
Health Status & Data Quality

When a vet consult is called for, the health status should be considered. The health status is integral to the way ZIMS determines data quality and pooled metrics. To help you keep records accurate and in sync, ZIMS will identify inconsistencies between clinical diagnosis and health status and issue a warning when viewing a medical record in ZIMS.

[Contact Species360 Support](#)

[About Health Status](#)

[Updating Health Status](#)

[Medical Dashboard](#)

[Anesthesia or Diagnosis & Procedures](#)

[Animal module](#)

[Add New Status](#)

[Possible data conflict warnings](#)

About Health Status

Health status is a critical part of medical records and can influence the interpretation of almost all other types of medical record. Calculating reference intervals for test results requires using only results from “normal” animals, which means the health status of the animal at the time the sample was collected must be known.

The health status at the time of an anesthesia event can impact the drug protocol selected, the dosages used and even the expected risk of the anesthesia event itself. A chloroquine prescription in a healthy penguin implies preventative treatment, while the same prescription in the same bird with an abnormal health status might result in checking the medical records for a malaria diagnosis.

Historically, health status was associated with individual medical records. The drawback of this approach is that when your assessment of the health status is amended later (the routine examination and testing on a “healthy” animal identifies an unexpected medical problem), it may be necessary to correct multiple medical records to maintain data integrity. This can be time consuming and it is easy to miss or forget to change some of those historical medical records.

The ZIMS approach is to use a logbook for health status entries. Health status is recorded for a specific date/time and the animal maintains that health status until a later entry changes the health status. Every other type of medical record determines the health status of the animal based on the date for that medical record and the logbook entries. There are several advantages to this method of maintaining health status records:

- Less data entry: A health status entry is only needed when the health status actually changes, not for every medical record.

- More internal data consistency: When every medical record stores an independent value for the health status and data entry is being performed by different staff, it is easy for the anesthesia record to indicate abnormal health status, while the samples collected during that anesthesia event indicate normal health status. The logbook approach means a single health status is applied to all record types.
- Fixing mistakes is easy: Now when the assessment of a health status is modified for a historical date (test results from the examination done a few days ago has identified a medical issue), it does not require finding and editing multiple records. Instead, a single logbook entry that changes the health status on the date in question, changes the health status for all the associated historical medical records. Every test result on the animal you initially marked as “normal” are now excluded from reference interval calculations with a single abnormal health status entry that is backdated to the date the samples were collected.

Updating Health Status

The Health Status can be managed from the Medical module or the husbandry side of ZIMS when permissions have been granted to non-medical staff.

Medical Module - Dashboard

Within the Medical module, Health Status is found in the right-hand panel, within the animals information. If no Health Status has been recorded, a ~ will display and you will be prompted to add a new Health Status. If you want to come back to add a Health Status after performing another action, you can click Let me Continue, then click [Add New Status](#) within the Health Status box.

The screenshot shows the ZIMS Medical Records interface for an animal named '102 / Red panda / ISS21-01138'. A warning dialog box is displayed in the center, asking: 'This animal does not have a defined health status. Would you like to define the health status now?'. The dialog has two buttons: 'Update Health Status' and 'Let me Continue'. In the background, the 'Basic Info' panel on the right shows the 'Health Status' field with a tilde (~) and a red box around it. Below the 'Health Status' field is a link for 'Add New Status'.

If one or more Health Status have been added, the most recent status will display. A link will appear to 'View History'. Clicking this link brings up a pop up with all previous health status updates. Here you can click to edit or delete any previous entries or click + button to add a Health Status to [enter a new one](#).

Health Status History

Health Status	Health Status Change Date/Time	Responsible Party		
Abnormal (minor...)	28/Dec/2018 00:00			✖
Normal	06/Jun/2018 00:00			✖
Abnormal	03/Jun/2018 00:00			✖
Normal	01/Dec/2017 00:00			✖
Abnormal	11/Jan/2017 00:00			✖
Abnormal (mino...)	01/Dec/2014 00:00			✖
Abnormal	29/Oct/2014 00:00			✖
Abnormal (mino...)	01/Oct/2014 15:51			✖
Normal	25/Jun/2013 00:00			✖

Medical Condition/Syndrome/Disorder

Foot rot

Onset Date 03/Jun/2022 00:00 **Responsible Clinician** Species360 Member Support **Confidence Level**

Resolution Date ~ **Unresolvable** No

Health Status Abnormal (minor) (28/Dec/2018)

Click to view health status history

Click to add new health status entry

Medical Module - Anesthesia and Diagnosis & Procedures

Health Status can also be managed or added within the Anesthesia and Diagnosis & Procedures Screens. Both screens will display the most recent status, which can be clicked to view a history, manage previous records, or add a new status.

Health Status History

Health Status	Health Status Change Date/Time	Responsible Party		
Normal	18/02/2022 00:00	Species360 Trai...		✖
Abnormal	05/01/2022 00:00	Species360 Trai...		✖
Normal	05/10/2021 00:00	Species360 Trai...		✖

Health Status Normal (18/02/2022)

Add Diagnoses & Procedures T0026/Bearded barbet/CBH21-00021/Undetermined F4

Animal ID *
T0026 / Bearded barbet / CBH21-00021

Onset Date *
18/02/2022 00:00

Health Status
Normal (18/02/2022)

Responsible Clinician *
Please Select

Medical Concern or Procedure *
Please select

Not in the list? [Add New Term](#)

Current Medical Concerns or Procedures

Animals Module - Animal Record

Health Status can also be found in the Animals module within the Details tab of an animal record. You will only see Health Status if you have been given medical permissions. The Health Status will display the most recent status recorded, if no status has been recorded you will see “Define Status”.

Clicking on the status will bring up the Health Status History pop-up, where you can manage previous entries or [add a new Health Status](#).

Animals *Records*

Search Animals By Identifier/GAN Filter By Institution Your animal lists Batch Measurements

Statistics **Bos taurus jersey**

Details More Details Note & Observation Major Life Event My Transactions

Expand all Collapse all Actions Medical Records Care and Welfare Animal Graphing Tool

Basic Info

Individual

Local ID
Preferred ID
House Name
Breed **Bos taurus jersey / Jersey cow**
Birth Location
Birth Type **Captive Birth/Hatch**
Birth / Age **Click to view health status history**
Current Collection **Main Institution Animal Collection**
Current Enclosure
Health Status **Abnormal (minor issue) (28/Dec/2018)** **Click to add new health status entry**
Body Condition Score **7/9 (10/Aug/2020)**

Identifiers
-< Click here for details

Parent Info
-< Click here for details

Lengths
-< Click here for details

Rearing
-< Click here for details

Taxonomy / Sex Type / Collection
-< Click here for details

Alerts
-< Click here for details

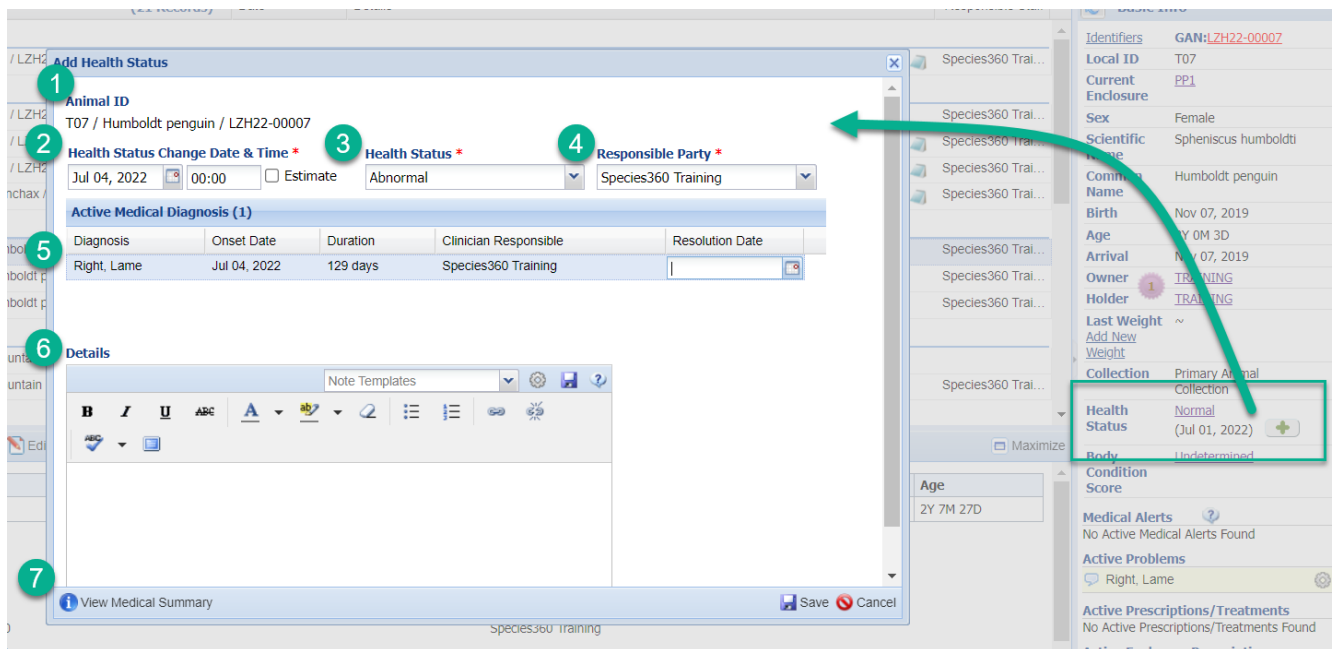
Images
-< Click here for details

Physical Holder History
-< Click here for details

Adding a new Health Status

Clicking Add Health Status within Health Status History or Add New Status within the dashboard will bring up the Add/Edit Health Status pop-up.

1. The Animal ID will be displayed for reference
2. Set the Health Status
3. Choosing from Normal, Abnormal, Abnormal (major issue), Abnormal (minor issue), or Not Applicable. Set the Date of change
4. The staff who assessed the status
5. Active Medical Diagnosis for the selected animal will appear with the onset, duration and clinician responsible for the diagnosis for easy reference. You can also add a resolution date if the diagnosis is no longer active
6. Add any relevant details into the Details box
7. A pop up view to the medical summary for the selected animal is available



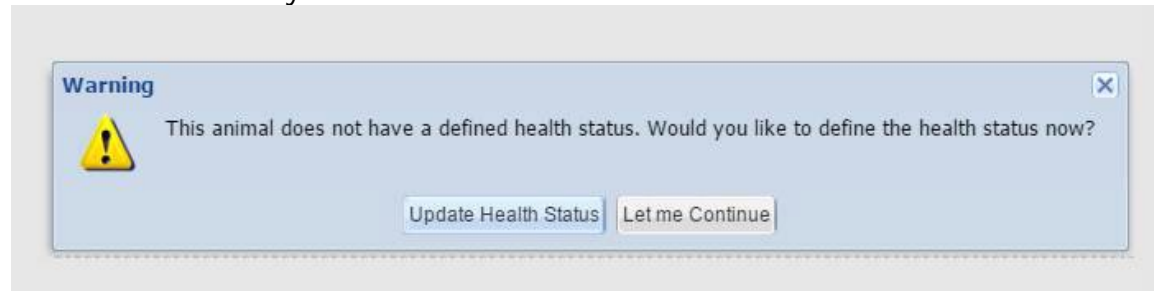
Possible data conflict warnings - Health Status & Active Problems

Active medical problems (clinical diagnosis records) and the health status of an animal are related, but distinct sets of information. Both record types are very important to the ZIMS system, both are an integral part of complete medical records and both impact global resources, such as Reference Intervals and Common Clinical Issues. In an effort to keep this information synchronized, ZIMS now provides warnings when it detects a possible data conflict or other problem with these record types. The user can act to fix the problem or choose to temporarily ignore the warning. Users may initially experience a larger number of warnings

There are 3 types of warnings:

No defined health status

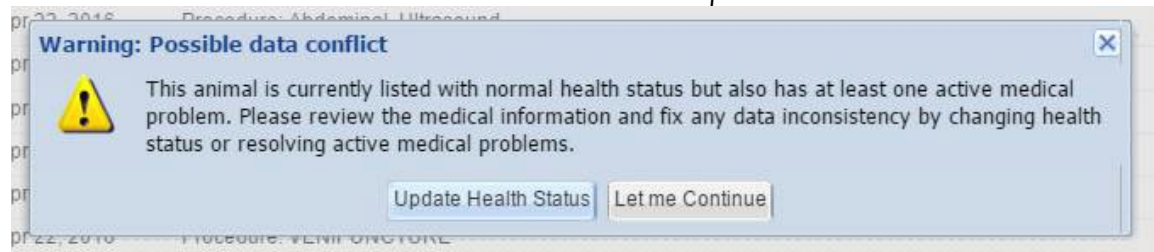
NOTE: Health status is mandatory in some records and defining the current health status now, helps with data consistency later. [Click here for more details.](#)



Animals are added to ZIMS without a defined health status. Since this information is required for some medical records, the user is warned when an animal with an undefined health status comes into focus in the medical dashboard. Once an initial health status has been defined, this warning will not appear again.

Normal Health status, but Active Problems

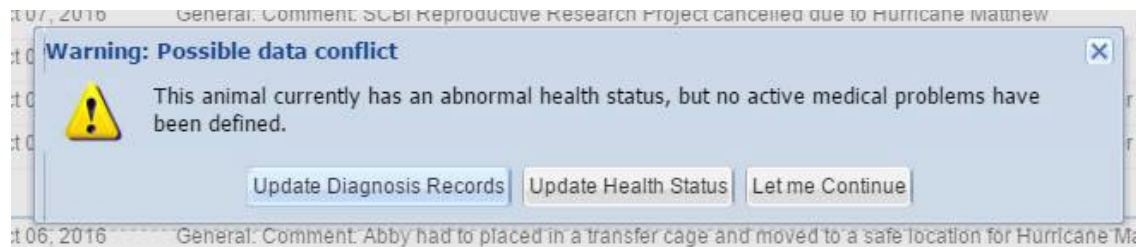
NOTE: This warning is intended to assist with improving data consistency between health status information and the onset and resolution of medical problems. [Click here for more details.](#)



This is a case where the animal has been defined as having a normal health status, but has currently active medical problems. This situation can be created by entry of an anesthesia record where the health status is indicated as normal, but there are one or more active medical problems. The error may have been with the anesthesia worksheet (perhaps filled out prior to the examination that generated the active problem entry) or it may be a case where historical medical problems have not yet been marked as resolved.

Abnormal Health status and no Active Problems

NOTE: This data quality feature is intended to identify when a patient's health status is in conflict with an active problem. Accurate health status information is critical to global reference intervals and anesthesia summary data. [Click here for more details](#)



The reverse of the above situation, this animal has been marked as having an abnormal health status, but no clinical signs or medical problems are currently active. Again, appropriate resolution of the data conflict could require editing the health status or adding an active medical problem.

Health status and clinical diagnosis records have always been an important part of complete medical records, but their importance increases as Species360 works to create new global resources that consolidate information based on these record types. Reference interval calculations have always relied on health status as a primary filter for selecting test result values for inclusion in that resource. However, health status has also been mandatory in anesthesia records since 1986 and the release of the Anesthesia Summaries resource allows users to explore the impact of health status on the risks of anesthetic complications and fatalities within a drug protocol. Clinical diagnosis records are used to compile the Common Clinical Issues resource and improvements in these records will improve that resource and help support future epidemiological analysis efforts.

Revised 10 November 2022