

The benchmarking data listed in the table below are based on 2021 case volumes. These benchmarking data may not be applicable for laboratories that utilize primary HPV screening for a significant portion of cervical cancer screening. Results were excluded for laboratories that included primary HPV screening results in the interpretive totals when more than 25% of their cervical/gynecologic cytology slides were from positive primary HPV screening. In evaluating its statistics, the laboratory's patient population should be taken into consideration. Percentile-reporting rates refer to the distribution of individual laboratory responses from reporting rates in various categories. Responses are ranked from lowest to highest, and the 50th percentile-reporting rate refers to the median response. A 25th percentile-reporting rate (which corresponds to 1.7% in the table) for the ThinPrep LSIL category means that a quarter of laboratories have LSIL rates of 1.7% or less. A 90th percentile-reporting rate (which corresponds to 11.7% in the table) for ASC-US in ThinPrep preparations means that 9 of 10 laboratories have an ASC-US rate of 11.7% or less.

The reporting rates for ASC-US, ASC-H, AGC, LSIL, HSIL, and UNSATISFACTORY are given as percentages of total case volume. An ASC-US rate of 2.0% means 2/100 cases in the lab are designated ASC-US. The ASC/SIL figure is a calculated ratio: the percentage or number of a laboratory's ASC-US and ASC-H cases divided by the percentage or number of LSIL, HSIL, and malignant cases. A laboratory with 4% ASC cases and 3% SIL cases has an ASC/SIL ratio of 1.3, as compared to the median ASC/SIL ratio of 1.5 for conventional Paps, 2.0 for ThinPrep® and 1.8 for SurePath.

CONVENTIONAL*							
Laboratory Percentile-Reporting Rate							
CATEGORY	5th	10th	25th	Median	75th	90th	95th
Unsatisfactory (%)	0.0	0.0	0.4	1.3	2.2	5.2	7.1
LSIL (%)	0.0	0.0	0.3	0.8	1.6	2.0	2.8
HSIL (%)	0.0	0.0	0.1	0.3	0.5	0.9	1.1
ASC-US (%)	0.1	0.3	1.0	1.8	3.6	5.3	6.7
ASC-H (%)	0.0	0.0	0.1	0.1	0.4	0.8	1.1
AGC (%)	0.0	0.0	0.0	0.1	0.2	0.6	1.2
ASC/SIL	0.4	0.5	1.0	1.5	2.7	4.2	5.6

ThinPrep**							
Laboratory Percentile-Reporting Rate							
CATEGORY	5th	10th	25th	Median	75th	90th	95th
Unsatisfactory (%)	0.2	0.4	0.9	1.7	2.9	4.8	5.7
LSIL (%)	0.4	0.9	1.7	2.4	3.3	4.8	6.6
HSIL (%)	0.1	0.1	0.2	0.4	0.6	1.0	1.3
ASC-US (%)	1.0	1.9	3.6	5.4	7.9	11.7	15.2
ASC-H (%)	0.0	0.1	0.2	0.4	0.6	1.1	1.5
AGC (%)	0.0	0.0	0.1	0.2	0.4	0.7	1.1
ASC/SIL	0.7	1.1	1.6	2.0	2.7	3.6	4.4

SurePath**							
Laboratory Percentile-Reporting Rate							
CATEGORY	5th	10th	25th	Median	75th	90th	95th
Unsatisfactory (%)	0.2	0.4	0.9	1.7	2.9	4.8	5.7
LSIL (%)	0.4	0.9	1.7	2.4	3.3	4.8	6.6
HSIL (%)	0.1	0.1	0.2	0.4	0.6	1.0	1.3
ASC-US (%)	1.0	1.9	3.6	5.4	7.9	11.7	15.2
ASC-H (%)	0.0	0.1	0.2	0.4	0.6	1.1	1.5
AGC (%)	0.0	0.0	0.1	0.2	0.4	0.7	1.1
ASC/SIL	0.7	1.1	1.6	2.0	2.7	3.6	4.4

CATEGORY	5th	10th	25th	Median	75th	90th	95th
Unsatisfactory (%)	0.0	0.0	0.2	0.4	0.8	1.2	1.6
LSIL (%)	0.2	0.5	1.0	2.2	3.0	4.3	5.9
HSIL (%)	0.0	0.0	0.2	0.3	0.5	1.0	1.4
ASC-US (%)	0.3	0.7	2.1	4.2	6.6	9.2	10.6
ASC-H (%)	0.0	0.1	0.1	0.3	0.5	0.8	1.3
AGC (%)	0.0	0.0	0.1	0.2	0.5	0.7	1.6
ASC/SIL	0.5	0.9	1.2	1.8	2.9	3.6	4.2

*Includes conventional annual test volume of >60.

**Includes SurePath and ThinPrep annual test volume of >300.

Evidence of Compliance:

- ✓ Records of statistical data for defined categories **AND**
- ✓ Records of data review and evaluation against benchmark data by the laboratory director or designee

REFERENCES

- 1) Department of Health and Human Services, Centers for Medicare and Medicaid Services. Clinical laboratory improvement amendments of 1988; final rule. *Fed Register*. 2023(Dec 28): [42CFR493.1274(c)(5)(i) through (c)(5)(vi)].
- 2) Davey DD, Souers RJ, Goodrich K, Mody DR, Tabbara SO, Booth CN. Bethesda 2014 implementation and human papillomavirus primary screening: practices of laboratories participating in the College of American Pathologists PAP Education Program. *Arch Pathol Lab Med*. 2019;143:1196-1202
- 3) Genest DR, et al. Qualifying the cytologic diagnosis of "atypical squamous cells of undetermined significance" affects the predictive value of a squamous intraepithelial lesion on subsequent biopsy. *Arch Pathol Lab Med*. 1998;122:338-341
- 4) Raab SS, et al. Interobserver variability of a Papanicolaou smear diagnosis of atypical glandular cells of undetermined significance. *Am J Clin Pathol*. 1998;110:653-659
- 5) Schiffman M, et al. HPV DNA testing in cervical cancer screening results for women in a high risk province in Costa Rica. *JAMA*. 2000;283:87-93
- 6) Solomon D, et al. Comparison of three management strategies for patients with ASCUS. *J Natl Cancer Inst*. 2000;93:293-299
- 7) Juskevicius R, et al. An analysis of factors that influence the ASCUS/SIL ratio of pathologists. *Am J Clin Pathol*. 2001;116:331-335

****NEW** 12/26/2024**

CYP.07620 Statistical Records - Reflexed Gynecological Cytopathology

Phase I



For gynecologic cytopathology cases reflexed from primary HPV screening, statistical records are maintained and evaluated at least annually, and include the following:

- Number of primary HPV screening tests performed, if available
- Number of Paps reflexed from primary HPV screening
- Number of reflexed Paps reported by diagnosis for each specimen type (including the number reported as unsatisfactory for diagnostic interpretation)
- Number of cases with a diagnosis of HSIL, adenocarcinoma, or other malignant neoplasm for which histology results were available for comparison
- Number of cases where cytology and histology are discrepant
- Number of cases where any rescreen of a normal or negative specimen results in reclassification as low-grade squamous intraepithelial (LSIL), HSIL, adenocarcinoma, or other malignant neoplasms
- Number of positive and negative p16/Ki67 dual stains performed.

NOTE: The data must be evaluated by the laboratory director or designee and included in the annual cytopathology statistical report.

If a p16/Ki67 dual stain is used as a follow-up to an HPV positive test with a negative Pap test, statistics should be maintained separate from p16/Ki67 dual stain results derived from a positive HPV screening test.

Evidence of Compliance:

- ✓ Records of statistical data for defined categories **AND**