

Webinar: Europe's Path to Eliminating Cervical Cancer

Brussels, February 5, 2021

International Agency for Research on Cancer



Europe's response to the global strategy: 5 priorities for action

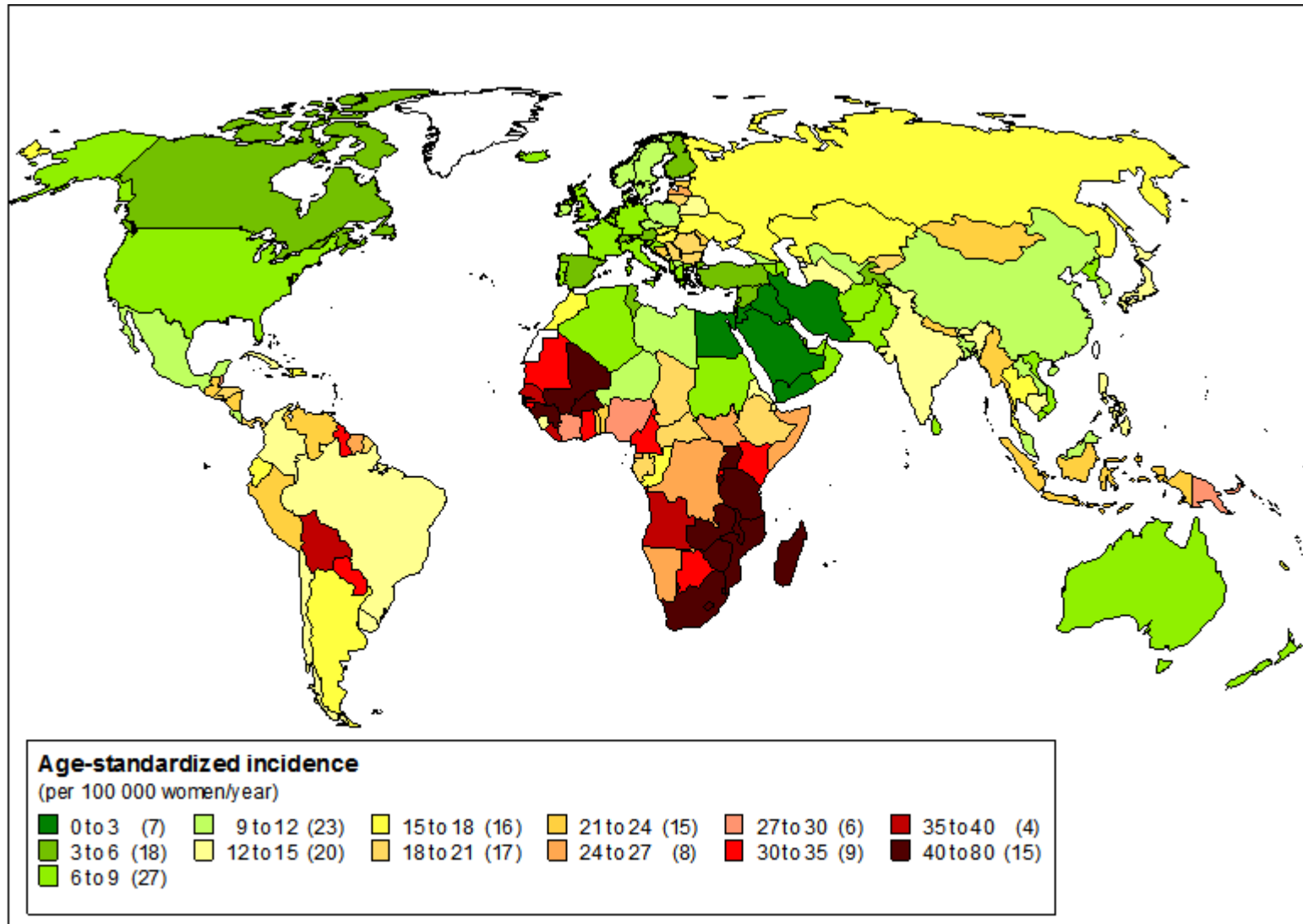
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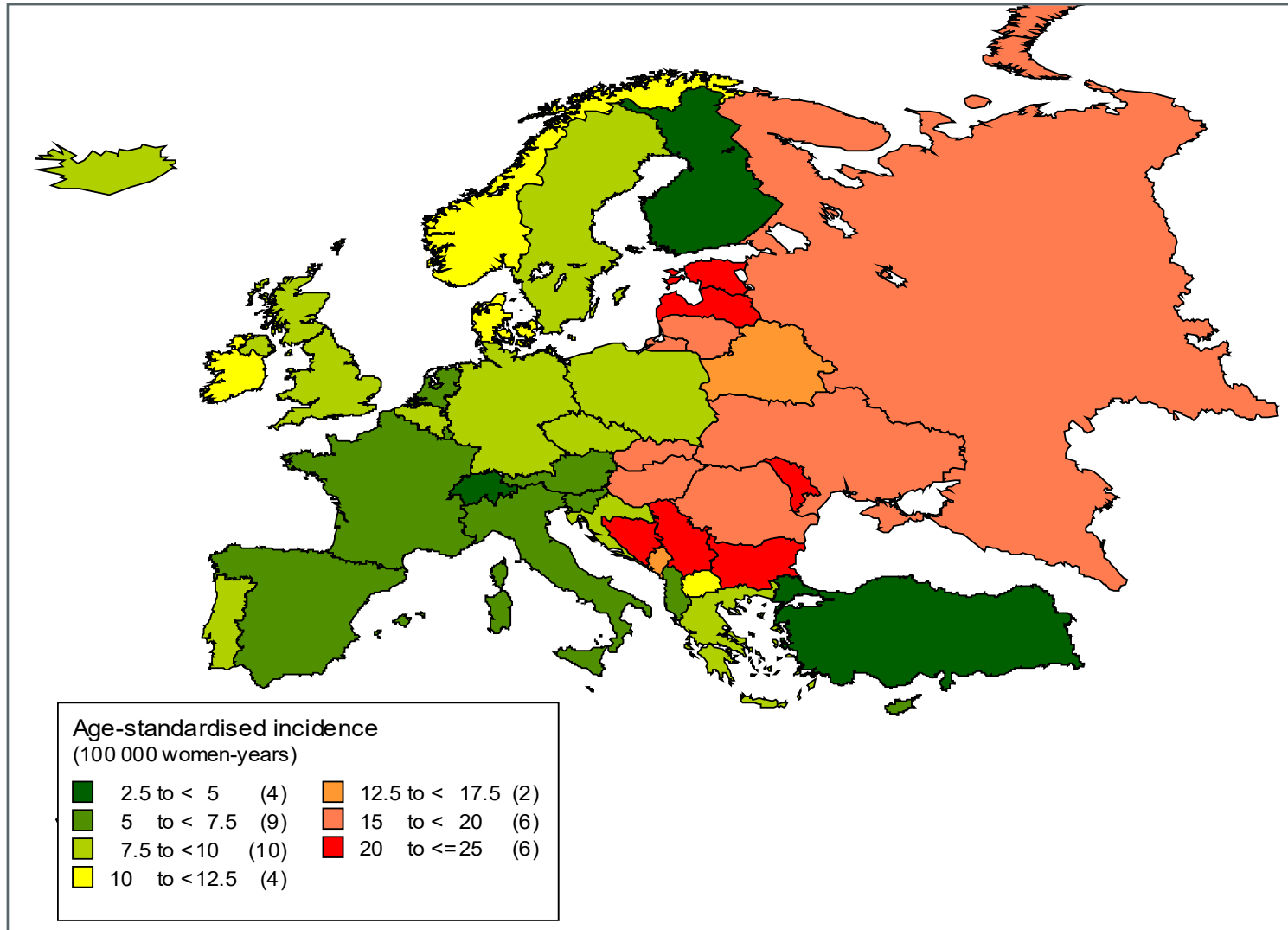
Contents

- **Current burden of cervical cancer in EU**
- **5 priorities:**
 - **Implement evidence-based recommendations**
 - **Optimise screening coverage & tackle inequalities**
 - **Optimise coverage of HPV vaccination**
 - **Organize and integrate 1ary and 2ary prevention in agreement with EU guidelines, including monitoring of quality & impact**
 - **Update the current EU recommendations**

Incidence of cervical cancer (IARC, 2018)

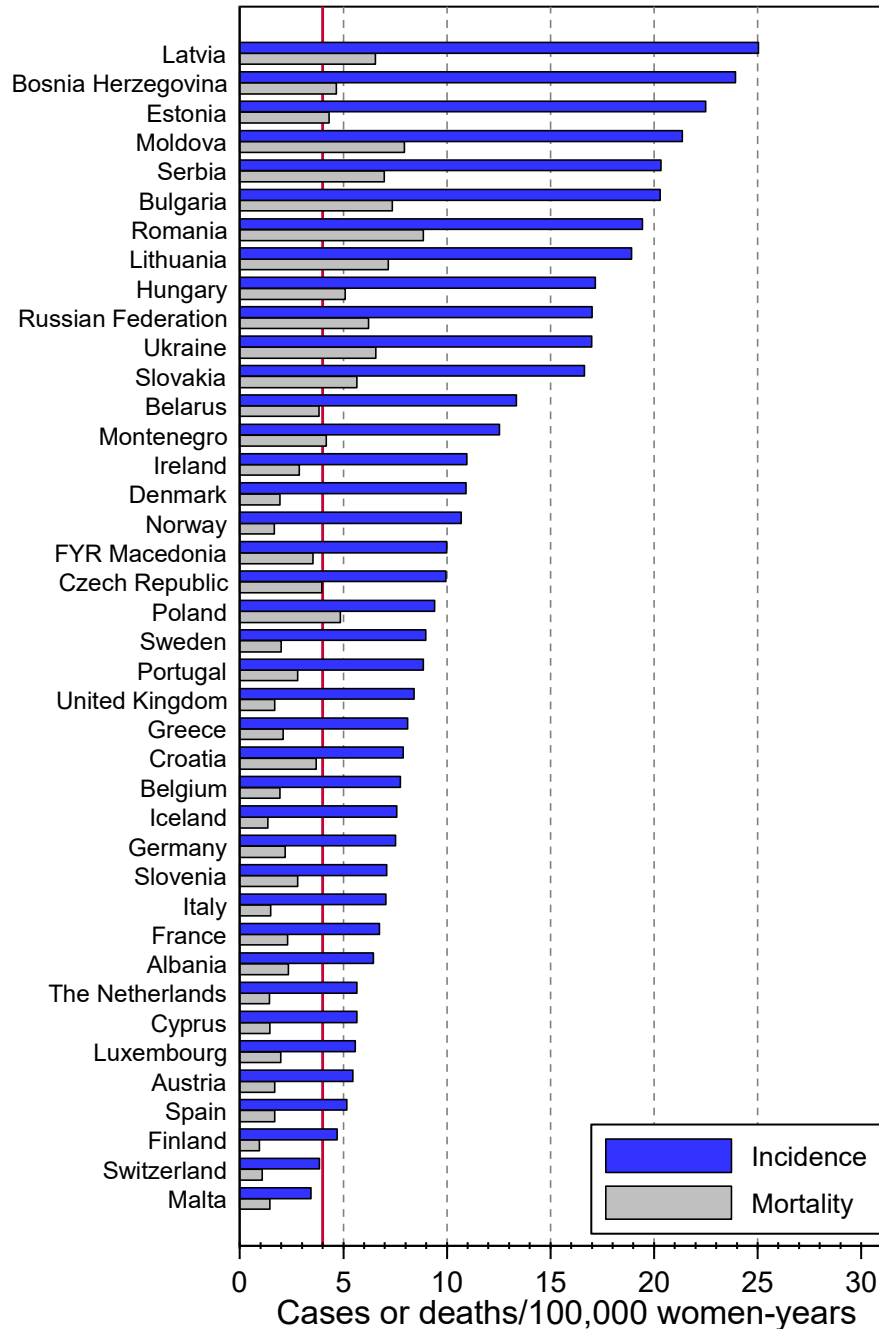


Incidence cervical cancer in Europe (2018)



Burden cervical cancer in EU (2018)

WHO elimination target:
ASIR < 4/100,00
=> CC a very rare disease



Burden of cervical cancer in (2018)

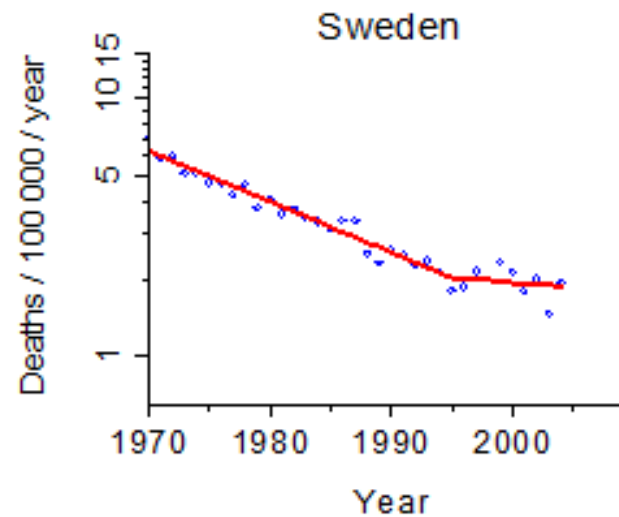
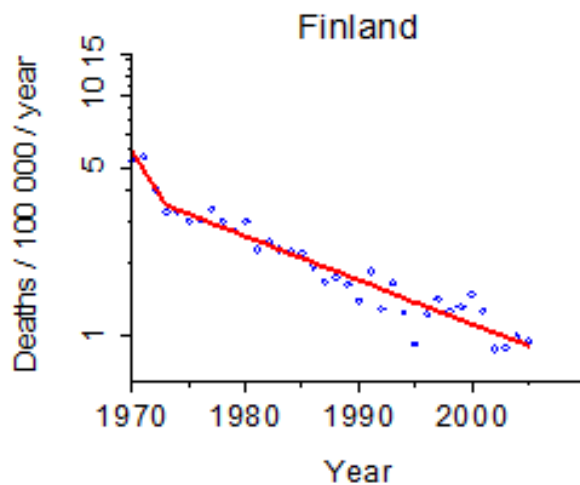
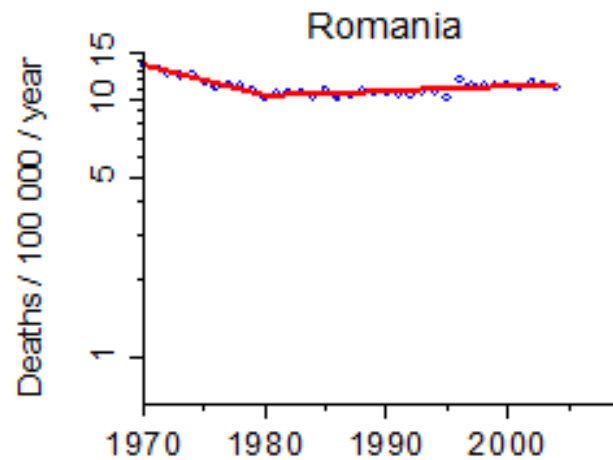
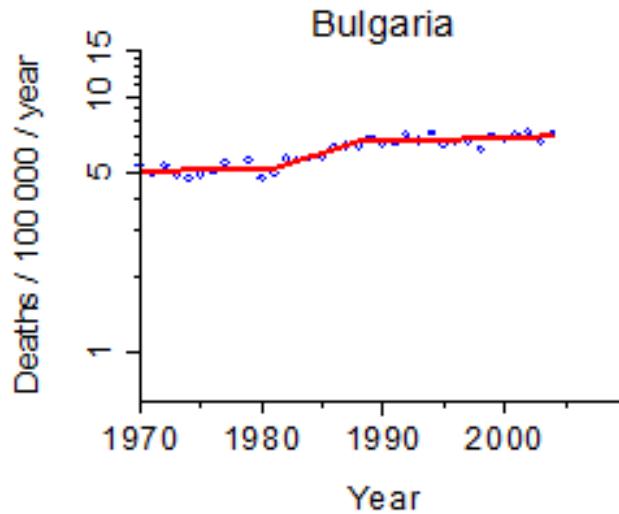
- **EU: 33,000 cases, 15,000 deaths**
- **European continent: 61,000 cases; 26,000 deaths**
- **Incidence range: highest in Latvia (25.0/10⁵) – lowest in Malta: 3.5/10⁵)**
- **Incidence & mortality: very high in Eastern EU**

	Cases			Deaths		
	Incidence *	Rank (all ages)	Rank (15-44y)	Mortality *	Rank (all ages)	Rank (15-44y)
C-Eastern Europe	16.0	5	2	6.1	8	1
Northern Europe	9.5	13	3	2.1	17	2
Southern Europe	7.8	13	3	2.2	15	2
Western Europe	6.8	15	4	2.1	16	3

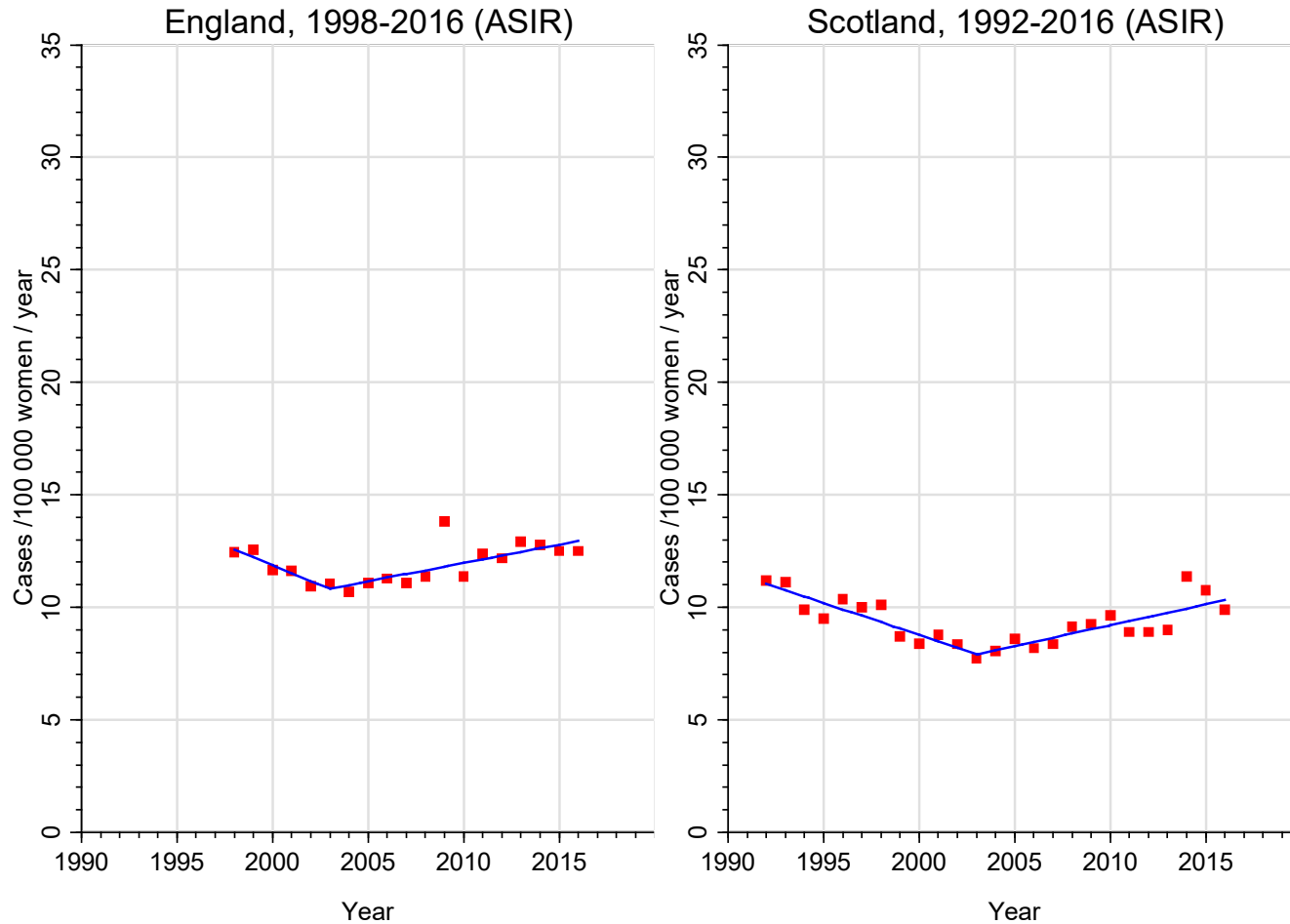
* World age-standardized: per 100,000/year

6 M. Arbyn, E. Weiderpass, L. Bruni, S.S. de, M. Saraiya, J. Ferlay, F. Bray, Estimates of incidence and mortality of cervical cancer in 2018: a worldwide analysis, Lancet Global Health 8(2) (2020) e191-e120.

Impact of cytology screening on mortality from cervical cancer



Recent increase in cervical cancer incidence trends



1. Evidence based screening policies

- **Strong evidence: HPV-based screening more effective than cytology to reduce future CIN3+, cancer^{1,2} => HPV screening is replacing cytology**
- **Co-testing more effective but more expensive (EU 2015 guidelines discourage co-testing)**
- **hrHPV infections are frequent in young women but these infection usually clear**
- **Recommended policy:**
 - **Start HPV testing at age 30-35y up to 60-64y, 5y intervals**
 - **Age group 25-29/34: cytology (3 year interval)**

1. Arbyn, Vaccine 2012

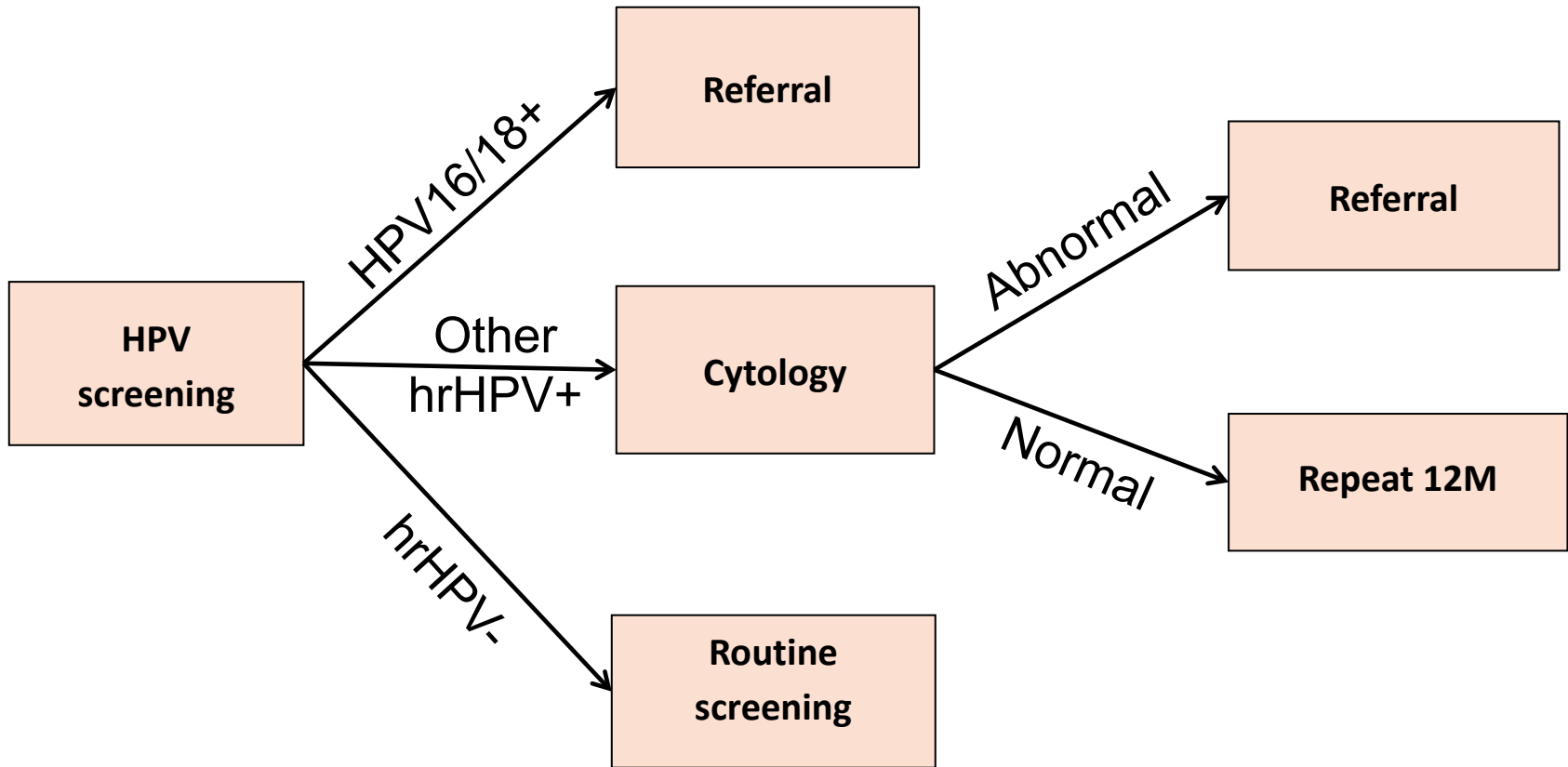
2. Ronco, Lancet 2014

Management of HPV+ women

- **HPV+ women need further triage**
 - **Cytology on the screening specimen**
 - If abnormal cytology: referral to gynaecologist
 - If cytology is normal: women are retested with cytology or HPV test ~12 months later
 - **Several alternatives: including HPV genotyping & other markers**
 - **Intensive research is ongoing on triage markers & algorithms**

Triage algorithms for hrHPV+ (2)

USA



2. Optimising screening coverage: reaching non responders (Arbyn, BMJ 2018)

- **HPV DNA testing on self-samples** as accurate as on clinician collected samples (condition: use validated HPV assays, based on PCR)
- **Randomised evidence: sending self-samplers to women is more effective than sending reminder letters; important to reach 70% screening coverage**
- **Response highly variable ~ local setting**
- **Pilot studies needed to assess local response before general roll-out of a strategy with self-sampling**
- **Only in organised setting**
- **Safe in times of COVID-19**

3. Maximise HPV vaccination coverage

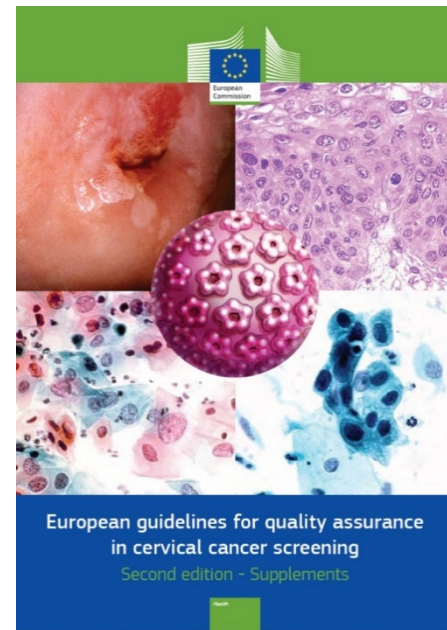
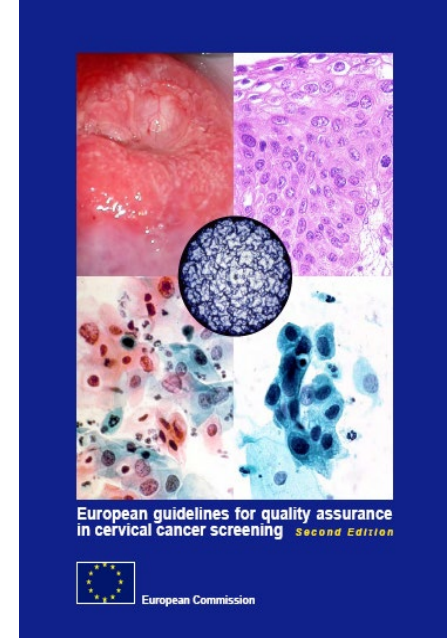
- **Strong contrasts in HPV vaccination coverage in EU (5-81%, WHO 2018)**
- **Low coverage in countries with high incidence (BU: 5%, RO; ?)**
- **Recommended:**
 - **all member states include HPV in the routine vaccination programmes, preferentially including also boys. WHO goal=90%.**
 - **Implementation research needed to improve participation rates**
- **Transparent communication to increase confidence & tackle fake news spread by anti-vac lobbies**

4. EU recommends organised screening

- **Invitation of the target population**
- **Maximise coverage, avoid too frequent screening**
- **Quality assurance at all levels**
- **Monitoring: organised & opportunistic activity**
 - **Quality and impact of screening**
 - **Action towards improvement**
- **Allows for risk-based management**
 - **Linkage screening with vaccination registries**
 - ⇒ **effects of vaccination**
 - ⇒ **differentiated screening policies: start screening later, longer intervals, more specific screening/triage**

5. Need for 3rd edition of EU guidelines for cervical cancer prevention

- 2nd ed (2008) pivotal for implementation of organised cytology-based screening with HPV testing to triage women with minor abnormal cytology, and surveillance after treatment of precancer
- Suppl 2nd ed (2015) pivotal for the introduction of HPV-based screening
- Need for 3rd ed: integrated HPV vaccination & screening with the purpose to eliminate CC as a public health problem





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**Thank you
for your attention**



Arbyn, et al, The European response to the WHO call to eliminate cervical cancer as a public health problem, International Journal of Cancer 2021; 148: 277-84.