Ladies and gentlemen,

I am pleased to have been invited today to this important conference to talk about influenza and influenza vaccines, and where we are from a public health perspective.

It feels as if I am back home!

Exactly 20 years ago, I had the honour to address some of you in Courchevel during the 2nd Options for the Control of Influenza meeting in my former capacity as Head of the National Influenza Centre in the Netherlands.

Thank you for allowing me to speak to you again.

What is wonderful to see is that some of the scientists of that time are still around, like Arnold Monto, David Fedson, and so on...

Back then in 1992, I had three dreams regarding influenza;

1. Good surveillance;
2. Good vaccination coverage, and;
3. Good vaccines.

Later, I left the scene to deal with all infectious diseases and not only influenza. So I am wondering what happened with the dreams I had at that time, and would like to, together with you, look back at the evidence.

But first since I am now speaking in my capacity as Director of ECDC, I would like to briefly explain our mandate and role with those of you who are not so familiar with ECDC.

**Role and mission of ECDC**

As a result of a European Commission proposal, the Council of the European Union and the European Parliament established a new European CDC in 2004. And in 2005 we became operational in Stockholm, Sweden.

But we are different in a number of ways from the US CDC in Atlanta.
As well as being smaller, ECDC does not have laboratories and we only focus on infectious diseases.

The main mission of ECDC is to identify threats, to assess them and communicate about them.

Our mission

- **Identify, assess and communicate** current and emerging threats to human health from communicable diseases.
- In the case of other outbreaks of illness of **unknown origin**, which may spread within or to the Community, the Centre shall act on its own initiative until the source of the outbreak is known.
- In the case of an outbreak which clearly is **not caused by a communicable disease**, the Centre shall act only in cooperation with the competent authority upon request from that authority.
Core Functions at ECDC

This is the room where all information comes together; at our round table meetings, that take place every day at 11:30, in the Emergency Operations Centre.

We evaluate the epidemiological data we receive from our Member States and global partners. And during the influenza A/H1N1 pandemic in 2009, a 24/7 service was set up here.

Core functions of ECDC

Every working day at 11:30, a roundtable meeting in ECDC’s Emergency Operations Centre assesses threats, official alerts and epidemic intelligence for around the EU and the world.

• Disease surveillance
• Epidemic intelligence
• Risk assessment
• Scientific advice and guidance
• Response support
• Preparedness and capacity strengthening
• Training and technical assistance
• Communication

In the EU, public health is a shared competence and ECDC’s role is primarily in surveillance and risk assessment.

We also have an advisory role in risk management, which is first and foremost a Member State competence coordinated by the Commission.

Providing guidance is also something we do, and last week, we published a guidance on seasonal influenza vaccination for pregnant women and for children. ECDC is the hub of different networks of experts across the EU and we work together on all the technical aspects of surveillance and response to control multinational outbreaks.

How does ECDC interact with industry?

I should also explain how ECDC interacts with industry. In two words; positively, but carefully.

ECDC has to be especially careful, even-handed, evidence-based and transparent in its relationship with industry.

And one of my first acts as newly appointed Director of ECDC was to put all our influenza team’s Declarations of Interest on our web-site, in addition to my own.

And all ECDC’s meetings with industry are matters of public record.
How does ECDC interact with industry?

Recently, we had our first visit from the EFPIA Executive Director accompanied by the European Vaccine Manufacturers’ Executive Director. And early next year, ECDC will organise a third industry meeting on flu vaccines.

They are taking the trouble to come all the way to Stockholm - that is why I welcomed this opportunity to return the compliment and to speak to you today.

These are people who are particularly vulnerable in bigger cities; they may also have lost their jobs, and their contacts with their families and loved ones.

My three dreams regarding influenza

So back to my three dreams;

1. Sustaining and Improving surveillance

2. Improving Vaccination Coverage

3. And producing Better vaccines

When it comes to my first dream, regarding good European-wide surveillance, much has happened in 20 years. Both EU Member states and the ECDC are delivering.

ECDC has provided a safe and permanent platform for the previous old EISS (European Influenza Surveillance System) network.

And I dare say, Europe has the best surveillance of any global region – though the pandemic revealed some significant vulnerabilities, especially in hospital surveillance and serosurveillance that countries need to address.

European surveillance data is also timely thanks to many dedicated surveillance experts across Europe.
And with the data we receive from the Member States, ECDC publishes every week during the influenza season a surveillance overview to indicate the current influenza situation and ongoing trends in Europe.

The Weekly Influenza Surveillance Overview, we call it the WISO, together with the monthly Virological report, provide an excellent and timely picture of the circulating viruses and influenza in primary care and which then feeds into WHO’s global surveillance.

ECDC publications
**Seasonal vaccination coverage in the Netherlands for past 20 years**

Now regarding my dream on improving vaccination coverage;

Twenty years ago I still had to use strong arguments in order to convince the authorities in the Netherlands to recommend vaccination for all older people and for the clinical risk groups. A few years later through surveillance data and scientific argument we were able to convince the authorities at a national level and this is the result.

What you see in the slide, here above, is the seasonal influenza vaccination coverage in the Netherlands for the past 20 years and among those recommended for vaccination.

Our aim in the Netherlands back in the early 1990's was to increase vaccination uptake among the older people, and to do this in an innovative way. You see here a steady increase in the vaccination uptake.
So my dream became reality in the Netherlands and shows that increasing vaccination is indeed ‘doable’.

But what was beyond my dreams at the time was to have a European Policy on Vaccination.

In December 2009 the European Council adopted the first ever vaccine coverage policy – for any vaccine.
A policy that included a recommendation for vaccination coverage of 75% and required countries to measure coverage and to have national action plans.

This same document required ECDC to ‘…..assist the Member States in providing scientific expertise on seasonal influenza vaccination’ and to ‘Give definitions of ‘older age groups’ and of ‘risk groups’.

Reported seasonal influenza vaccination coverage in older population in EU/EEA countries

This is what we see at the European level.

The slide illustrates reported seasonal influenza vaccination coverage rates in older population (over 55 years) in the EU and EEA countries (VENICE data).

23 countries provided vaccination coverage rates for influenza season 2010/11. You see that the range in vaccination coverage vary from 1% in Estonia to 82% in Netherlands.

Currently, only the Netherlands and the UK (almost) reach the EU target for vaccination coverage of 75% by influenza season 2014-15. That is the horizontal red line here.

In four countries, Poland, Lithuania, Latvia, Estonia, the reported vaccination coverage in older people is 10% or less.

What we see is poor coverage in many countries, an eighty fold differential in immunisation of older people, and there has also been a small decline of vaccination coverage since 2009 in some countries.
In addition, there are at least seven countries that are unable to supply data. So there is still much work to be done!
But I do believe that through good innovative information campaigns, increasing vaccination uptake is indeed ‘doable’.

**ECDC support**

**What does ECDC offer in terms of support?**

- Surveillance data and analysis
- Information and guidance on risk groups
- Training of trainers in immunisation
- Country specific immunisation policy, coverage and recent trends – VENICE
- Survey with the Commission – 2012–13
- Estimated burden of disease and the likely impact of increasing use of immunisation
- Influenza tool kit – posters leaflets
- Estimates of vaccine effectiveness – I-MOVE
- Country visits to assist Member States

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So what does ECDC do to support countries and the European Commission to improve vaccine coverage?

- In order to have better scientific information on risk groups, ECDC offers surveillance data and analysis;
- We offer information and guidance on risk groups;
- Training of trainers in influenza immunisation (the annual course took place at the beginning of this week at ECDC, with 19 countries represented!);
- An annual VENICE survey of country specific data immunisation policy, coverage and recent trends;
- Assisting in the Commission’s 2013 report of progress with the Recommendation;
- Estimates of burden of disease, impact of increasing use of immunisation and vaccine effectiveness;
- An Influenza tool kit of advocacy materials;
- And finally, country visits to assist member states if requested.

**Good and effective influenza vaccines**

Now my third dream was about better vaccines.
Sustainable influenza vaccination programmes and confidence of the citizens, can only work if there are safe and effective vaccines.

In order for us to be able to support the European-wide recommendation for vaccination coverage, it is crucial to have a ‘product’ that works.

I would like to share with you some data from the I-MOVE programme on vaccine effectiveness.

Vaccine effectiveness of 2010–2011 seasonal vaccine in the EU

What you saw on the previous slide was data for the season 2010-2011.
You see here that vaccine effectiveness was in the 50% - 60% range in those we are aiming to immunise.

Not very encouraging.

**Vaccine effectiveness of 2011–12 seasonal vaccine in the EU**

![Graph showing vaccine effectiveness of 2011-12 seasonal vaccine in the EU. The graph indicates that vaccine effectiveness was in the 50% - 60% range in those we are aiming to immunise.](image)

And last year, 2011-2012, was even worse – with a vaccine effectiveness of 30% or less in those we are aiming to immunise!

Now, I do realise that it can be complicated to measure vaccine effectiveness.

**Publications on vaccine effectiveness**

![Publications on vaccine effectiveness](image)
Nevertheless, publication after publication by a variety of authors from different countries come to the same conclusions, and these findings should be a ‘wake up call’ for us. With these levels of effectiveness, it is truly difficult for me to promote the European Council recommendation for vaccination uptake.

So why:
Do we still have vaccines that have some years had the lowest effectiveness of all our current vaccines?
Are we still using such old technology?
Do we have to put up with vaccines that work so poorly in those they are most intended for?
Do we still have to immunise annually?
So I am asking you today for better vaccines.

Take home message
So if we go back again to the three dreams that I had:
1. Good surveillance;
2. Good vaccination coverage, and;
3. Good vaccines.
Conclusion

Vaccines

Surveillance

Coverage

A lot has indeed already been done already, and regarding better surveillance and vaccination coverage, my dream has become reality.

But it is with pain in my heart that I conclude that we have not seen much progress on better vaccines for the past 20 years.

Sometimes, I even get the impression that some people and institutions want to avoid the subject of vaccine effectiveness.

But we need to be transparent about this issue, to do otherwise will be become counter-productive.

So my take-home message for you today is:

Increased vaccination coverage is only sustainable if we have better vaccines.

We can only promote vaccination if we have good, effective vaccines.

From a public health perspective, it is important that people are vaccinated, but it needs to be with a vaccine that works.

Thank you for your attention.