

STATUS CODE USAGE

The original plan of the DCC is to “sign off” a line when the following is satisfied:

- A. There is data for at least a number n of Females and p of Males where n and p are specified in the SOPs
- B. There is data for all the required procedures for the pipeline
- C. There is data for all the required parameters for each of the required procedures

It is possible although that some measurement was not possible, that is some data is missing. In that case it is necessary to use appropriate status codes to explain the absence of the data, in order to get the line signed off. There are three classes of status codes:

1. Specimen status code
2. Procedure status code: Type A, Type B
3. Parameter status code

A list of available status codes and the XSD structure for the Specimen and Experiment file can be found here: <http://www.mousephenotype.org/my-impc/documentation>

The following is to explain when and how to use which status code.

DATA MISSING DUE TO SICK or DEAD MOUSE

If the mouse is found dead during the pipeline or is found sick and moved to a different pipeline:

- a. If the center would like to have all its data already uploaded to be removed, then a specimen status code should be used.

In order to do so, just put the line containing the status code `<statusCode>IMPC_SSC_001</statusCode>` below the mouse information `<mouse DOB="2013-02-08" isBaseline="true" strainID="MGI:2164831" specimenID="IL17RD-TM1B-IC/12.2d_5234420" gender="female" zygosity="wild type" litterId="3885711" pipeline="HRWL_001" phenotypingCentre="H" project="BaSH">` in the Specimen file.

See the example:

Example of normal specimen xml file with no status code

```
<centre centreID="H">
  <mouse DOB="2013-02-08" isBaseline="true" strainID="MGI:2164831" specimenID="IL17RD-TM1B-
IC/12.2d_5234420" gender="female" zygosity="wild type" litterId="3885711" pipeline="HRWL_001"
phenotypingCentre="H" project="BaSH">
  </mouse>
</centre>
</centreSpecimenSet>
```

Example of specimen xml file with specimen status code

```
<centre centreID="H">
  <mouse DOB="2013-02-08" isBaseline="true" strainID="MGI:2164831" specimenID="IL17RD-TM1B-
  IC/12.2d_5234420" gender="female" zygoty="wild type" litterId="3885711" pipeline="HRWL_001"
  phenotypingCentre="H" project="BaSH">
    <statusCode>IMPC_SSC_001</statusCode>
  </mouse>
</centre>
</centreSpecimenSet>
```

- b.** If the center wants to keep the data already uploaded, then a Procedure status code of the type A should be used for the missing procedures explaining the reason why they are missing. With type A status code we will not expect more data for that mouse. Therefore, the center needs to submit the data up until the Procedure at which the mouse died and then use the status code for the first Procedure which do not have data for. **What if centers measure terminal tests on dead mice and want to submit data for those?**

In order to do so, just put the line containing the status code `<statusCode>IMPC_PSC_001</statusCode>` below the procedure information `<procedure procedureID="IMPC_CBC_002">` in the Experiment file, if the mouse died **during** the procedure or in place of the procedure information if the mouse died **before** the next procedure started. If the mouse died before the procedure, please fill the `dateOfExperiment` field with the file date of export (date is formatted YYYY-MM-DD) and the `experimentID` with a number of your choice, it could be the primary key of the experiment in the center database or whatever other unique identifier.

In both cases no data will be submitted for that procedure but we would like to capture the information that the mouse died during a particular procedure rather than before. If the center would like to submit some of the parameters measured before the mouse died during a procedure please use a Parameter status code for all the missing parameter values, see below in Section "Data missing due to other reasons".

See the example:

Example of normal experiment xml file with no status code

```
<centre project="DTCC" pipeline="IMPC_001" centreID="Wtsi">
<experiment dateOfExperiment="2014-02-04" experimentID="52f118b87216f">
<specimenID>mouse_8143</specimenID>
<procedure procedureID="IMPC_CBC_002">
<simpleParameter parameterID="IMPC_CBC_001_001" unit="mmol/l">
<value>123.56</value>
</simpleParameter>
<simpleParameter parameterID="IMPC_CBC_002_001" unit="mmol/l">
<value>11.09</value>
</simpleParameter>
</procedure>
</experiment>
</centre>
```

Example of normal experiment xml file with procedure status code (mouse died *during* the procedure)

```

<centre project="DTCC" pipeline="IMPC_001" centreID="Wtsi">
<experiment dateOfExperiment="2014-02-04" experimentID="52f118b87216f">
<specimenID>mouse_8143</specimenID>
<procedure procedureID="IMPC_CBC_002">
</procedure>
<statusCode>IMPC_PSC_001</statusCode>
</experiment>
</centre>

```

Example of normal experiment xml file with procedure status code (mouse died *before* next procedure)

```

<centre project="DTCC" pipeline="IMPC_001" centreID="Wtsi">
<experiment dateOfExperiment="2014-02-04" experimentID="52f118b87216f">
<specimenID>mouse_8143</specimenID>
<statusCode>IMPC_PSC_001</statusCode>
</experiment>
</centre>

```

DATA MISSING DUE TO OTHER REASONS

If for a given line data is missing for one or more required procedures, then a Procedure status code of the type B should be used for the missing procedures explaining the reason why they are missing for each mouse. The usage is the same as for Procedure status code of the Type A, see example above. If the mouse didn't start a procedure at all, please fill the experiment dateOfExperiment field with the file date of export (date is formatted YYYY-MM-DD) and the experimentID with a number of your choice, it could be the primary key of the experiment in the center database or whatever other unique identifier. If for a given animal data is missing for one or more parameters of one or more required procedures, then a parameter status code should be used for the missing parameters explaining the reason why they are missing. In order to do so, just put the line containing the status code `<parameterStatus>IMPC_PARAMSC_008</parameterStatus>` in place of the value `<value>123.56</value>` in the Experiment file.

See the example:

Example of normal experiment xml file with no status code

```

<centre project="DTCC" pipeline="IMPC_001" centreID="Wtsi">
<experiment dateOfExperiment="2014-02-04" experimentID="52f118b87216f">
<specimenID>mouse_8143</specimenID>
<procedure procedureID="IMPC_CBC_002">
<simpleParameter parameterID="IMPC_CBC_001_001" unit="mmol/l">
<value>123.56</value>
</simpleParameter>
<simpleParameter parameterID="IMPC_CBC_002_001" unit="mmol/l">
<value>11.09</value>

```

Example of experiment xml file with simple parameter status code

```

<centre project="DTCC" pipeline="IMPC_001" centreID="Wtsi">
<experiment dateOfExperiment="2014-02-04" experimentID="52f118b87216f">

```

```
<specimenID>mouse_8143</specimenID>
<procedure procedureID="IMPC_CBC_002">
<simpleParameter parameterID="IMPC_CBC_001_001" unit="mmol/l">
<parameterStatus>IMPC_PARAMSC_008</parameterStatus>
</simpleParameter>
<simpleParameter parameterID="IMPC_CBC_002_001" unit="mmol/l">
<value>11.09</value>
```

Example of experiment xml file with series parameter status code

```
<experiment experimentID="27487" dateOfExperiment="2012-11-23">
  <specimenID>59501</specimenID>
  <procedure procedureID="ICS_CHL_003">
    <seriesParameter parameterID="ICS_CHL_002_001">
      <value incrementValue="10">0.14</value>
      <value incrementValue="100">0.21</value>
      <value incrementValue="105">0.26</value>
      <value incrementValue="110">0.19</value>
      <value incrementValue="205">0.28</value>
      <value incrementValue="210">0.25</value>
      <value incrementStatus="IMPC_PARAMSC_001"
incrementValue="215"></value>
      <value incrementValue="220">0.27</value>
      <value incrementStatus="IMPC_PARAMSC_001"
incrementValue="225"></value>
      <value incrementValue="90">0.22</value>
      <value incrementValue="95">0.21</value>
    </seriesParameter>
```

OPTIONAL PROCEDURES AND PARAMETERS

It is not necessary to provide status code for optional parameters and procedures. A line can be signed off and exported to EBI and new data for optional procedures and parameters can be added afterward. Although this is allowed it is preferable if centres can submit all data for a line before the signing off so that it can be exported altogether.

