, would be very locked down? Basically it's draconian.
2 They're -- they're -- they are not going anywhere for a period of time. That's right?
3 A It's -- it's less draconian if it's voluntary. The way -- the way that you -- that -- the
4 mandatory business closures and mandatory shelter in place orders are draconian. I
5 wouldn't characterize telling people, recommending to people, look, it's you're -- if
6 you're vulnerable, then here's what needs to be vulnerable. It's probably wise to
7 reduce your -- your exposure to -- to places where the disease might spread during
8 times of high-community spread. I think that kind of recommendation or
9 (INDISCERNIBLE) to resources to help people do that, I wouldn't call that draconian.
10
11 Q It could get pretty complicated, though, in certain families, such as a father with
12 cancer, a child in university, and a wife working as a fitness instructor. You've got
13 very complicated issues there, right?
14 A Absolutely. Like I said, public health is always complicated. It's always local.
15
16 Q And if we go back to your report, page 30, I think that's 72 of 2300, Mr. Trofimuk.
17 You talk about at the bottom of that page a comprehensive and detailed list of
18 measures, including approaches to multigenerational households can be implemented.
19 And it's well within the scope and capabilities of public health professionals. But you
20 don't provide any examples of what those measures are, though, do you?
21 A So you -- you saw the FAQ. We provided some -- some examples. What I was
22 hoping with this, with providing the Great Barrington Declaration, was a conversation
23 and a -- and a call for public health professionals locally to engage of creative ways to
24 provide focus protection. Because it's going to be very different in different localities.
25 Protecting the Indigenous population and giving their living arrangements, it's going to
26 be very, very different than protecting an urban population of who -- of -- of
27 vulnerable individuals. And it will depend -- it will be a local -- it's going to be a local
28 decision. It's -- the GBD was meant as global document, as a strategic document,
29 rather than a -- a detail for every single community in the world. That would require,
30 and we were hoping would -- that would involve the public health officials literally
31 everywhere who know their communities well, would engage in thinking how to
32 protect vulnerable people in those communities, apart from simply stopping
33 community spread.
34
35 Q Okay. Thank you. Sir, at the time you wrote your reports, you believed in informing
36 people of the value of masks?
37 A I don't think we said much about masks. There the -- the -- the -- at that point, the --
38 the -- I was not particularly aware of the literature on masks. The same way I know
39 now is there's a study that came out, I don't remember the date, some time in 2020
40 with a comprehensive review of mask -- of mask literature that convinced me that
41 masks were not particularly effective. Then later there was a -- the Denmark mask

1 study that -- the Danish mask study that found that -- or randomized mask study during
2 the context of COVID that found no statistics (INDISCERNIBLE) in effective of
3 masks. So my -- I downgraded my -- my priors about whether masks could form --
4 could be a central part of -- of strategy to protect the vulnerable when used by people
5 who not particularly well trained in mask use.
6
7 Q Do you believe in informing people of the value of handwashing and social
8 distancing?
9 A I mean, I think, at that point, I believed social distancing was actually an important
10 component. The -- the evidence since regarding air soft spread of the disease has -- it
11 made me less -- believe less that it's important. I now believe it's more important to
12 have strong good ventilation.
13
14 Q Right.
15 A And --
16
17 Q And, sorry, that's an interesting point, Sir. And as I understand it, what you're saying
18 is the -- the growing knowledge about how the virus spreads via aerosols has now
19 made you more aware of the need for good ventilation because of what that
20 knowledge of aerosols spread and the risk it creates?
21 A Correct.
22
23 Q But in terms of these measures, then, whether -- whether masking or handwashing and
24 social distancing are taken, it's left up to people to make their own choices. Nothing is
25 mandated. And so the disable, the poor, those who are otherwise vulnerable, they
26 have to hope that they do not come into contact with someone carrying the disease,
27 right?
28 A So I think a strategy to stop community spread would -- to inevitably lead to the
29 disabled, the poor, the vulnerable to come into contact with people of the disease
30 because it extends the period of time the disease takes to get to equilibrium. And the
31 ability of people to stop themselves from human interactions to -- that might lead to
32 disease transmission, I think is -- is very unequally distributed in the population. It's
33 not the disabled or the poor or the vulnerable who possess differentially an ability to
34 protect themselves like that. It's actually relatively low risk populations who can
35 afford to work from home, who can afford to have people deliver, you know, deliver
36 their groceries to them, that would -- that would actually be protected by these kinds
37 of policies. And we have seen that inequality and who has been infected and who has
38 died from this disease, is a steep income in equality, including in places like in
39 Canada, including I've seen data from Toronto, in poor neighbourhoods that have
40 much higher rates of infection and death from COVID than richer neighbourhoods.
41 That's true in California, as well. It's not just unique to Canada. I think these

1 lockdown policies are incredibly unequal because it's mainly richer, often less
2 vulnerable populations that are able to abide by the -- by them. Much of the rest of the
3 populations, including the vulnerable, often have to -- has to work, has to engage in --
4 and not just because for their own -- own -- own sake; they have to engage in human
5 connections. So the lockdown policies, I don't believe, are a way to protect the
6 vulnerable. I think that you can stop disease spread, but the disease spread you're
7 stopping is not -- not necessarily focused on protecting the vulnerable. You have to --
8 if you want to protect the vulnerable, you have to make a decision, that's what you're
9 going to prioritize.
10
11 Q And obviously some scientists, researchers, policy makers support transmission
12 suppression efforts? That is your position, as far from universal?
13 A That's true.
14
15 Q And there's also the dual tracked approach of focus protection and community
16 suppression. Not what you support, but you would acknowledge that your position,
17 again, is not the only position being followed or advanced?
18 A That's true. But I don't believe that my position is necessarily a fringe position. In
19 fact, I don't think -- I think quite the opposite.
20
21 Q Understood, Sir. Community suppression efforts don't need to be all or nothing?
22 A I'm not sure what you mean by (INDISCERNIBLE), Mr. Parker.
23
24 Q Well, you don't have to put in place every NPI at this same time to try to suppress
25 community spread. You can layer on NPI's, as might be required to target over
26 whatever period of time the -- the -- the issue -- the transmission that you're trying to
27 suppress. That's what I'm trying to say.
28 A You mean, if I understand your question, I think you mean that there's a -- that there's
29 a range of policy options, if you want -- want -- someone wants to reduce community
30 spread.
31
32 Q Right.
33 A Which I completely agree, that's true.
34
35 Q And I just say that because GBD and the FAQs we were looking at seems to define
36 lockdowns very broadly, and but obviously they don't have to be defined so broadly, as
37 you just confirmed. Some jurisdictions have very stringent restrictions; others less so.
38 That's fair?
39 A Yes.
40
41 Q And those restrictions may ebb and flow within a jurisdiction, depending upon the --

1 the situation at any given time, right?
2 A Well, based on decisions made by public health, whether to impose or not impose
3 those restrictions, yes.
4
5 Q And if the virus spreads in -- in the community, that is going to put more people into
6 hospital and into the ICU of all ages, right?
7 A It depends on -- on who it spreads amongst. If it spreads amongst the vulnerable,
8 you're going to get much higher ICUs, you know, much higher hospitalizations, much
9 higher deaths. The key isn't community spread generally, but the key is spread among
10 the vulnerable.
11
12 Q Could you --
13 A I'm sorry, Mr. Parker, I didn't -- I didn't catch that.
14
15 Q Just telling my colleague to bring up a document. Sorry. I was muting so you didn't
16 have to hear me. We're just going to bring a page of Dr. Hinshaw's report, an exhibit
17 that I wanted to show to you, Sir. Sorry. Sorry, we're having some trouble loading
18 that document up, so we'll -- we'll move on. Dr. Bhattacharya, do you remember
19 appearing before or any round table with Governor DeSantis about hospital
20 overcrowding?
21 A I've appeared in several. I don't remember specifically -- I talked about hospital
22 crowding in one of them, but it's possible.
23
24 Q Would you -- do -- you don't recall the question at one of these roundtables as to
25 whether there is anybody that thinks COVID-19 represents a significant threat in terms
26 of overwhelming hospitals in the United States? Do you remember that question and
27 your answer, Sir?
28 A No. I've appeared in three or four roundtables with Governor DeSantis, and there
29 were a lot of questions asked.
30
31 Q Would you agree with me, Sir, that if a particular community reached a point where
32 the virus was spreading rapidly in the community to the point that the healthcare
33 system was getting overwhelmed, that there would be a good reason to put in place
34 more stringent transmission suppression measures design to limit person-to-person
35 contact?
36 A I say -- I think when you have hospital systems that are starting to get stressed, focus
37 protection approaches are much more important because it's the -- it's the vulnerable
38 population that when they get infected, end up in the hospital, that end up dying. So if
39 you want -- if you want to -- if you want to reduce the burden on hospital systems,
40 what you have to do is protect the vulnerable. That's how you reduce the -- the stress
41 on the systems.

1
2 Q And --
3 A The other thing you can do during those times is expend capacity. So, you know, for
4 instance, in the early days of the pandemic, even though it didn't end up being used
5 very much, there were surge -- surge centres where, you know, where there -- where
6 hospitalized patients could be outside of hospitals. In fact, we used those kind of
7 surge capacity in the past also with flu -- flu virus transmit -- when we've had flu
8 epidemics. So it should be a combination of both supply and demand, and then the
9 protecting the vulnerable, reducing the hospital systems, supplying any extending --
10 extending capacity for hospital systems to cope with those kinds of -- those kinds of
11 surges.
12
13 Q I'm just going to bring another document up for you, Sir. Just give me a minute. This
14 is a commentary, vaccination is the only acceptable path to herd immunity. The
15 author is Angela L Rasmussen (phonetic). Do you know that author, Sir? Have you
16 heard that name before?
17 A Yes. I have not seen this paper, though.
18
19 Q Okay. This is by Ms. Rasmussen, and the date on it is December 18, 2020. And if
20 you could just scroll down on this first page, please, Mr. Trofimuk. And that is good
21 right -- oh, sorry. Just so I can see the top of -- right there. Thank you. And at the
22 beginning of this piece, you can see Ms. Rasmussen is discussing the many strategies
23 that have been proposed for controlling the global Coronavirus. And she continues, if
24 you move down there, that herd immunity through natural infection may be the most
25 deeply flawed and outright dangerous. She continues, "In early October, three
26 scientists issued a document called the Great Barrington Declaration calling for focus
27 protection of the vulnerable, while encouraging young, healthy people to otherwise
28 resume their normal lives. The justification given for this approach is that the whole
29 community would benefit from the protection conferred upon the more vulnerable by
30 others than had built up herd immunity." Now, you said you knew who Ms. -- or I
31 think you recognize the name, Angela Rasmussen. Do you know specifically what she
32 does, what her expertise is, Sir?
33 A I think she's a virologist.
34
35 Q And I've read to you what Ms. Rasmussen said at the begging of this article. And so
36 it's fair to say that obviously there were -- I think we already discussed this, but that
37 there were people who did not (INDISCERNIBLE) focus protection approach set out
38 in the Great Barrington Declaration. It's fair to say that some people were very
39 antagonist toward it, as Ms. Rasmussen is in this piece. Is that -- is that fair to say?
40 A Well, now she mischaracterizes it. As we've discussed, that the goal is focus
41 protection of the vulnerable. The resumption of normal lives is not primarily just

1 because it will speed up the -- that (INDISCERNIBLE) immunity. It's primarily the
2 lockdowns themselves are harmful to young people, like we discussed, the harms to
3 young people, the children from closing schools.
4
5 Q All right. And just moving down to the bottom, still on that lift-hand column just
6 beginning the sentence "these unfortunate development" -- do you see that, Sir?
7 A Yeah.
8
9 Q And it says "these unfortunate developments in the pandemic were sponsored based
10 on a fundamental misunderstanding of herd immunity and how it is achieved. Herd
11 immunity has never been achieved through naturally inquired infections and is only
12 possible at global populations scale through mass immunization." That's what
13 Ms. Rasmussen said in December of 2020. Do you agree with that statement, Sir?
14 A No. She misunderstands basic epidemiology in that statement. In particular, the other
15 Coronaviruses have herd immunity without vaccinations. And her immunity is not --
16 is not a one-and-done-thing, that's the way she concedes it. Herd immunity --
17 population at large for the Coronaviruses, go in and out of herd immunity as -- as
18 times goes on on -- the key thing, as what's happened, is what we've learned is that
19 natural infection and vaccination provide protection against the disease. In fact,
20 natural infection and recovery provides stronger protection against the
21 (INDISCERNIBLE) disease and also against subsequent reinfection, at least prior to
22 Omicron, than the vaccines do. Her statement that only vaccination contributes to
23 herd immunity is just false. In fact, I would go further. I would say that given that we
24 now know that transmission is not -- that the protection against transmission by the
25 vaccine (INDISCERNIBLE) very, very rapidly, vaccines by themselves could never
26 have produced herd immunity and never will, unless we have better vaccines. I'm
27 sorry, Mr. Parker, I think you're muted.
28
29 Q So sorry, again. Thank you, Dr. Bhattacharya. The first sentence is the scientific
30 evidence is overwhelming, that there is lasting immunity after SARS-CoV-2, infection
31 among people who recover from the infection. Sir, you're not a biologist,
32 immunologist, or hierologist, right?
33 A I -- I mean, I studied biology, I've studied immunology, and I've studied virology all in
34 medical school, and then subsequently some of my research.
35
36 Q And here you cite an immunologist, right?
37 A What is this from? Is this from my report?
38
39 Q It's from your report, Sir. It's your primary report in your --
40 A Oh, yeah, yeah. Okay.
41

1 Q And you're citing the immunologist Nicole Omagarth (phonetic)?
2 A Nicole, yeah.
3
4 Q And her colleagues? Yeah. And it thrusts -- it talks about thrusting immunologists
5 into the spotlight, right?
6 A Could you scroll down so I can see the whole thing? Where does it say the spotlight?
7 I don't see it.
8
9 Q You know what? I can't find it right now, Sir, so we'll leave that. It might be just in
10 my notes. So let's move on. I've just looked at the various footnotes, here, Sir, and I
11 don't want to go through them all. 144, 145, 146. They are all citing immunologists,
12 Sir. As far as I can tell, when I look at the list of authors, none of them are citing
13 health economists. Would you agree with that, Sir?
14 A I mean, I think the very best evidence on natural immunity has come from
15 (INDISCERNIBLE) studies. Place like Qatar, Sweden, Northern California. These
16 are people who do (INDISCERNIBLE) work, cohort studies that look at patients who
17 have had -- there's a study from Italy that look at patients that had COVID infection in
18 the -- early in the pandemic, and then they track based off of using medical records to
19 see if they get reinfected. Reinfection rates are very, very, very low. Something along
20 the order of .51 percent. Again, before Omicron. I think Omicron has changed that
21 situation. The infection rate is a little bit higher. The -- the literature I cite here was I
22 think it was from 2020 when I wrote this, was already strong, that there was -- that
23 there was protection against reinfection from -- from that -- from -- from COVID
24 recovery. And, yeah, I cited a immunologist, but the -- but the very best evidence is
25 actually from not from immunologist; the very best evidence is from that immunology
26 (INDISCERNIBLE). I'm sorry, Mr. Parker, you're muted.
27
28 Q And, Dr. Bhattacharya, you've read Dr. Kindrachuk's report, I think his assessment of
29 what you say about herd immunity, right?
30 A I don't remember what he said about that.
31
32 Q He says that -- I think it's fair to say that both and he Dr. Hinshaw in their reports and
33 affidavits have assessed your suggestion of Alberta taking a focus protection approach
34 and have suggested that Alberta would have had very much different and very much
35 higher mortality if they had taken such an approach. Do you remember reading that
36 evidence, Sir?
37 A I mean, don't think Dr. Hinshaw agrees with my assessment, if that's what you're
38 asking. I don't remember specifically in saying that, but at that -- I mean, I'll take your
39 word for it. I don't -- I don't -- I think he's wrong. I think that Alberta would have had
40 less damage from the lockdowns and would have had similar mortality from COVID
41 based on the -- the date that we've talked about from the -- the -- the date suggesting

1 that the lockdown effectiveness on mortality was not particularly high.
2
3 Q Which data you're talking about, your own study? Is that what you're looking at,
4 you're basing it on those studies?
5 A No, we discussed -- we discussed on evidence, like, from the Hawkins study and other
6 places that -- that -- that there's no evidence that the lockdown focus strategies were
7 particularly effected at stopping mortality from disease. We also (INDISCERNIBLE)
8 comparing --
9
10 Q Do you know how many Albertans were -- have died from COVID as of July 6, '21,
11 which is when the evidence was filed in this matter?
12 A I don't. I don't have that (INDISCERNIBLE) with me, I believe.
13
14 Q Do you know, roughly, Sir? Do you have -- are you able to put it kind of ballpark?
15 Any idea at all?
16 A I would have to go look.
17
18 Q If I say 2,305, Sir, would you accept that?
19 A If you say so.
20
21 Q Better check, actually, Sir. By the way, the last week the 77,758, you'll be glad to
22 know I was correct on that number. The -- so, yeah, my apologies, Sir. I have got a
23 lots of numbers here I have memorized, and sometimes they come out wrong, so I just
24 want to check this one. But -- oh, I was off by two. 2,307 as of July 6 were the
25 number of -- of people in Alberta that had died from COVID-19. And you're saying
26 your -- your opinion is that Alberta could have in fact had a lower level of fatalities as
27 of that date if Alberta had taken a focussed protection approach following the Great
28 Barrington Declaration suggestions and the approach it has taken; is that right?
29 A I'm saying that the empirical evidence, such has -- has been reviewed in that Hawkins
30 Study we discussed, suggested that you would have saved maybe .2 percent of lives on
31 COVID. And that that is an incomplete picture of the mortality effects of the
32 lockdowns because they also themselves directly led to harms to the health of the
33 population. And I think we've discussed -- I know in my report I think I discussed
34 some of the evidence that the long-term harm actually held in children, for instance,
35 from closing schools. That could have been avoided. The (INDISCERNIBLE) of
36 policies, if it would have been replaced with focus protection policies, would have had
37 almost the same level of COVID-19 morbidity mortality, but with substantially less
38 harms from the lockdowns.
39
40 Q And you'll -- you'll acknowledge that there are others that disagree with that
41 assessment, obviously?

1 A Yeah.
2
3 MR. PARKER: Justice Romaine, I'm -- I'm moving to a couple
4 other sections that I hope to be able to wrap up within an hour. I was hoping to be
5 finished this morning, but I'm not going to get there. But I'm anticipating an hour left.
6 I'm wondering if it would be a good time to take -- well, just on that note, how would you
7 like to proceed?
8
9 THE COURT: Okay. Thank you. Let's take the hour long
10 lunch break, then. Okay. Thank you.
11
12 MR. PARKER: Thank you.
13
14
15 PROCEEDINGS ADJOURNED UNTIL 1:00 PM
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2
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5 the 14 day of February, 2022, and that I was the court official in charge of the
6 sound-recording machine during the proceedings.
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