



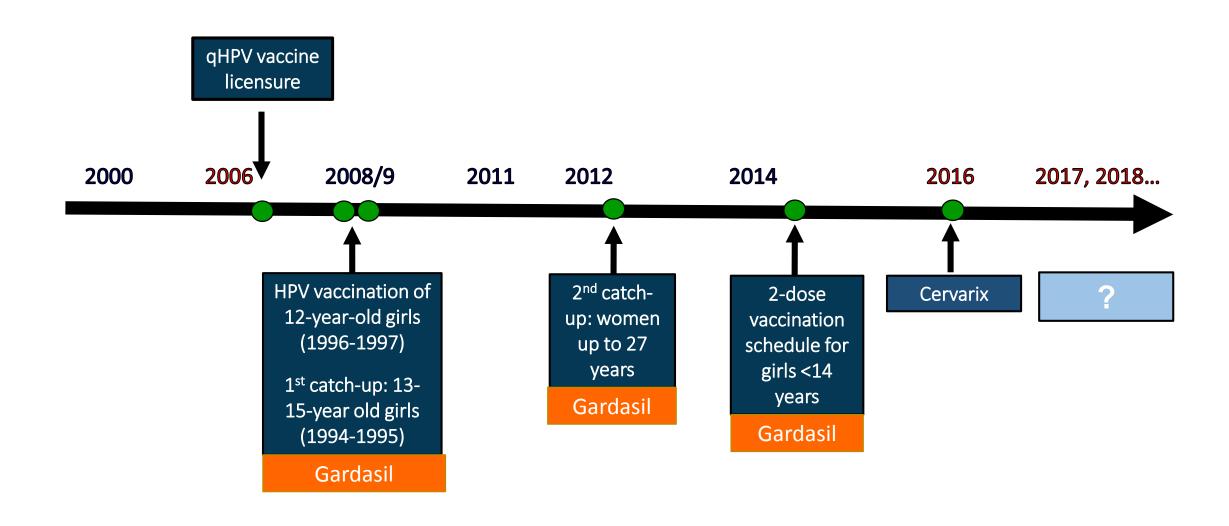
Progress achieved – real world impact from a Danish perspective

Susanne Krüger Kjær Professor, MD, DMSc Danish Cancer Society Research Center / and Dept. of Gynecology, Rigshospitalet

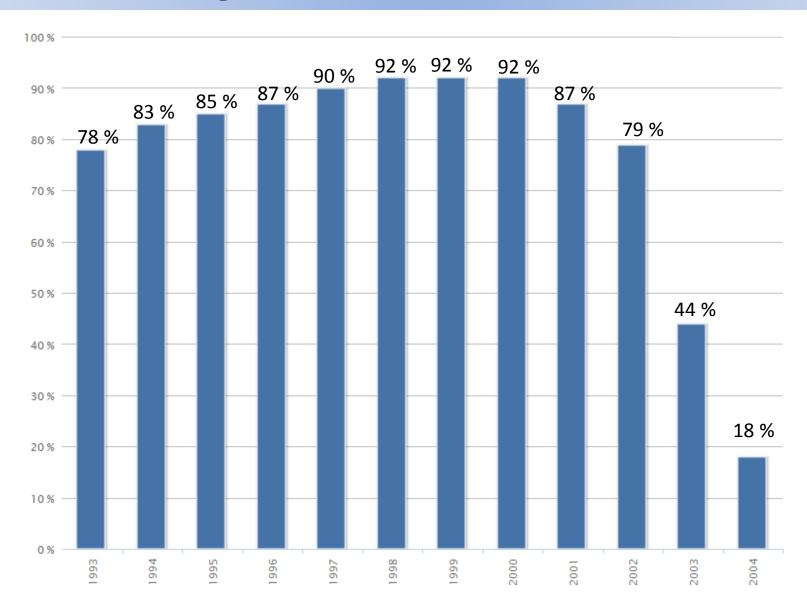
Disclosures

Lecture fees, advisory board fees from Merck and Sanofi Pasteur MSD, and unrestricted research grants through my institution from Merck

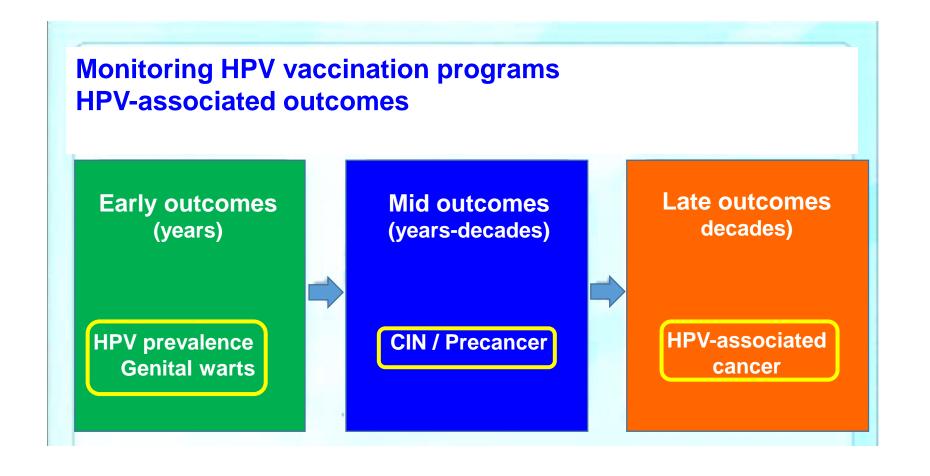
HPV vaccination in Denmark



HPV vaccination coverage in Denmark

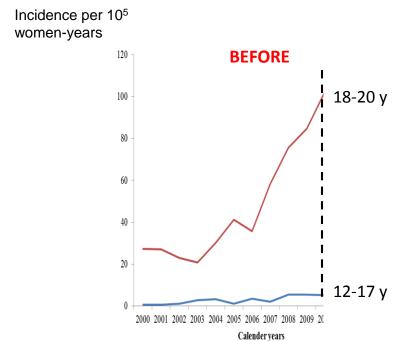


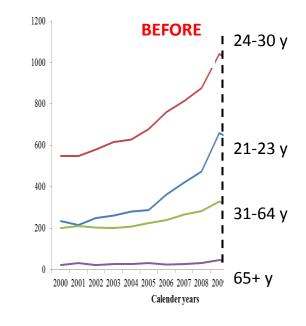
Real world <u>Impact</u> and <u>Effectiveness</u>



Impact in population.....

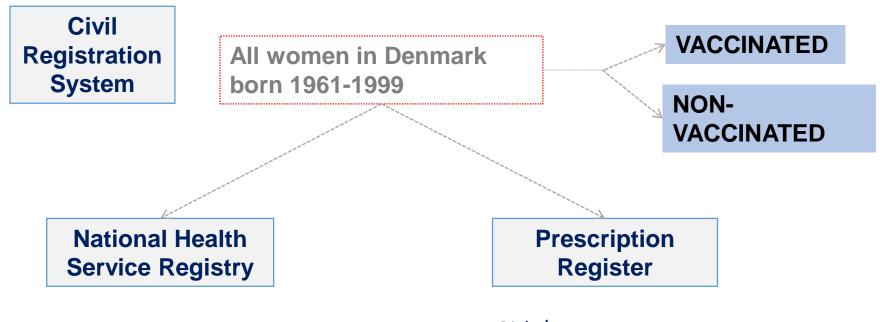
Incidence of CIN 2+ before and after start of HPV vaccination in Denmark





Effectiveness in population.....

Assessment of HPV vaccination status



at no cost in the children's vaccination program or catch-up programs (no. of doses and dates)

Girls HPV vaccinated

Girls/women HPV vaccinated outside the vaccination program (no. of doses and dates)

Assessing occurrence of genital warts/cervical lesions

INFORMATION on genital warts

 Information on all prescriptions on topical medicine for GWs (<u>Podyphyllotoxin</u>)

Vaccinated

All women in the birth cohorts 1985-1999

Non-vaccinated

Prescription Register

National Patient Register

 Information on all admissions for GWs to hospitals and all GWs out-patient visits

INFORMATION on <u>cervical</u> <u>lesions</u>

National Pathology Data Bank

Risk for Genital Warts in Denmark

Risk among HPV-vaccinated girls vs unvaccinated girls, stratified by birth cohort, Oct 2006 - May 2012

(Cox proportional hazard analysis)

Vaccination Coverage	Birth Cohort	Hazard Ratio	(OE9/ CI)	D.Value
			(95% CI)	P Value
14 %	1989–1990	0.62	(0.50–0.76)	< .001
27 %	1991–1992	0.25	(0.19–0.32)	< .001
88 %	1993–1994	0.22	(0.15–0.33)	< .001
90 %	1995–1996	0.12	(0.04–0.36)	< .001
87 %	1997–1999	-		

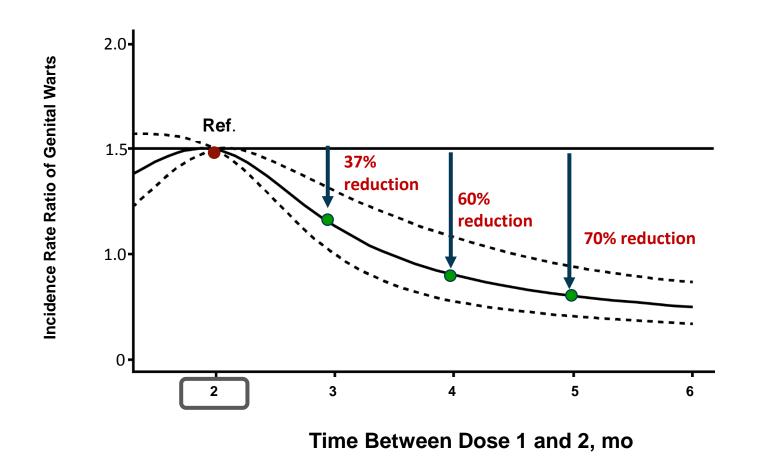
Risk for Cervical Lesions in Denmark

.... Risk of <u>cervical abnormalities</u> among HPV vaccinated girls versus unvaccinated girls stratified by birth cohort

(Cox proportional hazard analysis)

		Type of Cervical Lesio				
Manimatian	atypia+		pia+	CIN2 / CIN3		
Vaccination Coverage	Birth Cohort	Hazard Ratio	<i>P</i> Value	Hazard Ratio	P Value	
14 %	1989-90	0.75	< 0.001	0.88	0.32	
27 %	1991-92	0.46	< 0.001	0.56	0.005	
88 %	1993-94	0.40	< 0.001	0.27	0.005	
90 %	1995-96	0.43	0.08	-		
87 %	1997-99	-		-		

Risk of genital warts after 2 Doses of qHPV with varying intervals



Thank you for the attention!