

Supporting Information

Supplementary tables

This appendix was part of the submitted manuscript and has been peer reviewed. It is posted as supplied by the authors.

Appendix to: Machalek DA, Roberts JM, Garland SM, et al. Routine cervical screening by primary HPV testing: early findings in the renewed National Cervical Screening Program. *Med J Aust* 2019; doi: 10.5694/mja2.50223.

Age group	β-globin-positive	Ar	y oncogenic HPV		HPV16/18	Other oncogenic HPV only (non-16/18)		
	(valid) tests	Number	Proportion (95% CI)	Number	Proportion (95% CI)	Number	Proportion (95% CI)	
25–29 years	16 368	2966	18.1% (17.5–18.7%)	307	1.9% (1.7–2.1%)	2659	16.2% (15.7–16.8%)	
30-34 years	20 216	2386	11.8% (11.4–12.2%)	567	2.8% (2.6-3.0%)	1819	9.0% (8.6–9.4%)	
35–39 years	19 446	1588	8.2% (7.8-8.6%)	472	2.4% (2.2–2.6%)	1116	5.7% (5.4–6.1%)	
40-44 years	18 246	1284	7.0% (6.7–7.4%)	456	2.5% (2.3–2.7%)	828	4.5% (4.2–4.8%)	
45–49 years	18 739	1074	5.7% (5.4-6.1%)	393	2.1% (1.9–2.3%)	681	3.6% (3.4-3.9%)	
50-54 years	16 576	923	5.6% (5.2-5.9%)	342	2.1% (1.9–2.3%)	581	3.5% (3.2–3.8%)	
55–59 years	16 745	874	5.2% (4.9-5.6%)	343	2.0% (1.8–2.3%)	531	3.2% (2.9–3.4%)	
60-64 years	14 576	683	4.7% (4.4-5.0%)	266	1.8% (1.6–2.1%)	417	2.9% (2.6–3.1%)	
65–69 years	11 924	519	4.4% (4.0-4.7%)	211	1.8% (1.6–2.0%)	308	2.6% (2.3–2.9%)	
70-74 years	3847	182	4.7% (4.1–5.4%)	79	2.1% (1.6–2.6%)	103	2.7% (2.2–3.2%)	
Overall	156 683	12 479	8.0% (7.8–8.1%)	3436	2.2% (2.1–2.3%)	9043	5.8% (5.7–5.9%)	

Table 1. Age-specific prevalence of oncogenic human papillomavirus (HPV) in 156 683 valid primary screening tests from women aged 25–74 years, December 2017 – May 2018*

CI = confidence interval. * 157 of 156 840 tests for women in this age band were unsatisfactory.

		Negative for abnormality		Lov	w grade abnormality [‡]	High grade abnormality [§]		
Age group	Valid tests [†]	Number	Proportion (95% CI)	Number	Proportion (95% CI)	Number	Proportion (95% CI)	
Any oncogenic HPV								
25–29 years	2961	1756	59.3% (57.5–61.1%)	969	32.7% (31.1–34.4%)	236	8.0% (7.0–9.0%)	
30-34 years	2373	1419	59.8% (57.8–61.8%)	689	29.0% (27.2–30.9%)	265	11.2% (10.0–12.5%)	
35-39 years	1578	967	61.3% (58.8–63.6%)	441	28.0% (25.8–30.2%)	170	10.8% (9.3–12.4%)	
40-44 years	1281	799	62.4% (59.7–65.0%)	343	26.8% (24.4–29.3%)	139	10.8% (9.3–12.7%)	
45-49 years	1066	670	62.8% (59.9–65.7%)	315	29.5% (26.9–32.4%)	81	7.6% (6.2–9.4%)	
50-54 years	915	621	67.9% (64.8–70.8%)	219	23.9% (21.3–26.8%)	75	8.2% (6.6–10.2%)	
55-59 years	860	671	78.0% (75.1–80.7%)	151	17.6% (15.2–20.2%)	38	4.4% (3.2–6.0%)	
60-64 years	669	541	80.9% (77.7–83.7%)	91	13.6% (11.2–16.4%)	37	5.5 (4.0–7.5%)	
65-69 years	507	398	78.5% (74.7–81.9%)	81	16.0% (13.0–19.4%)	28	5.5% (3.8–7.9%)	
70-74 years	177	144	81.4% (74.9–86.4%)	16	9.0% (5.6–14.2%)	17	9.6% (6.0–14.9%)	
Overall	12 387	7986	64.5% (63.6–65.3%)	3315	26.8% (26.0–27.5%)	1086	8.8% (8.3–9.3%)	
HPV16/18								
25–29 years	306	153	50.0% (44.4–55.6%)	88	28.8% (24.0–34.1%)	65	21.2% (17.0–26.2%)	
30-34 years	562	302	53.7% (49.6–57.8%)	138	24.6% (21.2–28.3%)	122	21.7% (18.5–25.3%)	
35-39 years	466	268	57.5% (53.0–61.9%)	107	23.0% (19.4–27.0%)	91	19.5% (16.2–23.4%)	
40-44 years	455	279	61.3% (56.8–65.7%)	97	21.3% (17.8–25.3%)	79	17.4% (14.2–21.1%)	
45-49 years	388	240	61.9% (56.9–66.6%)	101	26.0% (21.9–30.6%)	47	12.1% (9.2–15.8%)	
50-54 years	340	231	67.9% (62.8–72.7%)	68	20.0% (16.1–24.6%)	41	12.1% (9.0–16.0%)	
55–59 years	336	257	76.5% (71.6–80.7%)	56	16.7% (13.0–21.0%)	23	6.8% (4.6–10.1%)	
60-64 years	260	206	79.2% (73.9–83.7%)	30	11.5% (8.2–16.0%)	24	9.2% (6.3–13.4%)	
65–69 years	207	164	79.2% (73.2–84.2%)	26	12.6% (8.7–17.8%)	17	8.2% (5.2–12.8%)	
70-74 years	77	61	79.2% (68.7–86.9%)	4	5.2% (2.0–13.0%)	12	15.6% (9.1–25.5%)	
Overall	3397	2161	63.6 (62.0–65.2%)	715	21.1 (19.7–22.5%)	521	15.3 (14.2–16.6%)	

Table 2. Age-specific prevalence of cervical abnormality in 12 387 oncogenic human papillomavirus (HPV)-positive primary screening test samples from women aged 25–74 years, December 2017 to May 2018*

		Negative for abnormality		Lov	w grade abnormality [‡]	High grade abnormality [§]		
Age group	Valid tests [†]	Number	Proportion (95% CI)	Number	Proportion (95% CI)	Number	Proportion (95% CI)	
Other oncogenic H	PV only (non-	-16/18)						
25–29 years	2655	1603	60.4% (58.5–62.2%)	881	33.2% (31.4–35.0%)	171	6.4% (5.6–7.4%)	
30-34 years	1811	1117	61.7% (59.4–63.9%)	551	30.4% (28.4–32.6%)	143	7.9% (6.7–9.2%)	
35-39 years	1112	699	62.9% (60.0–65.6%)	334	30.0% (27.4–32.8%)	79	7.1% (5.7–8.8%)	
40-44 years	826	520	63.0% (59.6–66.2%)	246	29.8% (26.8–33.0%)	60	7.3% (5.7–9.2%)	
45-49 years	678	430	63.4% (59.7–67.0%)	214	31.6% (28.2–35.2%)	34	5.0% (3.6-6.9%)	
50-54 years	575	390	67.8% (63.9–71.5%)	151	26.3% (22.8–30.0%)	34	5.9% (4.2-8.2%)	
55–59 years	524	414	79.0% (75.3–82.3%)	95	18.1% (15.1–21.7%)	15	2.9% (1.7–4.7%)	
60-64 years	409	335	81.9% (77.9–85.3%)	61	14.9% (11.8–18.7%)	13	3.2% (1.8–5.4%)	
65–69 years	300	234	78.0% (73.0–82.3%)	55	18.3% (14.4–23.1%)	11	3.7% (2.0-6.5%)	
70-74 years	100	83	83.0% (74.3–89.2%)	12	12.0% (6.9–20.0%)	5	5.0% (2.1–11.5%)	
Overall	8990	5825	64.8 (63.8–65.8%)	2600	28.9 (28.0–29.9%)	565	6.3 (5.8–6.8%)	

CI = confidence interval. * 92 of 12 479 tests for HPV-positive women in this age band were unsatisfactory. † Valid HPV test result and assessable by reflex cytology. ‡ Low grade squamous intraepithelial lesion (LSIL) or possible LSIL. § High grade squamous intraepithelial lesion (HSIL), possible HSIL, adenocarcinoma in situ, or cancer.

		Low risk*		Intermediate risk [†]		Higher risk [‡]		Unsatisfactory§	
Age group	Screening tests	Number	Proportion (95% CI)	Number	Proportion (95% CI)	Number	Proportion (95% CI)	Number	Proportion (95% CI)
25–29 years	16 389	13 402	81.8% (81.2-82.4%)	2484	15.2% (14.6–15.7%)	478	2.9% (2.7-3.2%)	25	0.15% (0.10-0.23%)
30-34 years	20 239	17 830	88.1% (87.6–88.5%)	1668	8.2% (7.9–8.6%)	710	3.5% (3.3–3.8%)	31	0.15% (0.11–0.22%)
35–39 years	19 469	17 858	91.7% (91.3–92.1%)	1033	5.3% (5.0–5.6%)	552	2.8% (2.6–3.1%)	26	0.13% (0.09–0.20%)
40-44 years	18 260	16 962	92.9% (92.5–93.3%)	766	4.2% (3.9-4.5%)	516	2.8% (2.6–3.1%)	16	0.09% (0.05–0.14%)
45–49 years	18 760	17 665	94.2% (93.8–94.5%)	644	3.4% (3.2–3.7%)	428	2.3% (2.1–2.5%)	23	0.12% (0.08–0.18%)
50-54 years	16 588	15 653	94.4% (94.0–94.7%)	541	3.3% (3.0–3.5%)	378	2.3% (2.1–2.5%)	16	0.10% (0.06–0.16%)
55–59 years	16 753	15 871	94.7% (94.4–95.1%)	509	3.0% (2.8–3.3%)	358	2.1% (1.9–2.4%)	15	0.09% (0.05–0.15%)
60-64 years	14 590	13 893	95.2% (94.9–95.6%)	396	2.7% (2.5–3.0%)	280	1.9% (1.7–2.2%)	21	0.14% (0.09–0.22%)
65–69 years	11 942	11 405	95.5% (95.1–95.9%)	289	2.4% (2.2–2.7%)	222	1.9% (1.6–2.1%)	26	0.22% (0.15–0.32%)
70–74 years	3850	3663	95.2% (94.5–95.8%)	95	2.5% (2.0-3.0%)	84	2.2% (1.8–2.7%)	6	0.16% (0.07–0.35%)
Overall	156 840	144 204	91.9% (91.8–92.1%)	8425	5.4% (5.3–5.5%)	4006	2.6% (2.5–2.7%)	205	0.13 (0.11–0.15)

Table 3. Age-specific risk classification after 156 840 primary human papillomavirus (HPV) screening tests for women aged 25–74 years, December 2017 – May 2018

CI = confidence interval.

* No oncogenic HPV detected. † HPV16/18 not detected but other oncogenic HPV detected and reflex liquid-based cytology (LBC) result is no or low grade abnormality (squamous intraepithelial lesion [LSIL] or possible LSIL). ‡ Other oncogenic HPV detected and reflex LBC result is high grade abnormality (squamous intraepithelial lesion [HSIL], possible HSIL, adenocarcinoma in situ, or cancer), or HPV16/18 detected (irrespective of LBC result); five had invalid HPV test results but high grade changes on reflex liquid-based cytology. § For 142 specimens, HPV tests were invalid and the reflex liquid-based cytology results were unsatisfactory; 53 were positive for other oncogenic HPV types but were unsatisfactory on cytology; ten had invalid HPV tests but had no or low grade changes on reflex liquid-based cytology.