

# Wildlife Health Diagnostic Database (LIMS) Metadata

## *Identification\_Information:*

### *Citation:*

#### *Citation\_Information:*

*Originator:* National Wildlife Health Center

*Publication\_Date:* Unpublished Material

*Title:* Wildlife Health Diagnostic Database (LIMS)

### *Description:*

#### *Abstract:*

The LIMS (laboratory information management system) database is a computerized record of specimens - from serum samples to carcasses - sent to the National Wildlife Health Center (NWHC) for processing and diagnostic workup. Data include history and recordkeeping information (identifier numbers, species, sex, submitter information, etc); types of tests run (virology, bacteriology, parasitology, chemistry, etc.) and some test results for heavy metals, particularly lead; and diagnostic results. The diagnostic coding system is based on SNOMED terminology, with certain modifications and additions to fit Center needs. SNOMED, the Systematized Nomenclature of Medicine, is a structured nomenclature and classification of the terminology used in human and veterinary medicine. Terms are assigned in any or all of the following six categories for each diagnosis: topography - detailed anatomic term for the site of interest; morphology - information on the pathogenic change or process associated with the topography; etiology - cause or causal agent of the disease or dysfunction; disease - disease, disease entity or syndrome; link - qualifier to link one diagnosis to another.

#### *Purpose:*

LIMS is a process-based record of samples sent to NWHC, and includes documentation on how samples and data move through the Center, as well as results information sent back to the submitter and other contacts. It may not be a representative sample of mortality for any particular species or group; however, the database can be used to determine if a disease/syndrome existed. For example, the database can be used to document avian cholera in mallards in California at a particular location or time, but it cannot be used to say that there was more cholera in 1990 than in 1980, since the number of specimens submitted for diagnostic workup does not necessarily reflect the total number of mortalities. Individuals interested in documenting total mortalities should reference the Epizootiological Database (EPIZOO), also maintained at NWHC.

#### *Supplemental\_Information:*

LIMSs not currently accessible outside NWHC. However, with assistance from appropriate Center personnel, searches of the database will be performed on request to the system manager. A complete system overhaul, including interfaces to other portions of the overall NWHC wildlife mortality database (e.g. EPIZOO) is in the planning stage..

## *Time\_Period\_of\_Content:*

### *Time\_Period\_Information:*

#### *Range\_of\_Dates/Times:*

*Beginning\_Date:* 197507

*Ending\_Date:* present (ongoing)

*Currentness\_Reference:* publication date

## *Status:*

*Progress:* In work

*Maintenance\_and\_Update\_Frequency:* Continually

## *Spatial\_Domain:*

### *Bounding\_Coordinates:*

*West\_Bounding\_Coordinate:* 144.616667

*East\_Bounding\_Coordinate:* -64.566667

*North\_Bounding\_Coordinate:* 71.833333

*South\_Bounding\_Coordinate:* 13.233333

*Keywords:*

*Theme:*

*Theme\_Keyword\_Thesaurus:* none

*Theme\_Keyword:* wildlife

*Theme\_Keyword:* epizootics

*Theme\_Keyword:* mortality

*Theme\_Keyword:* morbidity

*Theme\_Keyword:* diseases

*Theme\_Keyword:* avian

*Theme\_Keyword:* mammals

*Theme\_Keyword:* endangered species

*Theme\_Keyword:* birds

*Theme\_Keyword:* wildlife health

*Theme\_Keyword:* amphibian

*Theme\_Keyword:* reptile

*Theme\_Keyword:* marine invertebrate

*Theme\_Keyword:* endangered species

*Place:*

*Place\_Keyword\_Thesaurus:* none

*Place\_Keyword:*

range includes 50 U.S. states, 1 federal district, and all U.S. dependent areas (in the Caribbean and the Pacific Ocean). Irregular submissions have been received from other areas, primarily Canada.

*Temporal:*

*Temporal\_Keyword:* ongoing

*Access\_Constraints:*

Outside electronic access to the database is not available Some information in this data file is part of confidential legal cases; it may be used in pending litigation and cannot be released

*Use\_Constraints:*

Specific use constraints will be identified/addressed at the time of the request.

Acknowledgement of NWHC is required in products derived from this data.

*Point\_of\_Contact:*

*Contact\_Information:*

*Contact\_Person\_Primary:*

*Contact\_Person:* Jennifer Buckner

*Contact\_Organization:* National Wildlife Health Center

*Contact\_Position:* Diagnostic Database Manager

*Contact\_Address:*

*Address\_Type:* mailing and physical address

*Address:* 6006 Schroeder Road

*City:* Madison

*State\_or\_Province:* WI

*Postal\_Code:* 53711-6223

*Country:* U.S.A.

*Contact\_Voice\_Telephone:* 608-270-2443

*Contact\_Facsimile\_Telephone:* 608-270-2415

*Contact\_Electronic\_Mail\_Address:* [jbuckner@usgs.gov](mailto:jbuckner@usgs.gov)

*Hours\_of\_Service:* 8AM-4:30PM Monday through Friday,, U.S. Central Time, except holidays.

*Contact\_Instructions:*

Please limit requests to written applications for specific data. (email accepted)

*Data\_Set\_Credit:*

The datafile was developed and is maintained by personnel at NWHC and is the result of years of diagnostic work by Center personnel. However, federal, state, tribal, and local agencies, universities and private individuals have all been involved as contributors to the system and their assistance should not be ignored.

*Security\_Information:*

*Security\_Classification\_System*: none  
*Security\_Classification*: Unclassified  
*Native\_Data\_Set\_Environment*:  
Microsoft Server 2008 R2 and Windows 7  
*Cross\_Reference*:  
*Citation\_Information*:  
*Originator*: National Wildlife Health Center  
*Publication\_Date*: Unpublished Material  
*Title*: Wildlife Mortality Database (EPIZOO)

*Cross\_Reference*:  
*Citation\_Information*:  
*Originator*: College of American Pathologists  
*Publication\_Date*: 1993  
*Title*:  
SNOMED International: The Systematized Nomenclature of Human and  
Veterinary Medicine  
*Publication\_Information*:  
*Publication\_Place*: Northfield, IL  
*Publisher*: College of American Pathologists  
*Other\_Citation\_Details*: 4 volumes

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*Data\_Quality\_Information*:  
*Attribute\_Accuracy*:  
*Attribute\_Accuracy\_Report*:  
Data are verified upon completion by case pathologist. Random subsets of records  
are verified for all fields on an intermittent basis.

*Logical\_Consistency\_Report*:  
Values for selected fields are constrained and tested during data entry. When all work is  
complete, an assigned pathologist/clinician is responsible for reviewing the information,  
verifying its accuracy, determining a final diagnosis and issuing a final report. A summary of  
this information is then incorporated into the master file and becomes a part of the  
permanent record.

Various NWHC standard operating procedures are utilized during data processing -  
interested individuals should reference the NWHC SOP manual for specifics. Contact the  
PROCESS CONTACT listed below for additional information.

*Completeness\_Report*:  
LIMS is a computerized record of samples sent to NWHC for diagnostic evaluation; it may  
not be a representative sample of mortality for any particular species or group. The number  
of specimens submitted for diagnostic workup does not reflect the total number of  
mortalities. Individuals interested in documenting total mortalities should reference the  
Wildlife Mortality Event Database (EPIZOO), also maintained at NWHC.

*Lineage*:  
*Source\_Information*:  
*Source\_Citation*:  
*Citation\_Information*:  
*Originator*:  
Federal, state, tribal and local agencies, universities, private  
individuals and foreign governments have all been involved as  
contributors to the system; all have submitted samples and/or  
carcasses for diagnostic evaluation and have provided the  
history portion of the database.  
*Publication\_Date*: Unpublished Material  
*Title*: Wildlife Health Diagnostics Database (LIMS)  
*Source\_Time\_Period\_of\_Content*:  
*Time\_Period\_Information*:  
*Range\_of\_Dates/Times*:

*Beginning\_Date:* July, 1975

*Ending\_Date:* ongoing

*Source\_Currentness\_Reference:* publication date

*Process\_Step:*

*Process\_Description:*

Partners and submitters contact trained wildlife disease specialists at NWHC to discuss wildlife mortality and specimen submission. Wildlife specimens are accepted based on \_\_\_\_\_ criteria, received and logged into the system, then routed for diagnostic evaluation. At each step (necropsy, lab work, records), additional data is both manually and electronically incorporated into the file. Once all tests are complete, an assigned pathologist/clinician is responsible for reviewing the information, verifying its accuracy, determining a final diagnosis, and issuing a final report. A summary of this information is then incorporated into the master file and becomes a part of the permanent record.

Various NWHC standard operating procedures are utilized during data processing - interested individuals should reference the NWHC SOP manual for specifics. Contact the PROCESS CONTACT listed below for additional information.

*Process\_Date:* 1975 to present (ongoing)

*Process\_Contact:*

*Contact\_Information:*

*Contact\_Person\_Primary:*

*Contact\_Person:* Dr. David Blehert

*Contact\_Organization:* National Wildlife Health Center

*Contact\_Position:* Branch Chief, Disease Investigations

*Contact\_Address:*

*Address\_Type:* mailing and physical address

*Address:* 6006 Schroeder Road

*City:* Madison

*State\_or\_Province:* WI

*Postal\_Code:* 53711-6223

*Country:* U.S.A.

*Contact\_Voice\_Telephone:* 608-270-2460

*Contact\_Facsimile\_Telephone:* 608-270-2415

*Contact\_Electronic\_Mail\_Address:* dblehert@usgs.gov

*Hours\_of\_Service:* 8AM-4:30PM Monday through Friday, U.S. Central Time, except holidays.

*Contact\_Instructions:*

Please limit requests to written applications for specific data. (Email is acceptable.)

*Process\_Step:*

*Process\_Description:* Metadata imported.

*Time\_of\_Day:* 12073600

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*Spatial\_Data\_Organization\_Information:*

*Indirect\_Spatial\_Reference:* county FIPS

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*Spatial\_Reference\_Information:*

*Horizontal\_Coordinate\_System\_Definition:*

*Local:*

*Local\_Description:* Data are referenced to state and county names and FIPS codes.

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*Entity\_and\_Attribute\_Information:*

*Overview\_Description:*

*Entity\_and\_Attribute\_Overview:*

A complete description of the data set is provided in the document referenced in 5.2.2 (Diagnostic Database Coding Dictionary), including field lengths, descriptions and attribute value indicators.

*Entity\_and\_Attribute\_Detail\_Citation:*

Cleary, K.R. 1995. Diagnostic Database Coding Dictionary. National Wildlife Health Center, Madison, WI. 66 pp.

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*Distribution\_Information:*

*Distributor:*

*Contact\_Information:*

*Contact\_Person\_Primary:*

*Contact\_Person:* Jennifer Buckner

*Contact\_Organization:* National Wildlife Health Center

*Contact\_Position:* Diagnostic Case Manager

*Contact\_Address:*

*Address\_Type:* mailing and physical address

*Address:* 6006 Schroeder Road

*City:* Madison

*State\_or\_Province:* WI

*Postal\_Code:* 53711-6223

*Country:* U.S.A.

*Contact\_Voice\_Telephone:* 608-270-2443

*Contact\_Facsimile\_Telephone:* 608-270-2415

*Contact\_Electronic\_Mail\_Address:* jbuckner@usgs.gov

*Hours\_of\_Service:* 8AM-4:30PM Monday through Friday, U.S. Central Time, except holidays.

*Contact\_Instructions:*

Please limit requests to written applications for specific data. (Email is acceptable.)

*Resource\_Description:*

The information can be referenced using the descriptor LIMS to denote the Wildlife Health Diagnostic Database.

*Distribution\_Liability:*

Although these data have been processed successfully on a computer system at the National Wildlife Health Center, no warranty expressed or implied is made regarding the accuracy or utility of the data on any other system or for general or scientific purposes, nor shall the act of distribution constitute any such warranty. This disclaimer applies both to individual use of the data and aggregate use with other data. It is strongly recommended that these data are directly acquired from a National Wildlife Health Center server, and not indirectly through other sources which may have changed the data in some way. It is also strongly recommended that careful attention be paid to the contents of the metadata file associated with these data. The National Wildlife Health Center shall not be held liable for improper or incorrect use of the data described and/or contained herein.

*Standard\_Order\_Process:*

*Digital\_Form:*

*Digital\_Transfer\_Information:*

*Format\_Name:* MDB or ACCDB

*Format\_Version\_Number:* Microsoft Access 2010

*Format\_Specification:* Windows XP/7 or higher

*File-Decompression\_Technique:* no compression applied

*Transfer\_Size:* variable

*Digital\_Transfer\_Information:*

*Format\_Name:* xls

*Format\_Version\_Number:* Microsoft Excel 2010

*Format\_Specification:* Windows XP/7 or higher

*File-Decompression\_Technique:* no compression applied

*Transfer\_Size:* variable

*Digital\_Transfer\_Information:*

*Format\_Name:* RTF or docx  
*Format\_Version\_Number:* Microsoft Word 2010  
*Format\_Specification:* Windows XP/7 or higher  
*File-Decompression\_Technique:* no compression applied  
*Transfer\_Size:* variable

*Digital\_Transfer\_Option:*

*Offline\_Option:*

*Offline\_Media:* CD-ROM

*Recording\_Capacity:*

*Recording\_Density:* 650Mb

*Recording\_Density\_Units:* megabytes

*Fees:* No fees are charged at this time.

*Ordering\_Instructions:*

Written requests for specific information from the Wildlife Health Diagnostic Database (LIMS) should be addressed to the primary contact person noted above.

*Turnaround:*

Requests for information will be processed in as timely a manner as possible. However, NWHC does reserve the right to rank requests in line with mission priorities, serving its primary Department of Interior clients first, and all response times are tied to the availability of personnel to process and fulfill the request.

*Available\_Time\_Period:*

*Time\_Period\_Information:*

*Single\_Date/Time:*

*Calendar\_Date:* Present

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*Metadata\_Reference\_Information:*

*Metadata\_Date:* 20020718

*Metadata\_Review\_Date:* 20140915

*Metadata\_Future\_Review\_Date:* 20150901

*Metadata\_Contact:*

*Contact\_Information:*

*Contact\_Person\_Primary:*

*Contact\_Person:* Jennifer Buckner

*Contact\_Organization:* National Wildlife Health Center

*Contact\_Position:* Diagnostic Case Manager

*Contact\_Address:*

*Address\_Type:* mailing and physical address

*Address:* 6006 Schroeder Road

*City:* Madison

*State\_or\_Province:* WI

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*Contact\_Electronic\_Mail\_Address:* jbuckner@usgs.gov

*Hours\_of\_Service:* 8AM-4:30PM Monday through Friday, U.S. Central Time, except holidays.

*Metadata\_Standard\_Name:* FGDC Content Standards for Digital Geospatial Metadata

*Metadata\_Standard\_Version:* FGDC-STD-001-1998

*Metadata\_Time\_Convention:* local time

*Metadata\_Security\_Information:*

*Metadata\_Security\_Classification\_System:* None

*Metadata\_Security\_Classification:* Unclassified

*Metadata\_Security\_Handling\_Description:* None