

# IICA



## HandiSTATUS: Help with World **Animal Disease Status**

User Tutorials and Manual



HandiSTATUS



IICA  
PM-A1/  
SC-93-25

PROGRAM V: AGRICULTURAL HEALTH

## WHAT IS IICA?

The Inter-American Institute for Cooperation on Agriculture (IICA) is the specialized agency for agriculture of the inter-American system. The Institute was founded on October 7, 1942 when the Council of Directors of the Pan American Union approved the creation of the Inter-American Institute of Agricultural Sciences.

IICA was founded as an institution for agricultural research and graduate training in tropical agriculture. In response to changing needs in the hemisphere, the Institute gradually evolved into an agency for technical cooperation and institutional strengthening in the field of agriculture. These changes were officially recognized through the ratification of a new Convention on December 8, 1980. The Institute's purposes under the new Convention are to encourage, facilitate and support cooperation among its 33 Member States, so as to better promote agricultural development and rural well-being.

With its broader and more flexible mandate and a new structure to facilitate direct participation by the Member States in activities of the Inter-American Board of Agriculture (IABA) and the Executive Committee, the Institute now has a geographic reach that allows it to respond to needs for technical cooperation in all of its Member States.

The contributions provided by the Member States and the ties IICA maintains with its 17 Permanent Observers and numerous international organizations provide the Institute with channels to direct its human and financial resources in support of agricultural development throughout the Americas.

The 1987-1993 Medium Term Plan, the policy document that sets IICA's priorities, stresses the reactivation of the agricultural sector as the key to economic growth. In support of this policy, the Institute is placing special emphasis on the support and promotion of actions to modernize agricultural technology and strengthen the processes of regional and subregional integration. In order to attain these goals, the Institute is concentrating its actions on the following five Programs: Agricultural Policy Analysis and Planning; Technology Generation and Transfer; Organization and Management for Rural Development; Trade and Integration; and Agricultural Health.

The Member States of IICA are: Antigua and Barbuda, Argentina, Barbados, Belize, Bolivia, Brazil, Canada, Chile, Colombia, Costa Rica, Dominica, the Dominican Republic, Ecuador, El Salvador, Grenada, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Suriname, Trinidad and Tobago, the United States of America, Uruguay and Venezuela. The Permanent Observers of IICA are: Arab Republic of Egypt, Austria, Belgium, European Communities, France, Germany, Hungary, Israel, Italy, Japan, Kingdom of the Netherlands, Portugal, Republic of Korea, Republic of Poland, Romania, Russian Federation and Spain.

ISSN-0534-5391



**HandiSTATUS:  
Help with World Animal Disease Status**

**User Tutorials and Manual**

**Theresa Bernardo**  
*Information Specialist,  
Hemispheric Project*

**Carlton Schuyler**  
*Consultant*

**PROGRAM V: AGRICULTURAL HEALTH**

IICA  
PM A1/SC-93-25  
BV-7481

© Inter-American Institute for Cooperation on Agriculture (IICA).  
December, 1993.

All rights reserved. Reproduction of this book, in whole or in part, is prohibited without the express authorization of the Inter-American Institute for Cooperation on Agriculture (IICA). The views expressed in signed articles are those of the authors and do not necessarily reflect those of the Inter-American Institute for Cooperation on Agriculture.

As of October 1993, the Inter-American Agricultural Documentation and Information Center (CIDIA) and the Directorate for the Coordination of Institutional Affairs (DICA) were merged in a new IICA unit, the Directorate for Information, Communications, Training and Institutional Affairs (DICCAI).

The Directorate for Information, Communications, Training and Institutional Affairs (DICCAI), was responsible for the stylistic revision and cover design of this publication, through its Editorial Service and Print Shop.

Bernardo, Theresa

HandiSTATUS : help with world animal disease status;  
user tutorials and manual / Carlton Schuyler ; Theresa  
Bernardo. — San José, C.R. : Inter-American Institute for  
Cooperation on Agriculture. Program V: Agricultural Health,  
1993.

62 p. ; 28 cm. — (Serie Publicaciones Misceláneas / IICA,  
ISSN 0534-5391 ; no. A1/SC-93-25)

1. Enfermedades de los animales. 2. Bases de datos — Ma-  
nuales. I. Schuyler, Carlton. II. IICA. III. Título. IV. Serie.

AGRIS  
L70

DEWEY  
636.0890285

MISCELLANEOUS PUBLICATIONS  
SERIES

ISSN-0534-5391  
A1/SC-93-25

December, 1993  
San Jose, Costa Rica

00000789

## Table of Contents

<b>1</b>	<b>Introduction</b> .....	<b>1</b>
1.1	Program Development .....	1
1.2	Technical Content .....	1
1.3	Obtaining a Copy of HandiSTATUS .....	2
<b>2</b>	<b>Installation</b> .....	<b>3</b>
2.1	System Requirements .....	3
2.2	Installing HandiSTATUS .....	3
2.2.1	Installation Steps .....	3
2.2.2	Common Installation Problems .....	4
<b>3</b>	<b>Using HandiSTATUS</b> .....	<b>6</b>
3.1	Starting the Program .....	6
3.1.1	Enabling the Edit Version .....	6
3.2	Overview of HandiSTATUS Operation .....	6
3.3	Conventions .....	8
<b>4</b>	<b>Tutorials</b> .....	<b>8</b>
	Tutorial A: Select a Disease and View Information .....	8
A.1	Select the Language of Operation .....	9
A.2	Select an Individual Disease .....	9
A.3	View Information on a Selected Disease .....	11
	Tutorial B: Import/Export Analysis .....	14
	Tutorial C: General Disease Selection .....	19
C.1	Selecting Diseases by Criteria .....	19
C.2	Changing the Current Disease .....	20
C.3	Modifying the Current Selection .....	21

## REFERENCE SECTION

<b>5</b>	<b>Select / Diseases</b> . . . . .	24
	5.1 Individual Disease . . . . .	24
	5.2 Group Selection . . . . .	25
	5.2.1 Use List . . . . .	26
	5.2.2 New List . . . . .	27
	5.2.3 Modify List . . . . .	27
	5.2.4 Other . . . . .	28
	5.3 The SELECTION METHOD Box . . . . .	28
	5.3.1 Individual disease . . . . .	29
	5.3.2 Type of disease . . . . .	29
	5.3.3 Vector transmitted diseases . . . . .	30
	5.3.4 Status (A,B,C) . . . . .	30
	5.3.5 Country or Region . . . . .	31
	5.3.6 Species/Commodity . . . . .	32
	5.3.7 Zoonosis . . . . .	34
	5.3.8 Read selection from disk . . . . .	34
<b>6</b>	<b>Other Selections</b> . . . . .	34
	6.1 Year . . . . .	34
	6.2 Reports . . . . .	34
	6.3 Program Information . . . . .	35
<b>7</b>	<b>View</b> . . . . .	35
	7.1 Names . . . . .	35
	7.2 Status . . . . .	36
	7.3 International Animal Health Code . . . . .	37
	7.4 Affected Species and Commodities . . . . .	37
	7.5 Disease Transmission . . . . .	37
	7.6 Reference Laboratories . . . . .	37
	7.7 Maps . . . . .	37
	7.7.1 World Map . . . . .	39
	7.7.2 Regional Maps . . . . .	40
	7.8 Browse Distribution Listing . . . . .	41
	7.9 Yearbook-Type Listing . . . . .	41
	7.10 Zoonosis . . . . .	42
	7.10.1 Listing . . . . .	42
	7.10.2 Map . . . . .	42
	7.11 Previous Record . . . . .	43
	7.12 Next Record . . . . .	43
	7.13 List of Selected Diseases . . . . .	43
<b>8</b>	<b>Print</b> . . . . .	43

<b>9</b>	<b>Import/Export</b> .....	<b>44</b>
9.1	<b>Import/Export Analysis</b> .....	<b>44</b>
9.2	<b>Model Certificates</b> .....	<b>45</b>
<b>10</b>	<b>Utilities</b> .....	<b>45</b>
10.1	<b>Language: Change Default</b> .....	<b>45</b>
10.2	<b>Set Colors</b> .....	<b>45</b>
10.3	<b>Select Printer</b> .....	<b>47</b>
10.4	<b>Browse Supporting Files</b> .....	<b>47</b>
10.4.1	<b>Animal Species</b> .....	<b>47</b>
10.4.2	<b>Countries and Regions</b> .....	<b>49</b>
10.4.3	<b>Reference Laboratories</b> .....	<b>50</b>
10.5	<b>Pack and Index Files</b> .....	<b>50</b>
10.6	<b>Convert Occurrence Data</b> .....	<b>51</b>
<b>11</b>	<b>Quit</b> .....	<b>51</b>
<b>12</b>	<b>Edit</b> .....	<b>51</b>
	<b>Appendix I: Disease Codes</b> .....	<b>52</b>
	<b>Appendix II: Occurrence Codes</b> .....	<b>56</b>
	<b>Appendix III: Control Codes</b> .....	<b>57</b>
	<b>Appendix IV: Addresses</b> .....	<b>58</b>





## **1 Introduction**

HandiSTATUS (**Help with World Animal Disease Status**) is a database program which contains information about animal diseases which are important to international trade or human health. The main sources of information are the FAO/OIE/WHO Animal Health Yearbook, published by the Food and Agriculture Organization of the United Nations (FAO), and the International Animal Health Code and World Animal Health, produced by the International Office of Epizootics (OIE).

### **1.1 Program Development**

The development of this database was initiated in response to requests for information by animal health personnel in the Caribbean through CARAPHIN, a project of the Inter-American Institute for Cooperation on Agriculture (IICA) and the Canadian International Development Agency (CIDA), with support from Agriculture Canada and the University of Guelph. Work has continued under a hemispheric project of IICA's Program V: agricultural health, which aims to promote the safe trade of agricultural products.

The program was developed by Dr. Theresa Bernardo and Mr. Charles Schotman. It was initially intended to be a source of integrated information particularly suited for persons working in isolation in small countries; however, it has come into much wider use. At a meeting of the OIE Working Group for Animal Health Information Systems in Paris in October 1992, it was recommended that "the OIE and FAO adopt HandiSTATUS as the computerized interface for information interchange between countries and international organizations."

The Animal and Plant Health Inspection Service of the United States Department of Agriculture (USDA/APHIS) and the OIE have committed financing toward the further development of HandiSTATUS. Additional features to be built into the program include the ability to display multiple years' data and to fill out emergency and annual reports to be forwarded to the appropriate international organizations. In future, there will be a copy updated daily with reports of new outbreaks, with regular distribution of updated data by diskette or through telecommunications.

### **1.2 Technical Content**

HandiSTATUS provides information on diseases of sufficient importance to international trade or human health to be included in the official lists A and B (OIE/FAO) or C (FAO). It features maps of the global distribution of listed diseases for each species affected. More detailed information on distribution is available in text form. In addition to assisting in risk identification for import/export decisions, it provides access to the OIE's International Animal Health Code recommendations for safe importation of products, lists of reference laboratories and contains formats for veterinary certificates.

The purpose of a database program is not only to make the information available to the user, but also to make the process of searching for the information as easy as possible, even for those users minimally familiar with computers. Toward this end, HandiSTATUS has been designed to make searching for information a relatively painless process. Nevertheless, the novice user may wish to begin with one of the step-by-step tutorials on the use of HandiSTATUS.

The following are examples of kinds of information HandiSTATUS is able to supply:

- What is the worldwide distribution of Swine Vesicular Disease?
- What information is required on the Zoo-Sanitary Certificate for Rabbits?
- Which listed viral diseases of cattle have been reported to occur in Country X?
- Which list A diseases can be transmitted by insect vectors?
- Which diseases should be taken into consideration when moving horses from country X to country Y?
- What is the address of the FAO reference laboratory for Newcastle Disease that serves my area?

HandiSTATUS can be run on any IBM compatible microcomputer, provided there is approximately 6 megabytes (Mb) of space available on the hard disk. It has the potential to significantly improve the quality and timeliness of animal health information to facilitate the safe international trade of animals and their products.

### 1.3 Obtaining a Copy of HandiSTATUS

If you wish to obtain a copy of HandiSTATUS or wish to have your name added to the list of persons to receive updates please send a message to or call:

Dr. Theresa Bernardo  
Information Specialist, Program V: Agricultural Health  
Hemispheric Project  
IICA Headquarters  
PO Box 55-2200 Coronado  
COSTA RICA

E-mail until Feb. 28th, 1994: TBERNARD@UCRVM2.bitnet  
E-mail after March 1st, 1994: IICA-HQ!TBERNARD@tlaloc.iica.ac.cr  
Fax: (506) 29-47-41  
Tel: (506) 29-02-22 ext. 2652.

HandiSTATUS usually comes in a compressed form on one 3.5-inch high density diskette (3.5" HD). If you do not have access to a computer that will read 3.5" HD diskettes, please provide specifications for your computer's diskette drive.

## **2 Installation**

Before you start using HandiSTATUS we must address some preliminaries, such as installing the program, understanding in general how it works, and learning basic terminology.

### **2.1 System Requirements**

In order to run HandiSTATUS, you must have a computer with the following characteristics:

- IBM-PC compatible, 80286 (or i386 or i486) microprocessor, with at least 1Mb (2 or more megabytes is recommended) of RAM memory.
- MS-DOS (or PC-DOS, etc.)
- A hard disk with at least 6 megabytes (Mb) of free space.
- A VGA graphics adapter is required for viewing the distribution maps. For text data no particular graphics adapter is necessary.
- *Note:* HandiSTATUS does not currently support mouse input.

### **2.2 Installing HandiSTATUS**

In order to use HandiSTATUS, you must install it on your IBM PC-compatible computer. You need only install HandiSTATUS once. If HandiSTATUS has already been installed on your computer, you need not read this section.

You most likely received HandiSTATUS in the form of one diskette of compressed files. A compressed file is one which has been encoded in order to make it take as little space on the diskette as possible. Installing the program will uncompress all of the files and store them on a hard disk. If you have an IBM-PC compatible computer which fits the description above, then you may start with the installation process.

#### **2.2.1 Installation Steps**

If at any point during the installation process there is an error (i.e., the computer behaves unexpectedly), then read section 2.2.2 entitled **Common Problems During Installation**.

1. Boot your computer, and go to the DOS prompt. (This is the prompt the computer gives when it is waiting for user input. Normally, it looks like C>.)
2. Ensure that you have at least 6 Mb of space available on the hard disk. You can check the amount of available space as follows below. The symbol [Enter] means the carriage return key.

Type: **DIR** [Enter]

After listing the files and directories, this will show you how many bytes are free.

3. This step is ESSENTIAL for the program to function properly! Be sure that the CONFIG.SYS file in the root directory has the statement **FILES=35** (or more, if you will be using HandiSTATUS in conjunction with other programs). If it does not, edit it so that it does, *and re-boot the computer.*
4. Now, insert the HandiSTATUS installation disk into the correct drive. We will assume that the drive device letter is A:. If your floppy disk drive has a device letter other than A:, then substitute your device letter where A: appears in the instruction below.

Type: **A:install** [Enter]

The installation program will create a directory called **HS** and will copy the files necessary to run HandiSTATUS into this directory. You can follow the progress of the installation procedure on the screen. It will also check the amount of available space on the hard disk and will check the Files statement in CONFIG.SYS.

5. Once the program has been successfully installed you will see an introductory screen with the logos of the international organizations that have contributed information to HandiSTATUS. The screen will then clear, and the *menu bar* will appear at the top of the screen. See section 3.2: Overview of HandiSTATUS Operation, to start using HandiSTATUS. The next time you wish to start HandiSTATUS refer to section 3.1: Starting the Program. Have fun!

If the **FILES=** command in the CONFIG.SYS file has not been set to 35 or more you will receive a warning message. Press [Enter] to quit the program, then modify the CONFIG.SYS file as explained in point three above.

### 2.2.2 Common Installation Problems

Refer to this section if something "goes wrong" during the installation of HandiSTATUS. If your problem is not covered in one of the paragraphs below, then you may need to contact

us to resolve it. Please see contact details under section 1.3: Obtaining a Copy of HandiSTATUS.

**Problem:** HandiSTATUS hangs the computer when it is run, or results in an error window (a red window if you have a color screen) containing the message "Error code 4."

**Solution:** Most likely, you have not set the **FILES=** command in your CONFIG.SYS file correctly. It should read **FILES=35**, or a higher number than 35. You must re-boot the computer after changing this line in your CONFIG.SYS file. If, after making sure that the line is correct, and re-booting your computer, the problem persists, try changing the number 35 to 45, or 50. If the problem is still present, contact us.

**Problem:** HandiSTATUS does not run, and you get a "File not Found" error.

**Solution:** The current "Install" program is very simple. It does not recognize errors in unpacking the compressed program from the installation disk. It may be that the program did not install correctly. To check if this is the case, go to the DOS prompt and type: **C:\ [Enter] CD \HS [Enter] DIR [Enter]**. The screen should scroll by, and you should get a message that says there are about 115 files taking up approximately 5.5 million bytes (if you installed all the languages). If this is not the case, then call us; your installation disk may be damaged, or you may have a system which requires that special steps be taken.

**Problem:** HandiSTATUS does not run, and you get a message which says something about too little memory, or low memory, or memory full, etc.

**Solutions:**

1. It is possible that your system does not have enough memory to run HandiSTATUS. If you do not have at least 1Mb of RAM, then HandiSTATUS will not run.
2. You may have programs in memory which are taking up a lot of memory that HandiSTATUS needs. If you have large memory-resident programs, you may need to remove them from memory before running HandiSTATUS.
3. You may not have an appropriate memory manager installed. If you have a lot of memory, and have an 80286 or i386 microprocessor, then you may not be taking advantage of your memory. Check to see if you are running an extended and/or expanded memory manager, and that it is operational and configured correctly for your system.

**Problem:** Since I installed the new DOS 6, my computer locks up or hangs when trying to run HandiSTATUS.

- Solution:**
1. In the CONFIG.SYS file in the root directory of the boot disk change the line EMM386.EXE to DEVICE=C:\DOS\EMM386.EXE RAM auto.
  2. Run MEMMAKER and specify that EMS is required by the software programs.

### 3 Using HandiSTATUS

#### 3.1 Starting the Program

The first thing you need to do to run HandiSTATUS is change to the directory it resides in, and execute the program. This is done as follows, assuming that it resides in drive C, directory \HS:

```
Type: C:\      [Enter]
       CD \HS   [Enter]
       HS      [Enter]
```

You will see an introductory screen which shows the logos of the international organizations that have contributed information to HandiSTATUS. The screen will then clear, and a message will appear while the program loads the data necessary for operation. The screen will clear again, and the *menu bar* will appear at the top of the screen.

##### 3.1.1 Enabling the Edit Version

If you wish to use HandiSTATUS to edit (modify) its own data, then you need to supply the correct password when you run the program. For example, if the password is Xyzzy, then instead of simply typing HS to run the program, you would type HS XYZZY (character case does not matter within the password). The password is provided under selected circumstances.

#### 3.2 Overview of HandiSTATUS Operation

HandiSTATUS works with a menu-driven system which is easy to use and does not require any special computer knowledge to operate. At the most general level of control, you may select one of the seven pull-down menus in the *menu bar*:

Select View Print Import/Export Utilities Quit Edit

The Edit item will only appear if the editable version of HandiSTATUS has been loaded (see 3.1.1 Enabling the Edit Version).

Notice that the first letter of every item is in emphasized type (on color monitors, it is in a different color than the rest of the text). These letters corresponding to the menu items are called the *hot-keys*. Almost every menu item in HandiSTATUS has a corresponding hot-key. In addition, in some menus there is a key specified in square brackets to the right of the menu item. These are short-cut keys which can be used without referring to the menu (actually they do not work within the menu) and are particularly useful in browse lists.

To select a menu item, you may either press the corresponding hot-key, or use the arrow keys (↑, ↓, →, ←) to move the cursor (which is *highlighted*, appearing as a different color than the other menu items on a color screen) so that the desired menu item is highlighted, and press [Enter].

To eliminate an unwanted menu, or to exit from the current operation, the "Escape" key [Esc] is generally used. Pressing [Esc] has the effect of canceling any changes made at the current level, and returning to the function you were using previously. Thus, in general, to select a menu item or menu, [Enter] is used, and to exit from a menu or operation, [Esc] is used. [Enter] generally means "accept" or go on, and [Esc] generally means "cancel" or go back.

On-line help will be available in future versions of HandiSTATUS by pressing the F1 key. *{At present, help is not available for every item at all levels of HandiSTATUS.}*

What HandiSTATUS does is search through a collection of *records* in a collection of large databases. A record is a structure that holds a number of pieces of data (fields) relating to the same object. During a search, the program compares records in various databases cross-referenced with each other, and selects a number of records whose fields contain data which match the search criteria selected by you.

Throughout this manual, the terms *current selection* and *current disease* will be used. A current selection is a list of diseases (records) which have been selected according to certain criteria. A current disease is a specific disease (record) within the current selection which you are focusing your attention on at the present moment. You can check the name of the current disease by choosing the item Names under View. It is important to keep in mind that most HandiSTATUS operations involve building a current selection according to your needs, and then focusing on specific diseases within the current selection to get more detailed information.

### 3.3 Conventions

Throughout the manual, the following abbreviations for special keys will be used:

<b>[Enter]</b>	Carriage Return
<b>[Esc]</b>	Escape
<b>[Del]</b>	Delete
<b>[Ins]</b>	Insert
<b>↑, ↓, →, ←</b>	The arrow keys (← is not to be confused with the backspace key)
<b>[BS]</b>	Backspace
<b>[PgUp]</b>	Page Up
<b>[PgDn]</b>	Page Down
<b>[Home]</b>	Home
<b>[End]</b>	End

References to text which appears on the screen will be set in **this type style**.

Images of actual menus and windows will be set in *this type style*.

Special terms which should be remembered will be set in *this type style*.

Characters which you should type (except the special keys listed above) will be set in **this type style**.

When referring to the menu systems, we will often wish to refer to a **sequence of menus**. For example, we may wish to express the operation of selecting the **Select** menu, then from that menu selecting the **Diseases** option, then from the sub-menu which is activated, selecting the **Group Selection** option. This entire sequence would be abbreviated by separating the menu names and options by forward slashes, thus: **Select / Diseases / Group Selection**.

The next section of the manual contains tutorials for a quick, practical introduction to the use of HandiSTATUS. The tutorials are recommended for novice users. A more formal reference section on the operation of HandiSTATUS (including the entire menu system) is found after the tutorials.

---

## 4 Tutorials

### Tutorial A: Select a Disease and View Information

Before starting this tutorial, you should have successfully loaded HandiSTATUS on your computer (Chapter 2: Installation) and you should be familiar with Chapter 3: Using HandiSTATUS.



Assuming that HandiSTATUS has been installed in drive C, directory \HS, start the program as follows.

```
Type: C:\      [Enter]
      CD \HS   [Enter]
      HS      [Enter]
```

HandiSTATUS works with a menu-driven system which is easy to use and does not require any special computer knowledge to operate. Remember that required items can be highlighted by using the arrows or cursor keys, and the highlighted item can be activated by pressing the carriage return key, [Enter]. Menu items can also be chosen by typing the character of the menu item which appears in emphasized type. In general, press [Enter] to accept or proceed, and press [Esc] to cancel or go back.

When the program is started, the user can choose one of the items from the main menu bar appearing at the top of the screen:

Select View Print Import/Export Utilities Quit

### A.1 Select the Language of Operation

HandiSTATUS will operate in English, French or Spanish. If you wish to change the language, move the highlighted portion of the main menu bar (at the top of the screen) to the Utilities item, using ← and →, and press [Enter]. At this point, a pull-down menu will appear. The Utilities / Language: change default option will be highlighted. Press [Enter] again, then use the arrow keys to highlight the language you prefer and press [Enter] once more.



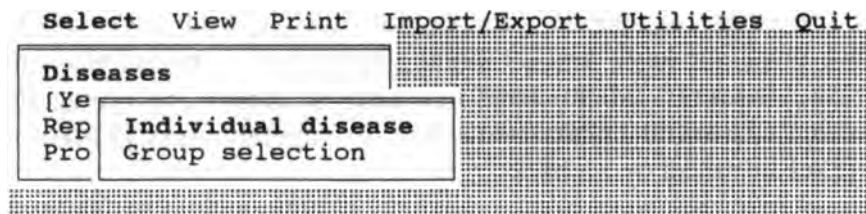
It is assumed that you have installed all three of the language modules; otherwise, the program will prompt you to do so at this time, using the distribution diskette.

### A.2 Select an Individual Disease

We will start with a simple example of selecting an individual disease and viewing some of the information available about that disease.

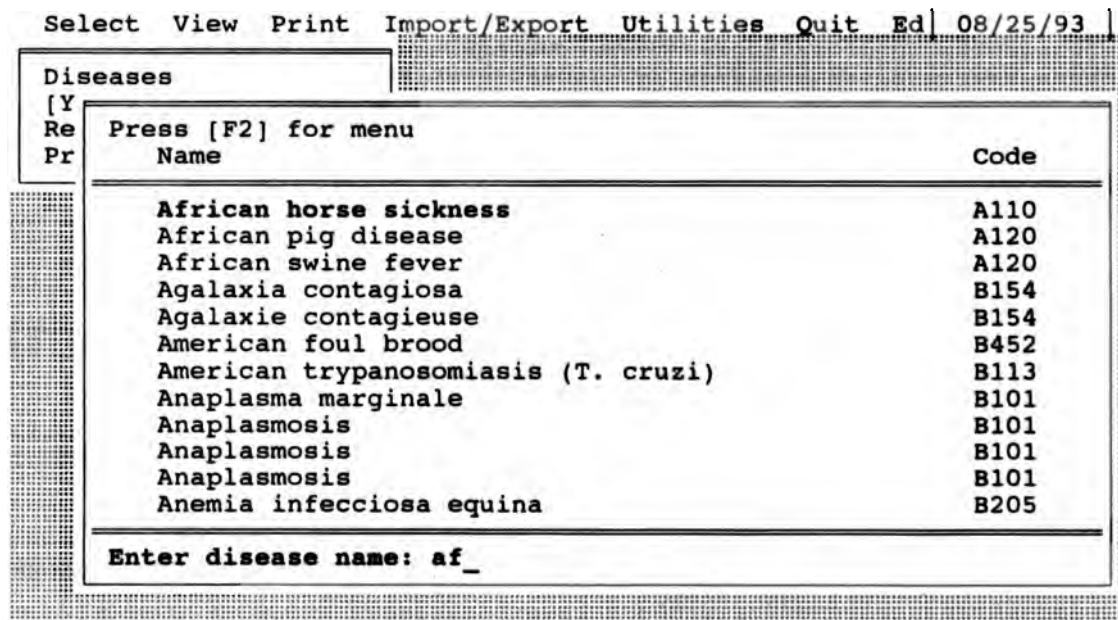
Move the highlighted portion of the main menu bar to **Select**, and press **[Enter]**. The **Diseases** option will be highlighted. Press **[Enter]**, then choose the item **Individual disease** by pressing **[Enter]** once more.

For the remainder of this tutorial, instructions for menu selections will be given in a more concise form. For example, the above would be represented by: **Choose Select / Diseases / Individual disease.**



You will now be presented with a list of disease names (English, French, Spanish and scientific names plus synonyms) which are included in HandiSTATUS. Use the down-arrow key to start scrolling through the list. You can hold this key down to move through the list, however, it is possible to make a selection more quickly using the incremental search mechanism.

Incremental search means that the searching process proceeds as you type the name of the item you are searching for. For example, if you wish to locate African Swine Fever, simply start typing the name: **A**, **F**, etc. Notice that the characters you type appear in the window at the bottom of the screen after the message **Enter disease name:** and at the same time, the cursor moves through the disease list to seek words which match as closely as possible the characters you have typed so far.



After you have typed only the first two characters, the program will have matched your entry against the word African. Deleting characters (by pressing [BS]) backtracks through the list. You can continue typing the disease name or use the cursor keys to highlight the disease you wish to select, then press [Enter] to select it.

After making your selection, you will be immediately taken to the View item on the main menu bar and the names for the disease you selected will be displayed.

### A.3 View Information on a Selected Disease

```
Select View Print Import/Export Utilities Quit Ed | 08/26/93 | 14:00
```

Record	Code	Type	Incubation	Transmission	Zoonosis	Zoo-Code
1/1	A120	v	42 days	vector +	-	+
Causal Organism						
Iridoviridae (DNA)						
Common Names						
English: African swine fever						
African pig disease						
Warthog disease						
Français: Peste porcine africaine						
Español: Peste porcina africana						

View allows you to see the information available on the disease you selected. The window on the screen displays the English, French, and Spanish names for the disease and the scientific name of the causal organism. Across the top of the window from left to right you see that only one record has been selected, that the disease Code is A120, that the causal organism is a virus, that the incubation period is 42 days, that the disease can be transmitted by insect vectors, it is not a zoonosis and the information from the OIE International Animal Health Code is available in the program. Press [Enter] to see all of the options available under View.

```
Select View Print Import/Export Utilities Quit
```

<b>Names</b>
Status
International Animal Health Code
Affected Species and Commodities
Disease Transmission
Reference Laboratories
<b>DISTRIBUTION</b>
Maps
Browse Distribution Listing
Yearbook-type Listing
Zoonosis
Previous record
Next record
List of selected diseases

The information we just saw is available under the **Names** selection. Let us go on to display the **OIE International Animal Health Code**. Highlight the corresponding option in the **View** menu and press **[Enter]** (alternatively, use the hot-key **I**). A message telling you that text is being read from disk briefly appears, and then the screen is filled with a window of text from the International Animal Health Code for the current disease. You may now read the text at your leisure, and move up and down the document with the up- and down-arrow keys, and the **[PgUp]** and **[PgDn]** keys. It includes information such as definitions of an infected country or free zone, and suggested requirements for importing from a free country or an infected country. When you have finished looking at the Code, press **[Esc]** to return to the **View** menu.

Press **[Enter]** to pull down the options under **View** and select **Affected Species and Commodities**. This list of animal species and commodities that can transmit the current disease (in this case African Swine Fever) is a key factor in the **Import/Export Analysis**, which is the subject of Tutorial B.

Press **[Enter]** twice to return to the options under **View** and select **Vectors and Transmission**. Here you will find references and information regarding transmission, survival and inactivation of the causal organism for the current selection. This information was kindly provided by the Australian Quarantine and Inspection Service. Again, you may go through the text with the up- and down-arrow keys, and the **[PgUp]** and **[PgDn]** keys. Once you have finished, press **[Esc]** to return to the **View** menu and press **[Enter]** to see the options.

We will now look at some of the options which relate to geographic distribution of the selected disease. Select **Maps / World**. You should now see a map of the world distribution of African Swine Fever. The legend is as follows:

- the disease has been reported in this species in this country
- the disease has not been reported in this species in this country
- ? the disease is of questionable occurrence in this country
- # the disease is restricted to a specific area within the country

In Tutorial C we will look at how the different OIE/FAO codes for reporting disease occurrence were divided into these four categories.

Select **Borders** to draw in the country borders. Once this is finished, select **Region** to look at a specific region. This brings a square onto the screen which can be moved with the cursor to the desired region. Move the square to Africa, then press **[Enter]** to see the regional map.

The map of Africa is shown with the borders drawn. You may remove them by selecting the item **Borders**, which functions as a toggle. Select **Country names** (also a toggle). The countries for which there is no symbol at all (for example Libya, Western Sahara, Senegal, Togo, etc.) are countries which did not report for this disease in this year.

The actual disease occurrence and disease control information reported to the OIE and FAO, and summarized in the Animal Health Yearbook and World Animal Health (on which the maps are based), can be viewed by pressing [Esc] to return to the View menu and selecting **Browse Distribution Listing**.

Select View Print Import/Export Utilities Quit Ed | 08/26/93 | 14

Disease: African swine fever		[F2] - Activate Menu	
- COUNTRY SPECIFIC REMARKS (if any) _____			
Data for 1990			
Country	Species	Occur	Control methods
Algeria	SUI	- 0000	
Angola	SUI	++ )(	P PnQ Qis *
Benin	SUI	+. .	*
Botswana	SUI	- 1987	P Qis *
Burkina Faso	SUI	-	
Burundi	SUI	+	Q S *
Cameroon	SUI	++	Qis *
Cape Verde	SUI	?	
Central African Repu	SUI	- 0000	
Chad	SUI	...	

View symbols for distribution and control for all countries and species

Here you will see a list of all countries (organized in alphabetical order for each region) and the information they reported for African Swine Fever. You can move through the list of countries using the up- and down-arrow keys, and the [PgUp] and [PgDn] keys. If you are not familiar with the OIE/FAO codes for disease occurrence or disease control, you can press F2 to activate the menu, then select **Occurrence Symbols** for an explanation of the symbols used. You can scroll down through the symbols with the arrow keys. Press [Esc] or [Enter] to leave the list of symbols. The short-cut key, F3, allows you to display the disease occurrence symbols directly from the list of countries, without using the menu.

Disease occurrence	
Symbol	Meaning
0000	Never reported
-	Not reported
year	Year of last occurrence
?	Suspected but not confirmed
(+)	Exceptional occurrence
Esc: Exit; R:Re-size/Move Window	

From this same menu you can select **Search Country** (short-cut key Alt-S) which allows you to jump to a specific country of your choice using an incremental search. Simply begin typing the name of the country you wish to select and the characters you type will appear

in the window at the bottom of the screen after the message **Seek:**. Type **IT** to select Italy and press **[Enter]**. If there is a specific message for the highlighted country and species it appears in the box "Country Specific Remarks." The short-cut key **Alt-S** can only be used while you are browsing the distribution listing.

```
Select View Print Import/Export Utilities Quit Ed| 08/26/93 | 14:
File Edit                               [F2] - Activate Menu
Disease: African swine fever
-----
COUNTRY SPECIFIC REMARKS (if any) -----
-----
Country name                            Isocode
-----
Italy                                    IT
Ivory Coast                              CI
Jamaica                                  JM
Japan                                     JP
Jersey                                   JS
Johnston Island                          JT
Jordan                                    JO
Kampuchea, Democratic                   KH
Kenya                                     KE
Seek:  it_
```

This has been a brief introduction to a few of the major features of the program. By now, you should feel comfortable enough to explore the other options by trying them out. To exit the program, press **[Esc]** a sufficient number of times to return to the main menu bar. Highlight **Quit**, select one of the two options and press **[Enter]**. The short-cut key to quit directly from any level is **Alt-Q**. Tutorial B provides an introduction to Import/Export Analysis and Tutorial C explains how to build and modify a current selection, which is composed of several diseases. The Reference Section of the manual provides more comprehensive coverage of all menu items.

### Tutorial B: Import/Export Analysis

This tutorial deals with the most specialized feature of the HandiSTATUS program, which integrates several of the program's capabilities.

In Import/Export analysis, HandiSTATUS searches for records in a disease database that match country and commodity data, provided by you, the user. For example, you might have a client who wishes to import into Mexico a shipment of beef from Venezuela. You would be interested to know the comparative status of bovine diseases in the two countries, particularly for those diseases which could be transmitted through beef. This is a simple process using

**HandiSTATUS.** All you need to do is specify the exporting and importing countries, and the species and commodity to be imported.

The **HandiSTATUS** program would then select the records for all bovine diseases which can be transmitted through beef, excluding those which have been reported not to occur in Venezuela. It would present a list of these diseases and the reported occurrence status in the exporting country (Venezuela) alongside the occurrence status in the importing country (Mexico). The user can then employ the comparative disease status as an aid in making a decision about the importation.

It is important to remember that the occurrence status for a given country was reported by the country itself and was current at the time of reporting. Check your copy of **HandiSTATUS** (opening screen or **Select/Program Information**) to verify the date of reporting. Eventually, it is envisaged that **HandiSTATUS** will be updated each day with status changes reported by the countries. Updated information will be distributed through telecommunications or on diskette. However, in all cases disease status should be verified directly with the country concerned.

Let us start our search as specified in the example above. To repeat, we wish to know which diseases should be considered in a shipment of beef from Venezuela to Mexico. The first thing we need to do is start the **Import/Export Analysis** process. To do this, we move the highlighted portion of the main menu bar (at the top of the screen) to the **Import/Export** item, using ← and →. As you move the cursor, you will notice that the line at the bottom of the screen (the *summary line*) changes. This line contains a brief summary of the function served by the highlighted option.

When the **Import/Export** option is highlighted, press **[Enter]**. At this point, a pull-down menu will appear. The **Import/Export Analysis** option will be highlighted. Press **[Enter]** once more. You will be presented with two windows: The top one contains a short description of the function you have selected (just to remind you), and the lower one contains another menu, with the top option highlighted. The screen should look similar to the one below.

You need to choose the proper information to enter for the four menu items. First, we will specify an animal species. Move the cursor using ↑ and ↓ to highlight the **Animal Species** selection, and press **[Enter]**. You will be presented with a menu containing all of the animal species which **HandiSTATUS** recognizes. To the left of each species or species group name is a number or letter: the hot-key for that item. You may select a species either by using ↑ and ↓ and pressing **[Enter]** when the desired species is highlighted, or by merely pressing the hot-key corresponding to the particular item. We wish to get information regarding beef, so we need to select **Bovine** (hot key: a). Again, either use ↑ and ↓ and **[Enter]**, or merely press the hot-key (a). The **Species** menu will disappear, and you will be returned to the **Selection Criteria** menu, with the selection (**Bovine**) printed next to the **Species** label, and the cursor advanced to the next selection criterion, **Commodity Type**.

**ASSESSMENT OF QUARANTINE RISK ASSOCIATED WITH SPECIFIED CONSIGNMENT**

Analysis of data based on disease occurrence, species and commodity range.

---

Data Entry for Analysis

Animal species  
Commodity Type  
Country of Origin  
Importing country

O.K.CLEAREXIT [Esc]

Press [Enter], and you will be presented with a **Commodity selection** menu. Again, there are hot keys for every commodity type. We need fresh meat (i.e., beef), which is selection **f**. Select this item just as you selected **Bovine** previously, and you will be returned to the selection criteria menu, with the **Country of Origin** menu item highlighted. Press [Enter].

The selection menu this time is rather large, so it is contained in a *scrolling window*. Scrolling is simply moving the contents of the window so that previously hidden information becomes visible. Press ↓ about fifteen times. Notice that when you reach the bottom of the window, the list of countries scrolls up one line. You may return to the top of the list (where you started) by pressing ↑ until you may no longer move up. The [PgUp] and [PgDn] keys may be used to move one window-full of entries at a time.

This scrolling window has two columns: **Country name**, and **Isocode** (International Standards Organization code). To move to the **ISOcode** column, press → once. To move back to the **Country name** column, press ← once. The ISO code is useful for reference purposes, but also comes in handy when using a feature called incremental search. Suppose, for example, that you know that the ISO code for Venezuela is VE. Then, to search for Venezuela, instead of using the arrow keys, you may move the cursor to the ISO Code column and type the characters VE. Notice that the characters appear at the bottom of the window, and the window automatically scrolls to the location in the list where the entry for Venezuela is located. Now, press [BS] once. The E you typed earlier is erased, and the window scrolls up to the entry for **Saint Vincent and the Grenadines**. Why is this? Notice that pressing ↑ once scrolls the window to the previous entry in the list, **Uruguay**, which has ISO Code UY. The answer to the question "Why?" is that Saint Vincent and the Grenadines is the first country in the list whose ISO Code starts with a V. Now, type the letter N. Notice that the cursor is now on the



entry for **Vietnam**, because you have entered the ISO Code **VN**, standing for Vietnam. You may wish to experiment a little bit now, by using **[BS]** and trying various ISO codes.

Experimentation becomes much more interesting when you move the cursor to the **Country name** column. Do so. Now, say that you wish to select the country **Rwanda**. Make sure that you delete all characters already typed (by pressing **[BS]** a few times), and type the characters **RW**. Since **Rwanda** is the only country whose name starts with the characters **RW**, you have made a match in only two characters!

For now, though, we are selecting the country **Venezuela**. So, backspace over the characters **RW**, and type the letters **VE**. Again, **Venezuela** is the only country whose beginning matches our input, so the desired match has been made. Press **[Enter]** to select **Venezuela**. The country selection disappears, and you are returned to the **Selection criteria** menu. Follow the same process to select **Mexico** as the **Importing Country** (type the letters **MEX** and press **[Enter]**). At this point, you have several options. You may redo any of your four selection criteria by moving the cursor back to that item in the menu and pressing **[Enter]**, or you may clear all your selection and start over by moving the cursor to the **Clear** "button" (a button is a menu item which is surrounded by an outline to look like a button) and pressing **[Enter]**; or you may exit the entire **Import/Export Analysis** process by "pressing" the **Exit** "button;" or, finally, you may accept the current selection criteria by pushing the **O.K.** "button." This is in fact what we wish to do. Move the cursor to the **O.K.** button and press **[Enter]**.

Two windows appear. The top one is a message informing you that a search is taking place; the bottom one is meant to keep you informed of the progress of the search by counting the number of records selected. When the search is over, the progress windows are removed, and a window appears containing a summary of all the quarantine risk information found with our search. In our system, there are four selected records (due to the dynamic nature of the database, the selection on your system may differ). The screen appears as follows:

```

Display View Print Import/Export Utilities Quit | 01/20/93 | 15:21:41
-----Selected records for Risk Evaluation-----

```

	Code	Disease name	Occurrence at origin	Occurrence at destination
A	A010	Foot-and-mouth disease (FMD)	•	°
C	A011	FMD - Virus O	•	
	A018	FMD - Virus not typed	?	
c	B106	Cysticercosis (C. bovis)	•	#

```

-----Data Entry for Analysis-----
Animal species Bovine
Commodity Type fresh meat
Country of Origin Venezuela
Importing country Mexico

```

This is a list of the diseases which might be of concern when importing beef from Venezuela to Mexico. The summary window contains, from left to right: the OIE code for the disease, the common disease name, the disease occurrence code that was reported by the country of origin (Venezuela) and the disease occurrence code reported by the country of destination (Mexico). These codes appear in Tutorial C and are also explained in section 7.7, **View / Maps**, of this manual.

You have now finished the Import/Export Analysis process, and HandiSTATUS will remember the groups of records you have selected as the current selection. The **Import/Export** option is only one way to make a current selection. The selection just made may now be used in other features of the program. It remains current until another selection is explicitly made.

You may now do several things:

1. Perform another Import/Export Analysis (if you would like to make a selection based on different criteria) by pressing [Esc].
2. Exit from the Import/Export options by pressing [Esc] twice.
3. View more detailed information about a specific disease (or specific diseases) in the current selection by pressing [Enter] while the cursor is on one of the fields in the desired record in the summary window.

For purposes of this tutorial, we will now select option 3. Move the cursor to one of the fields for the first record (for **Foot and Mouth Disease**) and press [Enter]. The screen clears, and you are presented with a window showing detailed information about the disease:

Record	Code	Type	Incubation	Transmission	Zoonosis	Zoo-Code
1/ 5	A010	v	21 days	+	-	+
Causal Organism						
Picornaviridae aphthovirus (RNA)						
Common Names						
English: Foot-and-mouth disease (FMD)						
English: Foot and mouth disease						
Français: Fièvre aphteuse (FA)						
Español: Fiebre aftosa (FA)						

This is just some of the information we may view about Foot-and-Mouth Disease. Let us review the various other sorts of information that can be viewed about specific diseases. To do this, we need to pull down the **View** menu. At this point, you may feel comfortable enough with the program to explore the **View** options on your own, or with the aid of Chapter 7 of this manual. Tutorial C explains how to build and modify a current selection, which is composed of several diseases.

## Tutorial C: General Disease Selection

Tutorial A demonstrated how to select a single disease and view the information on that disease contained in HandiSTATUS. In Tutorial B, we made a very specialized selection of diseases through the Import/Export Analysis function. This tutorial explains how you can select a group of diseases from the **Select / Diseases / Group Selection** menu.

You can make selections based on various classifications, such as type of causal organism or species affected, and you can modify that selection by adding to it, deleting from it, etc. For example, you may only be interested in diseases of swine, or you may have a special interest in hemoparasites. You may even wish to combine criteria to know which bovine diseases are also zoonoses, or to see if any of the list A diseases which affect sheep have been reported to occur in Australia.

### C.1 Selecting Diseases by Criteria

We wish to begin with the **Select** menu. To do this, you need to be able to move the highlighted cursor with the left and right arrows through the options in the main menu bar. If you are not at this stage, then press [Esc] a sufficient amount of times to return to the main menu bar. Now, choose **Select / Diseases / Group Selection**.

Select View Print Import/Export Utilities Quit

<b>Diseases</b>	
[Ye	
Rep	Individual disease
Pro	<b>Group selection</b>

We now want to build a current selection, composed of several diseases. After selecting the **Group Selection** option, one of two things may happen. You may be presented with the following box titled **SELECTION METHOD**, which is where we wish to start.

Select View Print Import/Export Utilities Quit

<b>Diseases</b>	<b>SELECTION METHOD</b>
{Y	Individual disease(s)
Re	Type of disease organism
Pr	Vector transmitted diseases
	Status (A,B,C)
	Country or Region
	Species/Commodity
	Zoonoses
	Read selection from disk

Or, if for some reason there is already a current selection in memory, then you will be presented with the following window:

```
Select View Print Import/Export Utilities Quit Ed | 08/27/93 | 14:55:
Diseases
[Year]
Report
Progra
```

List of selected diseases		
Use list	New list	Modify list
Other		
Main selection	: Chlamydia	2 records
Record	Name	Code
1	Enzootic abortion of ewes	B156
2	Psittacosis and Ornithosis	B312

If you are presented with this window, move the cursor to highlight **Modify list** and press **[Enter]**. Then select **New list** by pressing **[Enter]** and you will be returned to the SELECTION METHOD box (above), which is our starting point for this exercise.

The SELECTION METHOD box lists all of the criteria which you can use to make or modify a selection of diseases. First, we wish to select all list A diseases. Select **Status (A,B,C) / list A**. You will see a list of selected diseases. Notice that the main selection was list A diseases and that 27 records were chosen. Press **[Enter]** once again to **Use list**. The cursor drops down into the list of selected diseases and you can move through the list with the up and down arrows. Move down through the list until **Rinderpest** is highlighted and press **[Enter]**. You will immediately be taken to the **View** menu, with the **Names** of the current disease displayed. Press **[Enter]** again to pull down all of the options available under **View**.

You can now view any of the information available in **HandiSTATUS** about the current disease (**Rinderpest**). Highlight **Status** and press **[Enter]** to read the definition of a list A disease. Press **[Enter]** twice more to return to the options under **View**.

## C.2 Changing the Current Disease

Our current selection consists of all list A diseases and our current disease is **Rinderpest**. We can view any of the information on **Rinderpest** while it is the current disease, but we can also change the current disease to any of the other diseases in the current selection (any other list A disease in this example). From the **View** menu, select the option **List of Selected Diseases**, either using the arrow keys and **[Enter]**, or the hot-key **L**. You are returned to the window containing all the diseases in the current selection. Press **[Enter]** to **Use list** and you may now move the cursor to the disease you wish to examine (move to **Rift Valley Fever**), and press **[Enter]** to select it.

Again you will find that you are at the **View** menu, with the **Names** of the current disease displayed. There is an easy and fast alternative way to change the current disease from within

items in the **View** menu. Simply use the up and down arrows to go backwards and forwards through the list; it works when the last selection from the **View** menu was **Names**. Try it. Press the down arrow twice and you will see the names for African horse sickness. Stop here and press **[Enter]**. You can now look at any of the other information on African Horse Sickness.

### C.3 Modifying the Current Selection

You now know how to select a group of diseases using one of the criteria specified in the **SELECTION METHOD** box. We will now look at ways to modify the current selection using combinations of criteria.

Press **[Esc]** a sufficient number of times to return to the main menu bar then choose **Select / Diseases / Group selection**. You will see the **List of selected diseases** window. Select **Modify list** and you will see the five choices below.

```

Select View Print Import/Export Utilities Quit Ed| 10/15/93 | 10:58

```

**Diseases**  
**Year**  
**Report**  
**Progra**

List of selected diseases

Use list    New list    **Modify list**    Other

---

Main selection

---

Record	Name	ID
1	Fiebre aftosa (FA	
2	FA - Virus O	
3	FA - Virus A	A012
4	FA - Virus C	A013
5	FA - Virus SAT 1	A014
6	FA - Virus SAT 2	A015
7	FA - Virus SAT 3	A016

Select from list                    [F3]  
Add to list                            [Alt-I]  
Delete from list                    [Alt-D]  
Insert individual disease(s) [Ins]  
Remove individual disease(s) [Del]

Select **Add to list** and you will be returned to the **SELECTION METHOD** box. We are going to *add* to our current selection all of the list B diseases, so choose **Status (A,B,C) / list B**.

The **List of selected diseases** window now shows that you have added list B diseases to the current selection for a total of 122 records (see below).

We now wish to *select from* the current selection only those diseases which are caused by viruses. Choose **Modify list / Select from list / Type of disease organism / VIRUS**. You will see that we have decreased the number of records to 65.

Diseases [Year] Report Progra	List of selected diseases		
	Use list	New list	Modify list Other
Main selection	: List A diseases	27 records	
Added to above	: List B diseases	122 records	
Record	Name	Code	
1	Foot-and-mouth disease (FMD)	A010	
2	FMD - Virus O	A011	
3	FMD - Virus A	A012	
4	FMD - Virus C	A013	
5	FMD - Virus SAT 1	A014	
6	FMD - Virus SAT 2	A015	

Now we wish to limit our selection to diseases that occur in horses. Select **Modify list / Select from list / Species/Commodity** and you will be presented with a list of species to choose from. This is the same list that was used for Import/Export Analysis and functions in the same way. Select **Equine** and then select **live animals** from the list of commodities. You will see that the **List of selected diseases** will be reduced to 14 records for viral diseases of horses that are in either list A or B. You can stop at any time and browse through the list or look at the information available for a particular disease.

Next we wish to restrict the current selection to those diseases which have been reported to occur in Spain. This can be done by *selecting from* the current selection only those diseases which have been reported to occur in Spain. Another way to do this would be to *delete from* the current selection those diseases which have been reported not to occur in Spain. The latter operation may be preferable in case Spain has not reported for all diseases. It would ensure that only diseases which have been reported not to occur would be eliminated from the current selection.

Select **Modify list / Delete from list / Country or Region**. You will be presented with an incremental search for countries or regions. Type **SP** to highlight Spain and press **[Enter]**. You are now faced with a complicated-looking, full-screen menu (see below). Take some time to examine this screen. It includes all of the disease occurrence codes, divided into four categories. These are the same divisions that are used to draw the maps of geographic distribution. For example, all countries that had reported one of the codes under category 2 (questionable) would appear with a question mark on the maps.

For our present purposes, this is used to filter our current selection according to the occurrence of the disease in a specific country. The four principal categories of occurrence are indicated by the numerals 1 to 4: Reported; Questionable; Confined to Certain Regions; and Not Reported. Pressing **[Enter]** while one of these options is highlighted will check all of the sub-

categories (indicated by lower case letters) of the main categories. Pressing [Enter] again will remove the check marks (ie., [Enter] functions as a toggle). Pressing [Enter] while one of the sub-categories is highlighted will either remove or put a check mark (✓) next to that sub-category. The checked items will be used to filter the list, search or display in which you are currently engaged.

```
Select View Print Import/Export Utilities Quit Ed| 08/27/93 | 15:
Dis [Ye Filter on:
Rep Pro Disease Occurrence
1. Symbols REPORTED
a. )( Ubiquitous
b. +++ High occurrence
c. ++ Enzootic
d. + Low sporadic occurrence
e. (+) Exceptional occurrence
f. +.. Disease exists; distribution and occurrence unknown
g. ! Recognized in country for the first time
2. QUESTIONABLE
h. ? Suspected but not confirmed
i. +? Serological evidence only, no clinical disease
j. <= Only in imported animals (quarantine)
k. ... No information available (excluding blank records)
3. ( ) CONFINED TO CERTAIN REGIONS
4. NOT REPORTED
l. - ✓ Not reported
m. 0000✓ Never reported
n. year✓ Year of last occurrence
O: O.K.
```

Set the filter as illustrated above so that only the items under category 4, NOT REPORTED, have check marks next to them. This means that all diseases which have been reported not to occur in Spain will be deleted from our current selection. Press O, for O.K., to proceed. You will see that our current selection has been reduced to two diseases. Finally, we wish to know if either of these diseases can be transmitted by insect vectors. Select **Modify list / Select from list / Vector transmitted diseases** and you will find that our current selection has been reduced to one disease.

This has been a long and complicated selection process to demonstrate the various criteria for selection and methods of modification. We have selected all list A or B diseases that are viral diseases of horses which can be transmitted by insect vectors and may occur in Spain. You could arrive at the same selection in fewer steps (four) by starting with one of the more limiting factors such as diseases transmitted by vectors, then selecting from that viral diseases of horses reported in Spain.

After completing these tutorials we hope you will find your way around HandiSTATUS without any trouble. However, if you need additional information on any item you can refer to the Reference Section of this manual. We would appreciate receiving any comments or suggestion you might have regarding the program itself or this documentation. Please send them to the address listed under section 1.3, Obtaining a Copy of HandiSTATUS.

## REFERENCE SECTION

### 5 Select / Diseases

This is the first option in the **Select** menu. It is quite complex, and thus merits an entire chapter. The remaining options under the **Select** menu are covered under Chapter 6: Other Selections.

The **Select / Diseases** option allows you to create a current selection by searching the disease database for diseases which possess certain characteristics. The use of this option is the subject of Tutorials A (Individual Disease) and C (Group Selection). For new users, it is highly recommended that these tutorials be followed.

#### 5.1 Individual Disease

This is the simplest method to select a single disease. This option allows you to select a disease, keyed by the common name, causal organism, or OIE/FAO code. The selection window is divided into two columns: **Disease Name**, and **OIE/FAO Code**. You may switch between the columns with ← and →. When the **OIE/FAO Code** column is highlighted, you may perform an incremental search by disease code; when the **Disease Name** column is highlighted, you may conduct an incremental search by the disease name. Tutorial A demonstrates how to select a single disease and view the information on that disease which is contained in HandiSTATUS.

#### Selecting a disease

The disease selections are made by pressing **[Enter]** when the name or code of a desired disease is highlighted. You may move the cursor upwards and downwards through the list with ↑ and ↓, and the **[PgUp]** and **[PgDwn]** keys. Alternatively, you may use the *incremental search* capability (see below). Once the highlighted disease has been selected by pressing **[Enter]**, you will be immediately taken to the **View** menu and the **Names** of the disease will be displayed. From here you can "view" the various types of information about the selected disease (see Chapter 7: View).

An individual disease selected in this manner is not saved in memory; that is to say it does not become or replace the current selection.



## **Incremental Search**

This search mechanism has been implemented in several parts of HandiSTATUS. In particular, when selecting diseases, or countries/regions, you may make the selection through the incremental search mechanism.

Incremental search means that the searching process proceeds as you type the name or code of the item you are searching for. For example, if you wish to locate Foot and Mouth Disease, you may start typing the name: **F**, **O**, **O**, etc. Immediately, the cursor begins to relocate itself in the list of items according to the characters you have typed. Deleting characters (by pressing **[BS]**) backtracks through the list. To select Foot and Mouth Disease, you need only type the characters **FO**; these two beginning characters correctly locate the desired disease. Once the desired selection is highlighted, pressing **[Enter]** will make the selection.

## **Filtering the List by Language/Organism**

Pressing **[F2]** to activate the sub-menu, and then selecting the **Filter Setting** menu option will allow you to choose which common disease names appear in the selection window. By default, the names in the default language are shown. You may choose to show any or all of the English, French, and Spanish common names, as well as the names for the causal organisms. This may aid in selecting a disease for which you know nothing but the French name, or the causal organism, for example.

Place a check mark beside the type(s) of names which you wish to appear on the browse list by highlighting the item and pressing **[Enter]**. The **[Enter]** key functions as a toggle key; press it once to place a check mark and again to remove the check mark. Once the items you wish to select have been marked appropriately highlight **Ready** and press **[Enter]** to return to the list of disease names.

## **Cancelling the Selection Process**

To cancel the individual disease selection process, you may press **[Esc]** at any time. Doing this will immediately return you to the **Select** menu, and any disease selection that existed before you started the process will be restored.

## **5.2 Group Selection**

This option allows you to select and/or modify a group of diseases based on various criteria. Tutorial C demonstrates how to make and manipulate a group selection.

After selecting **Select / Diseases / Group Selection** one of two things may happen. If there is no current selection in memory you will be presented with the **SELECTION METHOD** box and you may begin to make a new selection of a group of diseases based on certain characteristics. The **SELECTION METHOD** box lists all of the criteria which you can use to make or modify a selection of diseases (see section 5.3, The **SELECTION METHOD** Box). If there is already a current selection in memory, then you will be presented with the **List of selected diseases** and a choice of the following:

- **Use list** should be selected if in fact the current selection of diseases is the one you wish to use; you wish to make no changes in the selection.
- **New list** allows you to begin a new group selection which will replace the current selection.
- **Modify list** will allow you to make changes to the current selection, by adding records, or deleting records by limiting the criteria for the records already selected.
- **Other** allows you to save a group selection for future reference or to recall a group selection which was previously saved to disk.

Below these headings there is a synopsis of the manner in which the present selection was chosen. The first line shows which criteria that was used to make the main selection. An additional line will be added for each modification stating the type of modification (see section 5.2.3 below, **Modify list**) and the criteria use for the modification (see section 5.3, The **SELECTION METHOD** Box).

### 5.2.1 Use List

Choose this option if you wish to work with the group of diseases which has already been selected. Pressing **[Enter]** while this option is highlighted will transfer you directly to the list of selected diseases which has three columns: **Record**, **Name**, and **Code**. The first simply enumerates the records in your current selection. The **Name** column contains the common name of the disease in the language you have selected. The **Code** column contains the OIE/FAO Code for the disease. You may move the cursor upwards and downwards through the list with **↑** and **↓**, and the **[PgUp]** and **[PgDwn]** keys. Press **[F2]** if you wish to reactivate the previous list of choices.

If you wish to view the information for one of the diseases in the list, highlight it and press **[Enter]** and you will be immediately taken to the **View** menu and the **Names** of the disease will be displayed. From here you can view the various types of information available on the selected disease in the same manner as for an individual disease selection.

### 5.2.2 New List

You should choose this option if you wish to replace the current selection with a new selection. It can also be used if you have made a mistake in your selection process and you wish to start over. Once you have chosen one of the criteria in the SELECTION METHOD Box the current selection will be erased completely and replaced with your new selection.

### 5.2.3 Modify List

This option allows you to manipulate the current selection in order to attain a list of diseases that satisfy a particular set of criteria. After choosing one of the following operations for selection, the SELECTION METHOD Box will appear offering a list of criteria for the selection:

- **Select from list** allows you to select a subset of diseases from the current selection according to one of the criteria from the SELECTION METHOD Box (see section 5.3 below). The new selection will be selected from the records in the existing current selection, instead of from the entire HandiSTATUS database. This usually results in a reduction of the list; diseases in the current selection which do not satisfy the specified criteria will be eliminated, and only the diseases which satisfy the specified criteria will remain. For example, if the existing selection consisted of a list of diseases that affect bovines, you might wish to select from this list only those diseases which are caused by bacteria. Or, if you wish to have a list of diseases which affect both sheep and goats, you would first select the diseases which affect sheep and then you would select from the list only those diseases which also affect goats.
- **Add to list** is a simple addition function. The diseases which satisfy the criteria you specify will be added to the list. For example, if you wanted a list of all the diseases which affected sheep or goats, you could first select all of the diseases which affect sheep and then add to the list all of the diseases which affect goats. The new selection will be merged with the existing current selection. For example, if a disease affects both sheep and goats it will only appear in the list once. It is important to realize that whatever diseases fulfill the criteria to be added to the list will be added regardless of what limitations were previously used to arrive at the current selection.
- **Delete from list** will eliminate from the current selection those diseases which satisfy the specified criteria. Notice that the select from list operation is complementary to delete from list: the first allows you to restrict the current selection according to certain criteria which the records must possess; the latter allows you to restrict the current selection by specifying certain criteria which the records must *not* possess. The following is an important example of when it is preferable to delete from the list rather than to select from the list. Suppose you were interested to know all of the diseases which affect a particular species that might possibly occur in Country X. You would start by selecting

all of the diseases that affect that species. You would then have a choice of: 1) selecting from the current selection only those diseases which have been reported to occur in Country X; or 2) you could delete all of the diseases which had been reported not to occur in Country X. What is the difference? If there were diseases for which Country X did not report (blanks in the data) these diseases would not appear if you had chosen the first option, but would be included in the list if you had chosen the latter, which is the most conservative approach to arriving at a list of diseases which might possibly occur in a given country.

- **Insert individual name(s)** will allow you to add an individual disease to the by using an incremental search.
- **Remove individual name(s)** will allow you to delete any disease in the current selection, just position the cursor on it and press the [Del] key. It will be immediately erased from the current selection. To re-insert it (in the case you made a mistake deleting it), you must know what the name was, and use the [Ins] key (**Insert a new disease**, above).

The above options can be used in combination to arrive at a current selection which fits a highly specified set of criteria. Tutorial C gives an example of a complex selection process. Once you have completed your desired selection you can then **Use list** to examine the information available on the diseases in the current selection.

#### 5.2.4 Other

Once you have made a selection, particularly if you used a complex set of criteria, you may wish to save the current selection for future reference. This option allows you to save your current selection or to recall a selection which was previously saved to disk.

In order to save the current selection, choose **Write selection to disk** and you will be prompted for a filename. Enter a filename of up to eight characters. The file extension will be added automatically (this will create two files, one with the extension DSL and another with the extension MSL). If you wish to call up a selection that was previously saved, choose **Read selection from disk** and you will be asked to enter the filename of the saved selection (without an extension).

#### 5.3 The SELECTION METHOD Box

You will have a choice of criteria from the SELECTION METHOD Box when you are making a new group selection or after you have specified the manner in which you wish to modify the current selection (select from, add to or delete from list). The following window appears on the screen and allows you to incrementally build a current selection (which, remember, is a collection of diseases):

Select View Print Import/Export Utilities Quit

<b>Diseases</b>	
[Y	SELECTION METHOD
Re	Individual disease(s)
Pr	Type of disease organism
	Vector transmitted diseases
	Status (A,B,C)
	Country or Region
	Species/Commodity
	Zoonoses
	Read selection from disk

The following paragraphs explain the items in the **Selection Method** box pictured above.

### 5.3.1 Individual disease

This functions in the exact same manner as **Select / Diseases / Individual disease** (see section 5.1), but here you can use this function in combination with the other criteria in the **SELECTION METHOD** Box. It also allows you to build a current selection of individual diseases by using **Modify list / Add to list**. For example, you might want to build a specific list of the diseases which are exotic to your country. You could then find out which other countries are also free from this list of diseases to identify possible sources of new genetic material.

### 5.3.2 Type of disease organism

This option allows you to make selections according to the type of the causal organism. Notice that there are three main heading (**Virus, Bacteria/Fungi/etc., and Parasites**). There are more specific options available under bacteria, and several sub-groupings of parasites, which in turn are sub-divided.

You may select either a main group, a sub-group or an individual item by moving the cursor and pressing **[Enter]** when your preference is highlighted, or by pressing the hot-key corresponding to your selection. For example, if you were to press number **3** you would select all the diseases in **HandiSTATUS** which are caused by parasites. If you wanted to select all the **Helminths** you should press **5**, but if you were only interested in nematodes, press **n**. To exit without selecting anything, press **[Esc]**.

<b>Diseases</b> [Year] Reports Program information	<b>Types of Organisms</b> 1. VIRUS 2. BACTERIA, FUNGI, ETC. Bacterium Rickettsia Chlamydia Mycoplasma Spirochete Leptospira Fungus 3. PARASITES 4. Protozoa hemoparasite protozoo other than hemoparasite 5. Helminths nematode cestode trematode 6. Arthropods mite fly larva
---	--

### 5.3.3 Vector transmitted diseases

This option allows you to select diseases which are transmitted by insect vectors. No further input is required; the selection is modified according to the type of modification chosen (see section 5.2.3, Modify list, for details).

### 5.3.4 Status (A,B,C)

This option allows you to select diseases according to the list to which they belong: List A or B (common to both the OIE and FAO), or List C (FAO only). Their definitions are as follow:

- **List A Diseases:** Communicable diseases which have the potential for very serious and rapid spread, irrespective of national borders, which are of serious socio-economic or public health consequence and which are of major importance in the international trade of livestock products.
- **List B Diseases:** Communicable diseases which are considered to be of socio-economic and/or public importance within countries and which are significant in the international trade of livestock and livestock products.
- **List C Diseases:** Communicable diseases with important economic influence at individual production level.

After you select one of the three choices, the current selection will be modified according to the modification method chosen (see section 5.2.3, **Modify list**, for an explanation of modification methods). For example, if you wish to select both List A and B diseases, select one of them as your initial selection then use **Modify list / Add to list** to add the other. Press [Esc] if you wish to exit without making a selection.

### 5.3.5 Country or Region

This option allows you to select diseases which have a particular level of occurrence in a specific country or region. For example, you may wish to know which diseases have been reported to occur in Country X, or more specifically which diseases in Country X have been reported to be enzootic.

You are first presented with an incremental search which allows you to specify which country you wish to work with. This window has two columns: **Country name**, and **ISO Code**. You may switch between the columns using ← and →. You may use the incremental search to find codes (in the right-hand column) or country names (from the left-hand column). See section 5.1, **Individual Disease**, for an explanation of the incremental search mechanism.

You may do an incremental search on any field (column) displayed. Thus, to select the Andean region, whose ISO Code is 4L, you may either put the cursor in the left-hand column and start typing **Andean**, or put it in the right-hand column and type simply **4L**. Once you have positioned the cursor to highlight the name or code of the country you desire to select from, press [Enter].

### Filtering Disease List by Occurrence

Next you will be presented with the disease occurrence filter menu. The purpose of this filter is to limit disease selection according to the type of occurrence reported by the country. This section describes the operation of this filter which appears in several **HandiSTATUS** functions.

Symbols	Filter on: Disease Occurrence
<b>1.REPORTED</b>	
a. )(	Ubiquitous
b. +++	High occurrence
c. ++	Enzootic
d. +	Low sporadic occurrence
e. (+)	Exceptional occurrence
f. +..	Disease exists; distribution and occurrence unknown
g. !	Recognized in country for the first time

## 2. QUESTIONABLE

- h. ? Suspected but not confirmed
- i. +? Serological evidence only, no clinical disease
- j. <= Only in imported animals (quarantine)
- k. ... No information available (excluding blank records)

## 3. CONFINED TO CERTAIN REGIONS

## 4. NOT REPORTED

- l. - Not reported
- m. 0000 Never reported
- n. year Year of last occurrence

The main groupings of occurrence are indicated by the numerals 1 to 4: Reported; Questionable; Confined to Certain Regions; and Not Reported. These are the same divisions that are used for the maps. Pressing [Enter] while one of these options is highlighted will check all of the sub-categories (indicated by lower case letters) of the main category. Pressing [Enter] again will remove the check marks ([Enter] functions as a toggle key). Pressing [Enter] while one of the sub-categories is highlighted will either remove or put a check mark (✓) next to that sub-category. You may also check individual items using the affiliated hot-key. The checked items will be used to filter the list (or search or display) in which you are currently engaged.

Set the filter to limit your selection to only those diseases which match your specifications (i.e., those which have been reported to have a specified distribution in the country you chose). Place a check mark beside the desired code(s) then press O, for OK, to accept the settings.

The diseases with the occurrence code(s) you have specified, in the country you chose, will be selected to modify your current selection. (If you are using **Modify list / Delete from list**, the diseases which fit your criteria will be excluded from the current selection; in other cases they will remain in the current selection.)

To cancel the selection process at any time, press [Esc]. If there is already a current selection in memory it will not be modified.

### 5.3.6 Species/Commodity

This allows you to select diseases according to which species and commodity they affect. You are first presented with a window containing a list of all the species in HandiSTATUS, from which you must select one, either by using the arrow keys and [Enter], or pressing the hot-key corresponding to the species entry. You may choose either a general species category (**MAMMALS, BIRDS, FISH or BEES**), or a more specific species. If you select the general species category, then all of the specific species under that category will be selected. For example, selecting **BEES** is equivalent to selecting both **adult bees** and **bee brood**.

Note that the selection **Other ruminants** signifies ruminants other than bovine, caprine or ovine (this message appears at the bottom of the screen). The options **Other avian** and



Other fish include birds and fish, respectively, other than those that appear above these selections.

Select View Print Import/Export Utilities Quit Ed | 10/16/93 |

Diseases		Species	
Ye	SELECTION		
Re	Type of diseas	1. MAMMALS	3. FISH
Pr	Vector transmi	a. Bovine	n. Salmonidae
	Status (A,B,C)	b. Caprine	o. Esocidae
	Country or Reg	c. Ovine	p. Cyprinidae
	Species/Commod	d. Other ruminants	q. Anguilla spp.
	Zoonoses	e. Equine	r. Ictalurids
	Individual dis	f. Swine	s. Claridae
	Read selection	g. Leporine	t. Other fish
		h. Canine	u. Molluscs
		i. Wild fauna	v. Crustaceans
		2. BIRDS	4. BEES
		j. Chicken	w. Adult bees
		k. Duck	x. Bee brood
		l. Psittacines	
		m. Other avian	

After selecting a species, a commodity selection must be made in a similar fashion. Again, there are general categories (**LIVE MATERIAL, MEATS, PRODUCTS OF ANIMAL ORIGIN**), and specific sub-categories.

Select View Print Import/Export Utilities Quit

Diseases		Commodity selection	
Ye	SELECTION METHOD		
Re	Type of di	1. LIVE MATERIAL	
Pr	Vector tra	live animals	
	Status (A,	hatching eggs	
	Country or	day-old avian species	
	Species/Co	semen or spawning prod.	
	Zoonoses	embryos/ova	
	Individual	2. MEATS	
	Read selec	fresh meat	
		meat products	
		3. PRODUCTS OF ANIMAL ORIGIN:	
		human consumption	
		industrial use	
		animal feed	
		pharmaceutical use	
		pathological/biological	

The current selection will then be modified (see section 5.2.3 for an explanation of modification type), according to the set of diseases occurring in the species and commodity which you just specified.

To cancel the selection process, press [Esc] until you are returned to the **SELECTION METHOD** box.

### **5.3.7 Zoonosis**

This option allows you to select diseases which are zoonoses (infectious diseases common to humans and animals). No further input is required; the current selection is modified according to the type of modification you are doing, to include or exclude zoonoses.

### **5.3.8 Read selection from disk**

This option allows you to recall a selection which was previously saved to disk. You will be prompted to enter the filename of the saved selection. See section 5.2.4 for more details on saving and recalling a selection.

## **6 Other Selections**

This chapter covers the options that are available under **Select** with the exception of **Select / Diseases**, which was the subject of the previous chapter.

### **6.1 Year**

This option allows you to select data from a particular year. These data will then be used in all features of the program until another year is selected; the maps will reflect the countries for which information was reported in that year. In the present version there is only a choice of data for 1990 or 1992. In future versions, data will be included for all years from 1989 inclusive.

### **6.2 Reports**

This section will assist the user to fill out animal health reports to be sent to the appropriate international organizations.

## 6.3 Program Information

This selection contains credits to the individuals and organizations that have contributed to the production of HandiSTATUS. You may activate a sub-menu from this screen by pressing [F2]. The short-cut key [Alt-P] allows you to print the credit screen to a printer or file (see Chapter 8: Print).

## 7 View

The View menu is used to retrieve detailed information about the current disease. If there is no active selection, you are presented with a message window which informs you that you must make a disease selection first. If there is a current selection, then you are presented with a menu with three groups of related commands:

- The first command group is used to view general information about the current disease. See the sections immediately following (7.1 to 7.6).
- The second group is used to view information concerning the geographic distribution of the disease, including maps. See sections 7.7 to 7.10.
- The third group is used to move between diseases in the current selection (i.e., change the current disease) or to change the current selection itself. See sections 7.11 to 7.13.

### 7.1 Names

This option displays basic information about a disease. **View / Names** is automatically displayed after you have made a disease selection by various means:

- using **Select / Diseases / Individual Disease**
- selecting a disease from the **List of selected diseases** which can be accessed either under **View** or when you are making a group selection (see section 7.13, List of selected diseases).
- selecting a disease after doing an **Import/Export analysis**.

The Names window appears as follows:

1	2	3	4	5	6	7
Record	Code	Type	Incubation	Transmission	Zoonosis	Zoo-Code
1/ 5	A010	v	21 days	+	-	+
Causal Organism						
Picornaviridae aphthovirus (RNA)						
Common Names						
English: Foot-and-mouth disease (FMD)						
English: Foot and mouth disease						
Français: Fièvre aphteuse (FA)						
Español: Fiebre aftosa (FA)						

From left to right, across the top of the window, is the following information:

1. The position of the record in the current selection, and the number of diseases in the current selection (the above example is the first disease in a list of five).
2. The OIE/FAO Code for the disease.
3. The type of causal organism (virus, bacterium, protozoa, etc.)
4. The incubation period of the disease as listed in the OIE's International Animal Health Code.
5. Whether the disease can be transmitted by insect vectors (+ is affirmative).
6. Whether the current disease is a zoonosis (+), or not (-).
7. Whether information on this diseases is available from the International Animal Health Code (see section 7.3 to view the Code).

Below this information is the scientific name of the causal organism (not to be confused with the type code listed above). This is followed by a list of common names for the disease. The English, Spanish, and French names will be present for all diseases; some diseases have additional names preceded by the label **Zoonoses**. These are the names of the disease when it occurs in humans.

If the current selection consists of more than one disease it is possible to change the current disease using the up and down arrows (↑ and ↓). This allows you to move sequentially back and forth among the selected diseases.

Press [Enter] to pull down the options under **View**.

## 7.2 Status

Selecting this option will give you the definition of the OIE/FAO classification of the current disease (List A, B, or C). See section 5.3.4 for the definitions. Pressing any key will return you to the previous screen; then press [Enter] to pull down the **View** menu.

### **7.3 International Animal Health Code**

Selecting this item in the **View** menu will allow you to browse through the text from the International Animal Health Code for the selected disease. In some instances the code is rather long; you may use the **[PgUp]** and **[PgDwn]** keys to quickly move through the text, or **↑** and **↓** to move line by line.

You may activate a menu for this option by pressing **F2** (as indicated on the screen), which allows you to print the text.

To return to the **View** menu, press **[Esc]** or **[Enter]**, and then press **[Enter]** when the **View** menu item is highlighted in the menu bar.

### **7.4 Affected Species and Commodities**

This item presents a display box with a list of the animal species and commodities which can be affected by the current disease. After inspecting the list, pressing any key will close the display box; then press **[Enter]** to pull down the **View** menu.

### **7.5 Disease Transmission**

This option calls up a window which contains extracts from scientific journals and other sources, regarding transmission of the current disease. This information was kindly provided by the Australian Quarantine and Inspection Service. Once again, you can print this information after activating the menu with **[F2]**. Press **[Esc]** or **[Enter]** to close the window; then press **[Enter]** to pull down the **View** menu.

### **7.6 Reference Laboratories**

This option offers a choice of either **FAO** or **OIE** Reference Laboratories which specialize in the current disease. A window will appear with the laboratory address (telephone, fax, telex, and e-mail addresses as available) in the left part of the window, while the region served appears on the right. Pressing any key will advance to the next laboratory; when the list of laboratories has been exhausted, you will be returned to **View**.

### **7.7 Maps**

This item allows you to view maps of the geographical distribution of the current disease. It includes maps of the whole world or a specific region, annotated with symbols indicating occurrence of the current disease for a particular species or all species.

The **Maps** sub-menu allows you to choose a type of map:

<b>World</b>
<b>Caribbean &amp; C.America</b>
<b>South America</b>
<b>North America</b>
<b>European Area</b>
<b>Africa</b>
<b>Asia</b>
<b>Oceania</b>

Selecting **World** or one of the seven regions will draw a map of the disease occurrence in animals. If the disease occurs in several species, you will be prompted to choose a particular species, or a cumulative map (for all species for which information on this disease is reported). For example, for Foot and Mouth Disease, which occurs in several species, the following window appears:

<b>bovinae (including buffalo)</b>
<b>buffalo</b>
<b>caprine</b>
<b>other</b>
<b>ovine</b>
<b>swine</b>
<b>Cumulative (for all species)</b>

You may highlight the species you wish to include in the distribution map. Select the last entry (**Cumulative**) to include all species. In this case the most serious level of occurrence will be used to draw the map regardless of which species it was reported in. Press **[Enter]** to draw the map.

### **Map Symbols**

On the maps, the occurrence in each country is indicated by a symbol. There are a set of standard symbols which are used in disease reporting to the OIE and FAO. The actual occurrence symbols which are reported by the countries and stored in the database have been divided into four groups for mapping purposes. The following list summarizes the correspondence between map symbols and reported occurrence:

Map Symbol	Meaning Reported	Corresponding Occurrence Symbols
●		)( Ubiquitous +++ High occurrence ++ Enzootic + Low sporadic occurrence (+) Exceptional occurrence +.. Disease exists; distribution and occurrence unknown ! Recognized in country for the first time
?	Questionable ?	Suspected but not confirmed +? Serological evidence only, no clinical disease <= Only in imported animals (quarantine) ... No information available (excluding blank records)
#	Restricted	() Confined to certain regions
○	Not reported	- Not reported 0000 Never reported year Year of last occurrence

Notice that the symbols on the right are the same as the one used to filter disease listings by disease occurrence (see Filtering Disease List by Occurrence, under section 5.3.5, Country or Region).

It is important to note that no symbol will appear on the map for countries that did not provide a report for the current disease in the selected year. This is not to be confused with countries which reported "... No information available," which would appear as a question mark on the map.

### 7.7.1 World Map

The menu bar at the top of the screen in the world map contains the following options:

#### Regions

Selecting this menu item will allow you to select a region from the world map, and draw an expanded map of the selected region. For example, if after seeing the world map, you wish to look more closely at the Caribbean and Central American regional map, you may select this option by using the arrow keys to move the highlighted regional indicator, and pressing [Enter] when the Caribbean/Central American region is highlighted. You will then be shown an expanded map of this region, just as if you had selected this region instead of **World** from the **View / Maps** sub-menu.

## **Borders**

This menu item works as a toggle. National borders are drawn in by default in accordance with the active year. Selecting this menu item will remove the national borders so that you may view the map uncluttered by political demarcations. Selecting it again will make the borders reappear.

## **Shift World Center**

This item allows you to shift the longitudinal axis of the world which HandiSTATUS places in the center of the screen, thus effectively moving the position of the continents horizontally. Use ← and → to position the new center, and press [Enter] (or [Esc] if you wish to cancel without re-positioning the map). The map will be re-drawn. The new world center will be saved in memory; to change it back to the way it was before you selected this menu item, you must re-position the center once again.

There are two positions for the center which result in maps that do not cut the major land masses in half. To position the center such that the Americas are on the left-hand side of the screen, put the dotted line approximately on the border between Norway and Sweden. To position it so that Asia, Africa and Europe appear on the left-hand side of the screen, position the center exactly on the East coast of Australia and through Tasmania.

## **Print**

Sends the map image to the printer. It is important that the right printer has been select previously (see section 10.3).

## **Quit to Menu**

Closes the world map and returns you to **View /Maps**.

### **7.7.2 Regional Maps**

The **Borders**, **Print**, and **Quit to Menu** options function in an identical manner as for the world map (previous section).

The **World Map** option replaces the regional map with a full world map of the requested disease and species occurrence distribution.

The **Country Names** option displays the names of the countries for the active year. Choosing country names again will clear the country names. The country names are not displayed by default, to provide a clearer view of the map.



## 7.8 Browse Distribution Listing

This option displays a list of all the countries and the information they reported for the current disease and active year. The active year appears in the center, at the top of the box. The columns display the country name; the species code; the occurrence symbols and the symbols for the control measures that are in place.

If you are not familiar with these symbols, press [F2] to activate the menu. From here you can highlight **Occurrence Symbols** and press [Enter] to view a list of the occurrence and control symbols with an explanation of their meaning. You can scroll through the list using the up and down arrows (↑ and ↓). You can also call up the list of symbols from the distribution listing (without calling up the menu) by using the short-cut key [F3].

<b>Browse</b>
<b>Search Country</b> [Alt-S]
<b>Occurrence Symbols</b> [F3]
<b>Species Codes</b> [F4]
<b>Set Filters</b> [F5]
<b>Exit</b>

Also from this menu you can select **Browse** to return to the distribution listing. You can select **Search Country** to perform an incremental search for a specific country, or you can call this feature up from the distribution listing by using the short-cut key [Alt-S].

The **Set Filters** function allows you to limit the browse listing to those countries which have reported only certain types of occurrences (see set occurrence filter, under section 5.3.5, Country or Region). For example, you might wish to list only countries that have reported that they have the disease, or alternatively, you might be interested to know which countries have reported that they do not to have the disease.

## 7.9 Yearbook-Type Listing

This option displays disease occurrence and control symbols in a format similar to the FAO/OIE/WHO Animal Health Yearbook. First, you must select a country or region using an incremental search, as explained in section 5.1, Individual Disease. The information reported by the specified country for the selected disease and year is displayed for all of the species for which that disease is reported. The listing for Foot-and-Mouth Disease in Venezuela in 1990 appears as follows:

Record	Code	Type	Incubation	Transmission	Zoonosis	Zoo-Code	
1/ 1	A010	v	21 days	+	-	+	
Causal Organism							
Picornaviridae aphthovirus (RNA)							
		BOV	BUF	CAP	ETC	OVI	SUI
Venezuela		++ PnQV *	-	-		-	++ PnQV *

If a region is specified, the listing will be made for each country in the region, spread over several screens if necessary.

## 7.10 Zoonosis

This item only contains information for diseases which are zoonoses (infectious diseases common to humans and animals). You are given a further choice of whether you would like to see the information in textual form or mapped.

### 7.10.1 Listing

This option will display a list of countries and the information they have reported regarding occurrence of the selected disease in humans. The list is similar in format to that given by the option **View / Browse Distribution Listing**, but contains only the country or region name, and an occurrence symbol. The same occurrence symbols are used as for the normal listings, but if it is known, the actual number of cases in humans is reported.

Pressing **F2** brings up the same menu as in **Browse Distribution Listing**, which allows you to search for a country, view an explanation of the occurrence symbols or set the filter. There is no need to view the species codes, as everything in this section applies to occurrence of the disease in humans.

### 7.10.2 Map

This item and its menu options function in the same way as **View / Maps**, with the exception that the data reported refers to occurrence of the disease in humans. Selecting this option will draw a world map with appropriate symbols indicating where documented cases of the disease in humans has occurred within the past year, as reported in the Animal Health Yearbook. From the world map, you may choose the **Regions** option to obtain a regional map of zoonosis occurrence. On the regional maps, as with **Zoonosis / Listing**, the actual number of reported cases appears on the map when available. The world and regional zoonosis map options are identical to those used for animal species maps (section 7.7: Maps).

## 7.11 Previous Record

When there is a current selection that consists of more than one disease, this option allows you to change the current disease to the previous disease on the list. You can also move automatically through the list from **View / Names** by using the up and down arrows (↑ and ↓).

## 7.12 Next Record

When there is a current selection that consists of more than one disease, this option allows you to change the current disease to the next disease on the list. You can also move automatically through the list from **View / Names** by using the up and down arrows (↑ and ↓).

## 7.13 List of Selected Diseases

This menu item calls up the window listing the diseases in the current selection. Note that this is the same window that appears when you are making a group selection of diseases through **Select / Diseases / Group Selection**. It is used to browse through the current selection of diseases, modify the list, or to designate the current disease, for which you can then view detailed information. Section 5.2, **Group Selection**, explains the details of how to use, manipulate or modify the **List of selected diseases**.

## 8 Print

This menu is used to generate a report about the current disease, or all of the diseases in the current selection. There must be an active current selection to use this menu. From the **Print** menu, indicate whether you wish to include the entire selection, or only the current disease. You are then presented with the **PRINT OPTIONS** menu, from which you may select various pieces of information about the disease(s) to be included in the report. The information is similar to that which can be accessed from the **View** menu.

Pressing **[Enter]** when a desired item is highlighted will place a check mark (✓) next to the item if it is not checked, or remove the check mark if it is already checked (it functions as a toggle key). The items **Distribution/Occurrence** and **Zoonosis** have sub-menus, from which you can set the occurrence filter (section 5.3.5), and select a country via the incremental search mechanism (section 5.1). After all the desired items have been checked, select the last item in the menu, **Ready**, to generate the report.

You may send the report either to a printer, or to a DOS text file. If you choose to send it to the printer, then it is sent immediately. If you choose to send it to a text file, then you are prompted to enter the name of the file (ahlist.txt is the default name). You may wish to change the device and path; for example, to save the file on a disk in drive **A:** in the sub-directory **\text**, in a file named **output.bak** you would specify the filename **A:\text\output.bak**. This creates an ASCII file which can be read into most word processors.

## 9 Import/Export

### 9.1 Import/Export Analysis

This function is designed to generate disease selections which are of potential interest when transporting animals or animal commodities between countries or regions. This is the subject of Tutorial B.

The minimal input to the Import/Export Analysis function is a country of origin, and an animal species. You may optionally specify an animal commodity, and/or a country of destination. All of these items may be selected by moving the cursor to the appropriate line of the **Data Entry for Analysis** window, pressing **[Enter]**, then designating your choice in the selection window which appears. For **Animal Species** and **Commodity Type**, the windows contain entries which may be selected with the arrow keys and **[Enter]**. **Country of Origin** and **Importing Country** are selected with the aid of an incremental search (section 5.1).

You may clear all of the specifications by selecting the **CLEAR** button. When all the desired specifications have been made, the search process may be started by selecting the **O.K.** button. The entire analysis process may be aborted by pressing the **EXIT** button (or by pressing **[Esc]**).

After the search process is complete, a window appears listing any diseases which match the specified criteria and which have been reported to occur in the country of origin. The columns in the window are:

#### **Code, Disease Name, Occurrence at Origin, Occurrence at Destination**

The last two columns provide the comparative disease status for the exporting and importing countries, which can aid the user in making a decision about the importation. The last column will be empty if no destination country was specified in the **Data Entry for Analysis** window. The symbols used are the same as those used for mapping and are explained in the legend below the list of diseases. In all cases, the most recent disease status should be verified with the country concerned.

To examine the information available on one of the selected diseases, press **[Enter]** when any field of the disease is highlighted. You will be transferred to the **View / Names** function, and may choose other **View** menu options as well. Once you have finished examining the disease, you may press **[Esc]** a sufficient number of times to return to the **Selected Records for Risk Evaluation** window, and select another disease for examination.

Pressing **[Esc]** from the **Selected Records for Risk Evaluation** window allows you to return to the **Data Entry for Analysis** window. From here you may re-enter Import/Export Analysis selection criteria or press **[Esc]** to exit this function and return to the main menu bar.

## 9.2 Model Certificates

This option provides a choice of titles of the OIE - approved certificates. Pressing [Enter] when the desired certificate is highlighted calls up a window containing a computer-formatted model of the actual certificate. This model is as accurate as possible given the limitations of the computer's text display. In most cases, the differences between the model and the actual are negligible. You can scroll through the page using the up and down arrows (↑ and ↓).

### A note about "pages"

When viewing model certificates, the term "page" has two meanings. Since the size of a page of paper is different from the size of a window on the computer screen, "real" pages and "computer" pages do not coincide. The [PgUp] and [PgDn] keys may be used to change computer pages (i.e., advance or regress one window-full of text); to advance to the next actual certificate page (as it would appear on paper), the [Enter] key is used.

When viewing a particular certificate, pressing [F2] calls up a sub-menu from which you may print the model certificate to a printer or to the disk; page through the certificate; view the certificate (which simply exits from the sub-menu); or edit the certificate (which you may do only if you supplied the correct password on the command line when you executed HandiSTATUS).

## 10 Utilities

This menu contains options related to the presentation of data, the configuration of the computer, and manipulating the format of data files.

### 10.1 Language: Change Default

This menu item allows you to change the operating language of HandiSTATUS. The current possible choices are English, Spanish, and French. Simply highlight the language of your choice and press [Enter].

### 10.2 Set Colors

This menu item allows you to change the colors which HandiSTATUS uses to display various forms of data. You may choose the default settings for color or black-and-white display, or you may customize your own colors or shades.

If you choose to select your own colors, you are presented with a full-screen menu from which you may alter the current color settings. Initially, the right-hand side of the screen is the active portion. From here, you may use the up and down arrows to select different options to change. Pressing [Enter] when the desired option is highlighted will transfer control to the left-hand side of the screen, which is the side where color selection takes place.

For most color settings, you must specify foreground and background colors. The foreground is the color of the text, numeric or punctuation character; the background is the color of the square on which the character is superimposed. The up and down arrows select different color settings (indicated by the pointers). The left and right arrows transfer control between the foreground and background menus. Notice that as you move the pointer up and down the foreground and background selection menus, an example of the current color selection is updated at the right-hand side of the screen. This is to verify that the color selection you have made is correct (legible, desirable, etc.). When you have made the desired color selection, pressing **[Enter]** will return you to the right-hand side of the screen.

When all of the desired color setting have been altered, you must press **F10** while the cursor is in the left-hand side of the screen to save the new settings. Beware: Pressing **[Esc]** from the either side of the screen will exit and cancel any changes.

Below is an explanation of the various color settings which may be changed. The following items refer to text and symbols inside pull-down menus. Note that menu-type entities inside pop-up windows (for example, the **Import / Export Analysis** selection window) are not pull-down menus.

- **Horizontal bar.** This is the color of the menu bar at the top of the screen.
- **Box outline.** This is the color of the boxes which surround pull-down menus and other entities.
- **Highlighted.** This is the color of highlighted menu items in the menu bar and pull-down menus.
- **Selectable.** This is the color of menu items in pull-down menus which the user is allowed to select, currently.
- **Non-Selectable.** This is the color of menu items in pull-down menus which currently have been made unavailable.

The following items refer to text which does not occur in pull-down menus. Note that this category does include menu-type entities which appear inside pop-up windows, such as the **Import / Export Analysis** window.

- **Standard.** This is the color of non-emphasized text.
- **Inverted.** This is the color of inverted (for emphasis) text.
- **Intense.** This is the color of, intensified text. Text becomes intensified when the menu or window which it is a part of becomes active.
- **Message.** This is the color of message text. Help windows, and the windows which appear to inform the user of search progress, etc., are message windows.

The following items refer to the color of graphics in the maps generated by **HandiSTATUS**. Note that changing the background color specification for one of these items changes this specification for ALL of them. The background color is merely the color of the water.

- **Coast lines.** This is the color of the lines which identify the borders of continents and islands with water.
- **Land masses.** This is the color of land masses (as opposed to water).
- **Border Lines.** This is the color of national borders within land masses.
- **Reported.** This is the color for the symbol used when the disease has been reported to occur in a country.
- **Questionable.** This is the color of the symbol used when the presence of the disease in a country has been reported to be questionable.
- **Restricted.** This is the color of the symbol used for countries that have reported that the disease is restricted to a certain area.
- **Absent.** This is the color of the symbol used to identify countries which have reported that the disease does not occur.

### 10.3 Select Printer

This option allows you to select what type of printer you have connected to your machine. You may move the cursor using ↑ and ↓, and the [PgUp] and [PgDwn] arrows, or you may begin typing the make of your printer (it functions as an incremental search). When the desired printer is highlighted, press [Enter] to select it. To cancel printer selection (i.e., to make no changes), press [Esc]. Selecting the correct printer is essential to print distribution maps.

### 10.4 Browse Supporting Files

#### 10.4.1 Animal Species

This option calls up a window displaying a list of all the animal species used by HandiSTATUS. It is basically for reference purposes. There are three columns: **Speccode** (species code), **Specname** (species name), and **Language**.

The **Speccode** column contains the text used to abbreviate species names. For reference, here is a list of the different species recognized, in English only:

<b>ANG</b>	Eels
<b>API</b>	Adult bees
<b>AVI</b>	Avian (birds)
<b>BOV</b>	Bovine (cows, bulls, etc.)
<b>BRO</b>	Bee brood
<b>BUF</b>	Buffalo
<b>CAN</b>	Canine (dogs)
<b>CAP</b>	Caprine (goats)
<b>CML</b>	Camel

**CRU** Crustaceans (crab, lobster, shrimp, etc.)  
**CYP** Carp  
**DEE** Deer  
**DUC** Duck  
**EQU** Equine  
**ESO** Esocidae (pike, etc.)  
**ETC** Other species  
**FAU** Wild fauna (mammals)  
**FEL** Feline (cats)  
**HUM** Humans  
**ICT** Catfish  
**LEP** Rabbit, hare  
**MOL** Molluscs (clams, oysters, mussels, etc.)  
**OVI** Ovine (sheep)  
**PEL** Fur-bearing animals (on farms)  
**PIS** Fish  
**PSI** Psittacid birds (parrots, etc.)  
**RUM** Ruminants  
**SAL** Salmon  
**SUI** Swine  
**VAR** Various species

The ETC category is used in the FAO/OIE/WHO Animal Health Yearbook when no species is specified. This is usually used to report occurrence of the disease in other than the main hosts.

The **Specname** column contains the name of the species in either English, French, Spanish, or the scientific name for the species. The **Language** column contains the code of the language of the **Specname** column. The codes used by HandiSTATUS are:

**00** Scientific name  
**20** English  
**30** French  
**40** Spanish

**[F2]** activates a submenu, which contains menu items for all of the actions available from the **Species** window. A summary of these follows.

**FILE** sub-menu

#### **Browse**

This item exits the menu system and permits you to continue to scroll through the list of animal species.



## Search

[Alt-S]

This menu item allows you to search for an animal species by name. You may activate this option when the cursor is highlighting any of the three fields (Specode, Specname, or Language), but the searching will always be by the species name (the Specname column).

When the window containing the prompt **Search for = >** appears, you should type the first few letters of the species you are looking for, and press [Enter]. For example, to search for the entry for "duck," you might type the letters **duc**, or alternatively **canard** (the word for "duck" in French.) Press [Enter], and the window will scroll to the entry which matches your input, or else a window will appear concisely informing you that your input does not match any of the records in the database: "Not found ..."

## Exit

[Esc]

This entry will take you out of the **Select / Animal Species** menu, back to the menu bar.

## EDIT sub-menu

This option is only available if you use the password for editing when you started the program.

### 10.4.2 Countries and Regions

This option calls up a window displaying a list of all the countries and regions recognized by HandiSTATUS. There are two columns: **Isocode** (International Standards Organization Code), and **Cname** (Country Name).

An Isocode is a two-character code designating a geographical, political, or economic region. Countries (and in some cases, parts of countries which are distinguished geographically or politically) have a two-letter code (for example, Zimbabwe has the code **ZW**, Alaska has the code **AK**, and the European part of Turkey has the code **TE**.) Super-national regions have codes beginning with numerals. Following is a list summarizing the significance of the first character in these numerically-coded regions:

- |   |  |
|---|--|
| 0 | Entire world.  |
| 1 | Europe   |
| 2 | Asia (including Middle East)   |
| 3 | Africa   |
| 4 | Americas   |
| 5 | Oceania (Australia, New Zealand, Pacific islands)                    |
| 7 | Other regions (including polar, religious, cultural, cross-regional) |

You may use the arrow keys, [Tab], [PgUp], and [PgDn] to move the highlighted cursor between records and fields, as well as scroll the screen. As in the **Select / Animal Species** mode, [F2] activates a sub-menu, which allows you to perform an incremental search. There is one menu item which is unique to the **Select / Countries** mode, which is explained below.

The **File / List areas** sub-menu (activated by [F4], or by selecting this menu item) calls up a window with two columns. The **Sub-regions and Countries within** column lists all the countries and regions which are a part of the country or region highlighted by the cursor when this menu item is selected. The **Regions and Sub-regions** column lists all of the countries or regions which contain the currently highlighted country or region. For example, highlighting the region **Baltic States** (whose ISO Code is 11) and selecting the **File / List Areas** sub-menu will result in the following lists:

<b>Sub-Regions and Countries within</b>	<b>Regions and Sub-Regions</b>
Latvia	Europe
Estonia	Eastern Europe
Lithuania	

That is to say, the **Baltic States** are **Latvia**, **Estonia**, and **Lithuania**; and they are located in **Europe** and also in the more specific region, **Eastern Europe**.

### 10.4.3 Reference Laboratories

This option calls up a window from which you may view the addresses of the **FAO Reference Laboratories**. The window is divided into two parts: the right side contains the addresses; the left contains an alphabetical laboratory code. The code is merely for reference by **HandiSTATUS**.

The cursor is initially in the right side of the window. Pressing [Esc] moves the cursor to the left side, from where you may use the up and down arrows to move through the list of laboratories. Pressing [Esc] again exits from this menu item.

### 10.5 Pack and Index Files

This option is really for the use of the programmer or other persons who make changes to the files. It allows you to index various database files. Select a file to index using the arrow keys or the hot-keys and press [Enter]. This functions as a toggle (press once to select, again to un-select). You may cancel operations by highlighting the **Cancel** button and pressing [Enter], or by pressing [Esc]. Keep in mind, however, that once a file is indexed, you can not un-index it.

## **10.6 Convert Occurrence Data**

This option allows you to convert between dBase III - format and the internal, HandiSTATUS-proprietary, binary format for the disease occurrence. You will mostly likely not need to do this, but for those who wish to use the occurrence data in dBase format, the conversion from bit-mapped to dBase III is available. The conversion back to bit-mapped has been made unavailable for the distribution version.

## **11 Quit**

You may exit HandiSTATUS after saving the current selection, or simply exit without saving anything. It is important to note that if you exit without saving the selection, the next time you run HandiSTATUS, there will be no current selection, that is to say, HandiSTATUS will erase the current selection before exiting. Quit will always save the settings for language, color and viewpoint of the world map.

## **12 Edit**

This menu is "hidden" to the right of **Quit**. In order to access this menu, you must have supplied the correct password on the command line when you executed HandiSTATUS. This option in the menu allows you to modify any information HandiSTATUS contains about the current disease, or add and delete diseases from the database. Instructions for editing HandiSTATUS will be provided as needed to users who have also been given the password.

## Appendix I: Disease Codes

### List A

A010	Foot-and-mouth disease (FMD)
A011	FMD - Virus O
A012	FMD - Virus A
A013	FMD - Virus C
A014	FMD - Virus SAT 1
A015	FMD - Virus SAT 2
A016	FMD - Virus SAT 3
A017	FMD - Virus Asia 1
A018	FMD - Virus not typed
A020	Vesicular stomatitis (VS)
A021	VS - Virus Indiana
A022	VS - Virus New Jersey
A023	VS - Virus not typed
A030	Swine vesicular disease
A040	Rinderpest
A050	Peste des petits ruminants
A060	Contagious bovine pleuropneumonia
A070	Lumpy skin disease
A080	Rift Valley fever
A090	Bluetongue
A100	Sheep pox and goat pox
A110	African horse sickness
A120	African swine fever
A130	Hog cholera
A150	Fowl plague
A160	Newcastle disease

### List B

#### Multiple species diseases

B051	Anthrax
B052	Aujeszky's disease
B053	Echinococcosis/Hydatidosis
B055	Heartwater
B058	Leptospirosis
B057	Q fever
B058	Rabies
B059	Paratuberculosis
B060	Screwworm ( <i>Cochliomyia hominivorax</i> )

#### Cattle diseases

B101	Anaplasmosis
B102	Babesiosis
B103	Bovine
B104	Bovine genital campylobacteriosis
B105	Bovine tuberculosis ( <i>Mycobacterium bovis</i> )
B106	Cysticercosis ( <i>C. bovis</i> )
B107	Dermatophilosis
B108	Enzootic bovine leucosis
B109	Haemorrhagic septicaemia
B110	Infectious bovine rhinotracheitis (IBR/IPV)
B111	Theileriasis
B112	Trichomoniasis
B113	Trypanosomiasis
B114	Bovine malignant catarrh
B115	Bovine spongiforme encephalopathy (BSE)

### Sheep and goat diseases

- B151 *Brucella ovis* infection
- B152 Caprine and ovine brucellosis (*B. melitensis*)
- B153 Caprine arthritis/encephalitis
- B154 Contagious agalactia
- B155 Contagious caprine pleuropneumonia
- B156 Enzootic abortion of ewes
- B157 Pulmonary adenomatosis
- B158 Nairobi sheep disease
- B159 Salmonellosis (*S. abortus ovis*)
- B160 Scrapie
- B161 Maedi-Visna

### Horse diseases

- B201 Contagious equine metritis
- B202 Dourine
- B203 Epizootic lymphangitis
- B204 Equine encephalomyelitis
- B205 Equine infectious anaemia
- B206 Equine influenza (Virus type A)
- B207 Equine piroplasmiasis (*Babesiosis*)
- B208 Equine rhinopneumonitis
- B209 Glanders
- B210 Horse pox
- B211 Infectious arteritis of horses
- B212 Japanese encephalitis
- B213 Horse mange
- B214 Salmonellosis (*S. abortus equi*)
- B215 Surra (*T. evansi*)
- B216 Venezuelan equine encephalomyelitis

### Pig diseases

- B251 Atrophic rhinitis
- B252 *Cysticercosis* (*C. cellulosae*)
- B253 Porcine brucellosis (*B. suis*)

- B254 Transmissible gastroenteritis of pigs
- B255 Trichinellosis
- B256 Enterovirus encephalomyelitis
- B257 Porcine reproductive and respiratory syndrome

### Poultry diseases

- B301 Avian infectious bronchitis
- B302 Avian infectious laryngotracheitis
- B303 Avian tuberculosis
- B304 Duck hepatitis
- B305 Duck virus enteritis
- B306 Fowl cholera
- B307 Fowl pox
- B308 Fowl typhoid (*S. gallinarum*)
- B309 Infectious bursal disease (Gumboro disease)
- B310 Marek's disease
- B311 Mycoplasmosis (*M. gallisepticum*)
- B312 Psittacosis and Ornithosis
- B313 Pullorum disease (*S. pullorum*)

### Lagomorph diseases

- B351 Myxomatosis
- B352 Tularemia
- B353 Viral haemorrhagic disease of rabbits

### **Fish diseases**

- B401 Viral haemorrhagic septicaemia
- B404 Spring viraemia of carp
- B405 Infectious haematopoietic necrosis
- B406 Herpesvirosis of salmonids
- B408 Renibacteriosis
- B411 Herpesvirosis of ictalurids
- B413 Epizootic haematopoietic necrosis
- B414 Edwardsiellosis (E. ictalun)

### **Mollusc diseases**

- B431 Bonamiosis
- B432 Haplosporidiosis
- B433 Perkinsosis
- B434 Marteiliosis
- B435 Indovirosis

### **Bee diseases**

- B451 Acariasis of bees
- B452 American foul brood
- B453 European foul brood
- B454 Nosemosis of bees
- B455 Varroasis

### **Diseases of other animal species**

- B501 Leishmaniasis

### **List C**

#### **Multiple species diseases**

- C611 Listeriosis
- C612 Toxoplasmosis
- C613 Melloidosis

- C614 Blackleg
- C615 Botulism
- C616 Other clostridial infections
- C617 Other pasteurelloses
- C618 Actinomycosis
- C619 Intestinal Salmonella infections
- C620 Coccidiosis
- C621 Distomatosis (liver fluke)
- C622 Filariasis

#### **Cattle diseases**

- C652 Mucosal disease/Bovine virus diarrhoea
- C653 Vibrionic dysentery
- C654 Warble infestation

#### **Sheep and goat diseases**

- C701 Contagious pustular dermatitis
- C702 Foot-rot
- C703 Contagious ophthalmia
- C704 Enterotoxaemia
- C705 Caseous lymphadenitis
- C706 Sheep mange

#### **Horse diseases**

- C751 Equine coital exanthema
- C752 Ulcerative lumphangitis
- C753 Strangles

#### **Pig diseases**

- C801 Swine erysipelas

### **Poultry diseases**

- C851 Infectious coryza
- C853 Avian encephalomyelitis
- C854 Avian spirochaetosis
- C855 Avian salmonellosis (excluding  
Fowl typhoid-B308 and Pullorum  
disease-B313)
- C856 Avian Leucosis

### **Dog and cat diseases**

- C921 Canine distemper

## Appendix II: Occurrence Codes

### DISEASE OCCURRENCE

0000	Never reported
-	Not reported
year	Year of last occurrence
?	Suspected but not confirmed
(+)	Exceptional occurrence
+	Low sporadic occurrence
++	Enzootic
+++	High occurrence
+?	Serological evidence and/or isolation of causative agent, no clinical disease
+..	Disease exists, distribution and occurrence unknown
()	Confined to certain regions
)(	Ubiquitous
!	Recognized in country for the first time
<=	Only in imported animals (quarantine)
...	No information available



## **Appendix III: Control Codes**

### **DISEASE CONTROL**

#### **(Control Measures)**

- Cn** Control of non-vertebrate vectors
- Cr** Control of wildlife reservoirs
- P** Prohibition of import from infected countries
- Pa** Control program for only some areas of the country
- Q** Quarantine, movement control and other precautions at frontier and inside the country
  
- Qf** Quarantine and other precautions at frontier
- Qi** Quarantine measures and movement control inside the country
- S** Stamping-out policy
- Sp** Modified stamping-out policy
- T** Treatment
- te** Testing
- tv** Voluntary testing
- V** Vaccination
- Vp** Vaccination prohibited
- \*** Notifiable disease

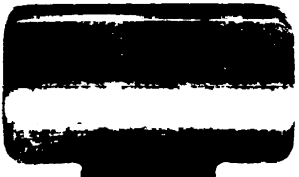
#### **Other Symbols**

- <** Country without updated data (published data are the same as in previous issue; updating not received in time)



**FECHA DE DEVOLUCION**

FECHA DE DEVOLUCION			



---

INTER-AMERICAN INSTITUTE FOR COOPERATION ON AGRICULTURE  
Headquarters / P.O.Box 55-2200 Coronado, Costa Rica / Tel.: 29-02-22 /  
Cable: IICASANJOSE / Telex: 2144 IICA CR / FAX (506) 29-47-41, 29-26-59 IICA COSTA RICA