AM: If infections are on the rise in Europe but the number of deaths is still relatively low, are we at the beginning of a second wave?
ML Well, what we know is that this virus has quite a long way to go. I mean if we look at the proportion of the population that actually still remains susceptible only about 10 percent of the world’s population has been exposed and has had some evidence of infection. Which means that most people remain susceptible. We are seeing some worrying trends across Europe in a number of countries where we’re seeing an increase in testing - increase in case numbers which is partly due to increased testing, it’s partly due to improved surveillance but it’s definitely heading in the wrong direction. And so what we really need to focus on is bringing transmission under control and we do have the tools that could put that in place.

AM: The good news I suppose at the moment is that death rates still look relatively low and looking across Europe there is one country which has behaved very differently from the rest, has not imposed masks on people, has had a much looser lockdown, virtually no lockdown at all, has kept bars and restaurants open and so forth and that country is Sweden. And they’re now doing quite well. Is it possible that the rest of us have got it wrong?
MK: Well, we do - we have a number of tools that work and we know that many countries are implementing an all of government, all of society approach in different ways. And what is working in many countries is this testing, making sure that you find, you isolate and you care for cases based on the severity of their symptoms, making sure that you do comprehensive contact tracing. These are the things that break transmission, break
chains of transmission. Other types of measures such as stay at home measures you know have helped in some countries because countries needed some time to build up their public health infrastructure, get their hospitals ready, build up their testing capacity and so some countries have implemented these tools in different ways. You mention mortality and you look at the differences in mortality across countries and you look at what’s happening with mortality in Europe, and I think there’s a number of reasons why we’re seeing a lower number of deaths, particularly across Europe. First, is that most of the surveillance that begins at the beginning of a pandemic focuses on severe infections and this is typical because these are the people who show up at health care. And so when testing expands and surveillance expands you find people on the more mild end of the spectrum. Second, we’re much better at caring for patients. We’re nine months into this pandemic and we know a lot more than we did in the beginning so with earlier case detection people can be cared for quicker and this means earlier oxygen support, repertory support and now we have Dexamethasone for severely and critically ill patients. Next is that our testing strategy is very, very different than it was in the beginning. Where many countries were really overwhelmed, now we have much better testing across the world and so more people are being tested.

AM: So this is essentially the same virus so far as you can tell, and therefore as lethal as it was before?
MK: Yes. And as I said we see difference in changes in mortality because our testing is different. We looking differently now. And so there are reasons for that. But the infection fatality ratio, which has been estimated to be zero point six percent, is not small and if you think about a virus that can circulate, that has the ability to circulate a morality or an infection fatality ratio of .6% is not low. And if we look at that infection fatality rate which is the number of deaths over the number of infections or estimated infections, it varies drastically by age and it increases by age. So we need to
do everything we can to not only prevent deaths, and there’s a lot that we can do there, we still need to prevent infections.

AM: Here it’s absolutely clear the government wants to keep schools open, keep colleges open over the winter at almost all costs. What kind of restrictions must the rest of us look forward to to enable that to happen safely?

MK: Well that’s a good question because schools don’t operate in isolation. Schools are part of communities and so what we absolutely must do is bring transmission under control in the communities. And there’s a number of things that we can do. This is all the testing, isolation, caring, contact tracing. It also has to do with making good choices about what we do every day in minimising our exposure through the course of our day. Taking a risk based approach in all of the actions that we do.

AM: So does that mean for instance closing pubs and restaurants again?

MK: Well, a lot of this has to do with what does the data look like in the area where these schools operate. So we need strong national plans everywhere but they need to be implemented at the most local level.

AM: Do you think children should be exempt from some of these restrictions?

MK: Well, we’re understanding a little bit more about how this virus impacts children. There’s three things that we look at. One is severity, the disease that is caused in children, luckily the majority of children who are infected with Covid-19 or with the SARS Covid-2 virus will have mild disease or asymptomatic infection, but that’s not universal. We do know and we have seen that some children have had severe disease and some children have died. The other thing we look at is the extent of infection and so these are measured by the epidemiology studies that I mentioned. Children can be infected. We do see some differences in
prevalence by age with the youngest age group having the lowest level of zero prevalence and the adolescents, the teenagers having the same type of zero prevalence as adults. And then lastly we look at transmission and we know that children can transmit and we’ve known that since the early days in this pandemic. Children can transmit the virus. A lot of it depends on the type of contact patterns that they have and many schools were closed and so the contact patterns changed in the beginning of the pandemic, but as schools open and as societies open we do know that children can transmit. It appears to be the older children can transmit more than the youngest children.

Ends