Screening Program for Cervical Cancer | Sask cancer AGENCY

Health-Care Provider Resources

FAQs and Decision Points for Initiating and Discontinuing Pap Testing

New start age and frequency of cervical cancer screening

There are three major changes to the screening guidelines:

(1) Start age of screening has been postponed to 25.

(2) Frequency of screening has been decreased to every three years.

(3) HPV reflex testing has been added. See the HPV reflex testing resource for more details.

These changes have been justified by a number of important observations.

Cervical cancer screening in young people can be harmful.

- Screening increases the number of colposcopy referrals and treatment by loop electrosurgical excision procedure (LEEP), which increases the risk of adverse pregnancy outcomes:

Outcome (# of studies)		Cases	Controls	Pooled Relative Risk (95% CI)
Second trimester loss (4)		1.6%	0.4%	1.6%
Preterm birth < 34 weeks (5)		48/1,670 (2.9%)	6,053/267,889 (2.3%)	48/1,670 (2.9%)
Preterm premature rupture of membranes (6)		108/2,102 (5.1%)	7,940/314,891 (2.5%)	108/2,102 (5.1%)
Preterm birth < 37 weeks	vs. no dysplasia (15)	473/5,457 (8.6%)	54,036/1,172,059 (4.6%)	473/5,457 (8.6%)
	vs. dysplasia untreated	109/1,092 (10.0%)	17,696/242,946 (7.2%)	109/1,092 (10.0%)

Adopted from Kyrgiou et al, Cochrane Database Syst Rev 2015 Sep 29;9, and Conner et al, Obstet Gynecol 2014;123 (4); 752-61.

- The greater the depth and number of LEEPs, the higher the risk:

		Preterm Births (%)	Odds ratio for preterm Birth (95% CI)
Depth of LEEP	<12 mm	54/1,022 (5.3%)	1.00 (reference)
	13-15 mm	49/1,118 (4.4%)	0.82 (0.55-1.23)
	16-19 mm	47/650 (7.2%)	1.44 (0.96-2.16)
	>20 mm	72/801 (9.0%)	1.74 (1.21-2.55)
	<10 vs. >10 mm	Not reported	2.61 (1.28-5.34)
Number of LEEPs	2 vs. 0	31/273 (11.4%)	3.78 (2.58-5.53)
	2 vs. 1	Not reported	1.88 (1.27-2.78)

Adopted from Noehr et al, Obstet Gynecol 2009;114(6): 1232-8, and Kyrgiou et al, Lancet 2006;367(9509):489-498.

Cervical cancer screening in young people (age 21-24) has not been shown to reduce cervical cancer risk.

- People screening in their early 20's (21-24) do not have a lower risk of cervical cancer diagnosed at ages 25-29, compared to those who have never been screened in their early 20's.[1]
- Initiating cervical cancer screening at age 25 compared to age 21 yields a very small incremental increase in the number of cervical cancer cases (0.23-0.33 per 1000 screened).
- Decreasing the frequency of screening from every year to every three years yields very small incremental increase in the number of cervical cancer cases (from 0.58 to 0.62 per 1000 screened, i.e., a difference of 0.04 per 1000, or 1 in 25,000).
- However, postponing the start age and reducing the frequency of screening will dramatically reduce the number of colposcopic examinations:

Estimated outcomes per 1,000 screened, according to start age and interval of screening

Adopted from Kulasingam et al, US Preventive Services Task Force 2011.

Outcomes	Screening Interval	Age 21	22	23	24	25
Colposcopy	Annual	360.6	322.3	283.8	245.3	206.6
	3 years	134.3	135.0	135.0	92.5	92.8
CIN 2/3	Annual	20.4	20.0	19.5	18.8	18.0
	3 years	13.7	14.9	15.9	12.2	13.0
Cancer	Annual	0.25	0.31	0.39	0.48	0.58
	3 years	0.39	0.46	0.54	0.52	0.62

What factors should be considered to determine when to initiate screening?

- Risk factors include: multiple sexual partners, sexual debut in early teens or younger, smoking, no HPV vaccination.
- Protective factors include: HPV vaccination, sexual debut in 20s or older, low number of sexual partners, non-smoking.

How should I advise people under 21 years of age requesting to be screened?

- Screening is not recommended under 21 years of age; the evidence is clear that the harms outweigh the benefits.
- For those with several risk factors/few protective factors, it may be prudent to start screening at a younger age (i.e., between 21 and 24 years of age).

How should I advise people between 21 and 24 years of age asking about screening now versus waiting until 25 years of age?

- There is no specific age in which screening should commence between the ages of 21 to 29.
- The decision to start screening should be an individual one. People 21-24 years should be counselled and allowed to access screening if they choose.
- It is important to consider the person's risk factors, protective factors, values and preferences in this age group.
- For most (average risk) peoples, screening can start between the ages 25 and 29. Screening before 25 years of age is unlikely to be beneficial (refer to page 1).
- People 21-24 years of age who may be at higher risk could start screening as early as age 21.

People between 25 and 29 years of age want to know if they need to start cervical cancer screening now or if they can wait.

- It is important to consider the people's risk factors, protective factors, values and preferences in this age group.
- People who have few risk factors/several protective factors could initiate screening as late as 30 years of age.

Some people in my practice are older than 69 and wish to continue screening even though they have had regular screening for the last 10 years.

- The decision to stop screening should be a personal one based on the person's life expectancy, quality of life, personal values and understanding the challenges of screening beyond this age.
- Challenges include: estrogen depletion, pain, difficulty obtaining samples, false positive results.

If repeat Pap testing is indicated for my patient's abnormal result, what is the new interval for repeat cytology?

- The new guidelines recommend that cytology be repeated every 12 months for two years (i.e., two tests). This is a change from repeat cytology every 6 months for 1 year.
- Follow up recommendations are based on patient age and initial cytology results. Please see the Follow-Up for Abnormal Pap Test Algorithm.

Can a patient opt-out of HPV reflex testing?

- No. The HPV reflex test is automatically done by the laboratory on the same sample depending on the person's age and specific abnormal result. HPV reflex testing ascertains if a high-risk HPV type is present and objectively stratifies risk of ASC-US and LSIL cytology results. This helps patients get the appropriate follow up, while reducing overtreatment when high-risk HPV types are absent.
- When preparing for a Pap, inform patients that cervical screening includes combined Pap and HPV reflex testing. If desired, you may provide them with educational materials available though the Screening Program for Cervical Cancer.

For the Cervical Cancer Screening Clinical Practice Guidelines refer to:

http://www.saskcancer.ca/images/pdfs/health_professionals/clinical_resources/cancer_screening_guidelines_and_resources/Cervical%20Cancer%20Screening%20Guidelines.pdf

[1] Sasieni P, Castanon A and Cuzick J. Screening and adenocarcinoma of the cervix. International Journal of Cancer. 2009; 125(3): 525-9.