Bethesda 2001
New Zealand Modified

Codes, descriptors and assessment of sample adequacy for cytology laboratories

National Cervical Screening Programme (NZ)
Ministry of Health
Updated October 2013
Bethesda 2001 (NZ modified) codes for cytology laboratories

**Specimen types**
- Specimen type is mandatory
- Only one specimen type is allowed

<table>
<thead>
<tr>
<th>New Code</th>
<th>Descriptor</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPS</td>
<td>Conventional pap smear</td>
</tr>
<tr>
<td>LBC</td>
<td>Liquid based cytology</td>
</tr>
<tr>
<td>COM</td>
<td>Combined (conventional and liquid based)</td>
</tr>
</tbody>
</table>

**Specimen site**
- Specimen site is mandatory

<table>
<thead>
<tr>
<th>Code</th>
<th>Descriptor</th>
</tr>
</thead>
<tbody>
<tr>
<td>T</td>
<td>Vault</td>
</tr>
<tr>
<td>R</td>
<td>Cervical</td>
</tr>
<tr>
<td>V</td>
<td>Vaginal</td>
</tr>
</tbody>
</table>

**Adequacy**
- Adequacy code is mandatory
- Either one S code or a maximum of two U codes are allowed

<table>
<thead>
<tr>
<th>Old code</th>
<th>New TBS2001 code</th>
<th>Full New Descriptor</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>S1</td>
<td>The specimen is satisfactory for evaluation (optional free text)</td>
</tr>
<tr>
<td>A2G</td>
<td>S2</td>
<td>The specimen is satisfactory for evaluation (optional free text). No endocervical/transformation zone component present</td>
</tr>
<tr>
<td>A3A</td>
<td>JA</td>
<td>The specimen is unsatisfactory for evaluation because of insufficient squamous cells</td>
</tr>
<tr>
<td>A3B</td>
<td>JB</td>
<td>The specimen is unsatisfactory for evaluation because of poor fixation/preservation</td>
</tr>
<tr>
<td>A3C</td>
<td>JC</td>
<td>The specimen is unsatisfactory for evaluation because foreign material obscures the cells</td>
</tr>
<tr>
<td>A3D</td>
<td>JD</td>
<td>The specimen is unsatisfactory for evaluation because inflammation obscures the cells</td>
</tr>
<tr>
<td>A3E</td>
<td>JE</td>
<td>The specimen is unsatisfactory for evaluation because blood obscures the cells</td>
</tr>
<tr>
<td>A3F</td>
<td>UF</td>
<td>The specimen is unsatisfactory for evaluation because of cytolysis/autolysis</td>
</tr>
<tr>
<td>A3I</td>
<td>UG</td>
<td>The specimen is unsatisfactory for evaluation because … (free text)</td>
</tr>
</tbody>
</table>

**Deriving General “G” codes**

<table>
<thead>
<tr>
<th>Interpretation</th>
<th>Derived General “G” codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unsatisfactory</td>
<td>No G code</td>
</tr>
<tr>
<td>“U” Code</td>
<td>U + “O” code</td>
</tr>
<tr>
<td>Plus infection</td>
<td>U + “OT2” code</td>
</tr>
<tr>
<td>Plus endometrial cells</td>
<td>U + “OT3” code</td>
</tr>
<tr>
<td>Plus atrophy</td>
<td></td>
</tr>
<tr>
<td>Negative</td>
<td>G1</td>
</tr>
<tr>
<td>No “I” code</td>
<td>G1 + “O” code</td>
</tr>
<tr>
<td>Plus infection</td>
<td>G1 + “OT1” code</td>
</tr>
<tr>
<td>Plus reactive</td>
<td>G1 + “OT2” code</td>
</tr>
<tr>
<td>Plus endometrial cells</td>
<td>G1 + “OT3” code</td>
</tr>
<tr>
<td>Plus atrophy</td>
<td></td>
</tr>
<tr>
<td>Abnormal</td>
<td>Except AC5</td>
</tr>
<tr>
<td>Excluding AC5</td>
<td>G2</td>
</tr>
<tr>
<td>AC5</td>
<td>G3</td>
</tr>
<tr>
<td>“O1-05”, “OT2”, and “OT3” codes may be used with “U” codes (no “G” code with U code)</td>
<td></td>
</tr>
<tr>
<td>“O1-05” and “OT1-OT3” codes may be used with normal and abnormal codes = “G1”, “G2” or “G3”</td>
<td></td>
</tr>
</tbody>
</table>
**General** (previously "category")
- General code is mandatory (except when unsatisfactory)
- Only one General code is allowed
- G codes will be accompanied by either a S1 or S2 code
- Abnormal interpretation codes must be accompanied by either G2 or G3 (ASL or worse)
- G1 does not require an interpretation code but may be associated with O1-O5 codes and OT1-OT3 codes

<table>
<thead>
<tr>
<th>Old Code</th>
<th>New TBS2001 code</th>
<th>Full New Descriptor</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>G1</td>
<td>Negative for intraepithelial lesion or malignancy</td>
<td>N</td>
</tr>
<tr>
<td>B2A2</td>
<td>G2</td>
<td>Epithelial cell abnormality: See interpretation/result</td>
<td>ABN</td>
</tr>
<tr>
<td>New</td>
<td>G3</td>
<td>Other: See interpretation/result</td>
<td>ABN</td>
</tr>
</tbody>
</table>

**Interpretation** (previously "diagnosis")
- A maximum of five interpretation codes are allowed
- G2 code is mandatory with any of the following: ASL, ASH, LS, HS1, HS2, SC, AG1-AG5, AC1-AC4
- G3 code is mandatory with AC5
- Only O1-O5, OT2 and OT3 codes are allowed with an unsatisfactory (UA-UG) report
- OT2 may be accompanied with a qualifying clause for smear takers (*see note below)
- A combination of LS and ASH may be used to replace the old code C3A2B7

<table>
<thead>
<tr>
<th>Old code</th>
<th>TBS2001 code</th>
<th>Full New Descriptor</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>C1C1</td>
<td>O1</td>
<td>There are organisms consistent with <em>Trichomonas</em> species</td>
<td>N</td>
</tr>
<tr>
<td>C1A1</td>
<td>O2</td>
<td>There are fungal organisms morphologically consistent with <em>Candida</em> species</td>
<td>N</td>
</tr>
<tr>
<td>C1B1</td>
<td>O3</td>
<td>There is a shift in microbiological flora that may represent bacterial vaginosis</td>
<td>N</td>
</tr>
<tr>
<td>C1B2</td>
<td>O4</td>
<td>There are bacteria morphologically consistent with <em>Actinomyces</em> species</td>
<td>N</td>
</tr>
<tr>
<td>C1D2</td>
<td>O5</td>
<td>There are cellular changes consistent with <em>Herpes simplex</em> virus</td>
<td>N</td>
</tr>
<tr>
<td>C2A1</td>
<td>OT1</td>
<td>There are reactive cellular changes present (optional free text)</td>
<td>N</td>
</tr>
<tr>
<td>C2B1A</td>
<td>OT2*</td>
<td>There are endometrial cells present in a woman over the age of 40 years</td>
<td>N</td>
</tr>
<tr>
<td>C2B2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C2B4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C3B1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C3B1A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C3B1B</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C3B1C</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C2A4</td>
<td>OT3</td>
<td>There are atrophic cellular changes present</td>
<td>N</td>
</tr>
<tr>
<td>C3A1</td>
<td>ASL</td>
<td>There are atypical squamous cells of undetermined significance (ASC-US) present</td>
<td>LG</td>
</tr>
<tr>
<td>Old code</td>
<td>TBS2001 code</td>
<td>Full New Descriptor</td>
<td>Grade</td>
</tr>
<tr>
<td>----------</td>
<td>--------------</td>
<td>---------------------</td>
<td>-------</td>
</tr>
<tr>
<td>C3A2A C3A2A1 C3A2A2 C3A2A3</td>
<td>LS</td>
<td>There are abnormal squamous cells consistent with a low grade squamous intraepithelial lesion (LSIL; CIN1/HPV)</td>
<td>LG</td>
</tr>
<tr>
<td>C3A1E</td>
<td>ASH</td>
<td>There are atypical squamous cells present. A high grade squamous intraepithelial lesion cannot be excluded (ASC-H)</td>
<td>HG</td>
</tr>
<tr>
<td>C3A2B C3A2B1 C3A2B2 C3A2B3 C3A2B4 C3A2B5 C3A2B6</td>
<td>HS1</td>
<td>There are abnormal squamous cells consistent with a high grade squamous intraepithelial lesion (HSIL). The features are consistent with CIN2 or CIN3</td>
<td>HG</td>
</tr>
<tr>
<td>New</td>
<td>HS2</td>
<td>There are abnormal squamous cells consistent with a high grade squamous intraepithelial lesion (HSIL) with features suspicious for invasion</td>
<td>HG</td>
</tr>
<tr>
<td>C3A3</td>
<td>SC</td>
<td>There are abnormal squamous cells showing changes consistent with squamous cell carcinoma</td>
<td>HG</td>
</tr>
<tr>
<td>C3B2B C3B2B1</td>
<td>AG1</td>
<td>There are atypical endocervical cells present</td>
<td>HG</td>
</tr>
<tr>
<td>C3B2A C3B2A1</td>
<td>AG2</td>
<td>There are atypical endometrial cells present</td>
<td>HG</td>
</tr>
<tr>
<td>C3B2 C3B2C C3B2E</td>
<td>AG3</td>
<td>There are atypical glandular cells present</td>
<td>HG</td>
</tr>
<tr>
<td>C3B2B2</td>
<td>AG4</td>
<td>There are atypical endocervical cells favouring a neoplastic process</td>
<td>HG</td>
</tr>
<tr>
<td>C3B2D</td>
<td>AG5</td>
<td>There are atypical glandular cells favouring a neoplastic process</td>
<td>HG</td>
</tr>
<tr>
<td>C3B3D C3B3E C3B3F</td>
<td>AIS</td>
<td>There are abnormal endocervical cells consistent with adenocarcinoma in-situ (AIS)</td>
<td>HG</td>
</tr>
<tr>
<td>C3B3A</td>
<td>AC1</td>
<td>There are abnormal glandular cells consistent with endocervical adenocarcinoma</td>
<td>HG</td>
</tr>
<tr>
<td>C3B3B</td>
<td>AC2</td>
<td>There are abnormal glandular cells consistent with endometrial adenocarcinoma</td>
<td>HG</td>
</tr>
<tr>
<td>C3B3C</td>
<td>AC3</td>
<td>There are abnormal glandular cells consistent with extrauterine adenocarcinoma</td>
<td>HG</td>
</tr>
<tr>
<td>C3B3</td>
<td>AC4</td>
<td>There are abnormal glandular cells consistent with adenocarcinoma</td>
<td>HG</td>
</tr>
<tr>
<td>C3C C4</td>
<td>AC5</td>
<td>There are abnormal cells consistent with a malignant neoplasm</td>
<td>HG</td>
</tr>
</tbody>
</table>

*Suggested clinical qualifying clause that may accompany OT2 (endometrial cells in women over 40 years):*

*The presence of endometrial cells in a woman over the age of 40 years can be a normal finding, or seen in association with hormone replacement therapy, or rarely, associated with endometrial pathology including hyperplasia or neoplasia. Please correlate this finding with any symptomatology of uterine pathology, for example abnormal uterine bleeding and refer/investigate accordingly.*
Recommendations - repeats, follow up, management

- Recommendation code is mandatory
- R12 (oestrogen treatment) must be accompanied by interpretation code OT3 (atrophic changes)
- R10 is used with HS2, SC, AC1-AC5
- R14 may be used with any report except HS2, SC, AC1-AC5 and when there is a clinical suspicion of invasive cancer indicated on the requisition form

<table>
<thead>
<tr>
<th>Old code</th>
<th>TBS2001 code</th>
<th>New Full Descriptor</th>
</tr>
</thead>
<tbody>
<tr>
<td>B2B0</td>
<td>R1</td>
<td>The next smear should be taken in 3 years based on information held on the NCSP Register</td>
</tr>
<tr>
<td>B2B1</td>
<td>R2</td>
<td>Please repeat the smear within 3 months</td>
</tr>
<tr>
<td>B2B4</td>
<td>R3</td>
<td>Please repeat the smear within 3 months of the end of pregnancy</td>
</tr>
<tr>
<td>B2B5</td>
<td>R4</td>
<td>Please repeat the smear in 3 months</td>
</tr>
<tr>
<td>B2B6</td>
<td>R5</td>
<td>Please repeat the smear in 6 months</td>
</tr>
<tr>
<td>B2B7</td>
<td>R6</td>
<td>Please repeat the smear in 12 months</td>
</tr>
<tr>
<td>B2B7A</td>
<td>R7</td>
<td>Because a previous smear showed atypical squamous cells or low grade changes, please repeat the smear in 12 months</td>
</tr>
<tr>
<td>B2B7H</td>
<td>R8</td>
<td>Annual smears are indicated because of previous high grade abnormality</td>
</tr>
<tr>
<td>B2B8</td>
<td>R9</td>
<td>Referral for specialist assessment is indicated</td>
</tr>
<tr>
<td>B2B8A</td>
<td>R10</td>
<td>Urgent referral for specialist assessment is indicated</td>
</tr>
<tr>
<td>B2B8B</td>
<td>R11</td>
<td>Code not in use</td>
</tr>
<tr>
<td>B2B9</td>
<td>R12</td>
<td>Please repeat the smear shortly after a course of oestrogen treatment</td>
</tr>
<tr>
<td>B2B8C</td>
<td>R13</td>
<td>Under specialist care</td>
</tr>
<tr>
<td>B2B13</td>
<td></td>
<td></td>
</tr>
<tr>
<td>New</td>
<td>R14</td>
<td>In view of the abnormal clinical history provided, urgent referral for assessment is recommended regardless of cytological findings</td>
</tr>
</tbody>
</table>

Note: Please refer to the “Guidelines for Cervical Screening in New Zealand” for recall and management guidelines including high risk HPV (HrHPV) testing. These are available on the NSU website: