

STD*MIS ASCII Morbidity Import

The morbidity import component of STD*MIS is designed to allow the importation of electronic morbidity data into STD*MIS from a fixed-length ASCII file. The feature allows importation of a limited number of variables that comprise a morbidity record, some of which are optional and some of which are required. The order, or position, of each variable in the import file may vary for each source of imported data as the import program 'maps' the variable positions independently. The variables are also not required to use STD*MIS coding conventions as the import function provides a means of translating most incoming coded variables into STD*MIS codes.

This document is divided into three sections. The first section discusses the activities that must occur before importing morbidity result data. The second section describes the technical issues associated with importing these data into STD*MIS, including setting up the file mapping definitions and the variable look-up translations into STD*MIS values. The last section covers the post-importation activities.

I. Prior to Running Morbidity Import

The STD*MIS import function for morbidity record data is designed to be flexible. That is, an electronic morbidity record file from one submitting source may look very different from that of another. This variability is allowed as long as the format for a particular submitting source, once it is successfully imported into STD*MIS, remains the same for subsequent exports of the data. It is important to remain in routine communication with the site you are importing morbidity data from. If their format for data changes, you need to be aware of this, prior to importing this changed data.

It is advised that ASCII import files for morbidity imports are stored outside of the STD*MIS folder, to limit the size of the STD*MIS folder.

Note: Since data imported into STD*MIS cannot be un-imported, it is advised to practice your imports on a backup copy of your database, until you are happy with the results.

In order to successfully import an electronic morbidity record file, there are some variables that must be included in the file, some that may have missing information, and some that have variable formatting requirements.

A. Import morbidity record variables

The table provided below lists all the variables that can be imported into STD*MIS. Some

variables are required in the import file before STD*MIS will process the file; some are required within this file but can contain missing data for individual records within the file. Some variables are converted by STD*MIS upon import, based on decisions that are made by you when defining the rules to import morbidity record data from each submitting source. Finally, please note specific rules associated with representing dates, social security numbers, and telephone numbers in the footnotes below.

Last Name	Up to 20 characters	Must be defined in the import file, but may be blank in the records that are imported.
First Name	Up to 20 characters	Must be defined in the import file, but may be blank in the records that are imported.
MI	One character	Patient's middle name initial - not a required field.
DOB ¹	Eight or 10 characters	Must be defined in the import file, but may be blank in the records that are imported.
SSN ²	Nine to 11 characters	Patient's social security number - not a required field.
Sex	Translated upon import using STD*MIS sex field variables	Must be defined in the import file, but may be blank in the records that are imported.
Race	Translated upon import using STD*MIS race field values	Must be defined in the import file, but may be blank in the records that are imported.
Race Type	One character	If local race/nationality codes are available, these may be imported - not a required field.
Ethno.	Translated upon import using STD*MIS ethnicity field values	Must be defined in the import file, but may be blank in the records that are imported.
Med. Rec. No	Up to 10 characters	Patient's medical record number - not a required field.
HARS_ID	Up to 10 characters	Patient's HARS Id number - not a required field.
Report Date	Eight or 10 characters	Must be defined in the import file and must be present in the records that are imported.
Pregnant	Translated upon import using STD*MIS pregnancy field value	Pregnancy status of the patient at the time when morbidity was diagnosed - not a required field.

Morbidity Age	3 numbers	Does not have to be defined in the imported records. If present, this represents the patient's age when the diagnosis was made. If the patient's DOB is present, and the age is missing, this field will be calculated.
Address Date	Eight or 10 characters	Although this is not a required field, it is useful in determining most current address for a patient. If no date of address is present, the value of the date of report is used.
Patient Street	Up to 30 characters	Patient's street address - not a required field.
Patient City	Up to 25 characters	Must be defined in the import file, but may be blank in the records that are imported. When included, the city name must match city names found in the STD*MIS Geo_Area reference file. The address for the patient or the provider must have sufficient information for a city, county, and zip value to be created for the patient's address record.
Patient County	Up to 20 characters	Must be defined in the import file, but may be blank in the records that are imported. If the county name is blank, the city name or the zip code should be present. If present, county names must match county names found in the STD*MIS Geo_Area reference file.
Patient State	Two characters	Must be defined in the import file, but may be blank in the records that are imported IF a valid zip code is included. When present, the state must match the state code found in the STDSETUP, or the record will be rejected. A valid zip code is one that is present in the STD*MIS Geo_Area Reference file <i>and</i> matches the state in STDSETUP.
Patient Zip	Five characters	Must be defined in the import file, but may be blank in the records that are imported. When included, the zip code must match the zip codes found in the STD*MIS Geo_Area reference file for the state indicated in the STDSETUP.
Census Tract	Up to 8 characters	Patient's address census tract - not a required field.

Patient Telephone ³	Ten or 12 characters	Patient's telephone number - not a required field.
Diagnosis	Translated upon import using STD*MIS diagnosis values	Must be defined in the import file and must be present in the records that are imported. This code or term identifies the reported infection.
PID	Translated upon import using STD*MIS PID file value	PID status for patient - not a required field
Method of Case Detection	Two characters	Codes used in the 73.54 Interview Record to specify the reason for exam/diagnosis. Not a required field. If blank, the import defaults this value to "99".
Provider	Translated upon import using STD*MIS provider file values	Must be defined in the import file and must be present in the records that are imported. The first twenty (20) characters must uniquely identify the provider.
Date of Diagnosis	Eight or 10 characters	Must be defined in the import file and must be present in the records that are imported.
Local Use Fields	Variable	Multiple local use fields can be imported. They must match the format for the STD*MIS local use fields already defined for morbidity records. *Note: Edit checks created on local use files will be ignored during the import process; therefore, invalid values may be imported.

¹ Date fields may be represented in any of five (5) formats: MMDDYYYY, YYYYMMDD, MM/DD/YYYY, YYYY/MM/DD, or MM/DD/YY

² Social Security Number may be represented in either XXX-XX-XXXX or XXXXXXXXXXXX format.

³ Telephone numbers may be represented in either XXX-XXX-XXXX or XXXXXXXXXXXX format.

NOTE: If the source import file has a variable with more characters than the STD*MIS variable it is mapped to and it is not a translated field, the ending characters are truncated off the field in order to fit within the STD*MIS file structure. For example, if the source file street field is 40 characters, the first 30 characters would be retained, the last 10 characters would be truncated when imported into STD*MIS.

B. Import definition requirements and documentation

Before importing ASCII data into STD*MIS, an import definition must be set up for each source

of morbidity records. This process consists of defining the incoming record layout, setting up translation tables, etc. In order to set up an import definition, four items are required; a file layout of the incoming data, a data dictionary of the coding scheme used by the source system, a sample data file, and a provider list in ASCII file format (This may be created by using the F6 function key during the set-up process). Following is a brief description of each item.

1. Record layout

A record layout should specify the variable names, their beginning and ending columns, and their length. A sample (incomplete) record layout is:

VARIABLE	LENGTH	BEGINNING	END
Last Name	20	1	20
First Name	15	21	35
MI	1	36	36
Date of Report	8	37	44
DOB	8	48	55
Age	3	56	58
Sex	7	59	65
Race	1	66	66
Ethnicity	1	67	67
Provider	20	70	89
Report Date	8	90	97
Patient's Street	30	98	127
Patient's City	25	128	152
Patient's County	20	153	172
Patient's State	2	173	174
Patient's Zip Code	5	175	179
Patient's Phone Number	10	180	189

2. Data dictionary

Imported records may have variables coded differently than STD*MIS. To address this issue, the STD*MIS import allows translation of many variables during import. In order to accurately configure the translation tables, a data dictionary of variable coding in the source database is needed. An example (incomplete) data dictionary is seen below.

<u>FIELD NAME</u>	<u>LENGTH</u>	<u>DESCRIPTION/ CODED VALUES</u>
Sex	7	Male Female Unknown

Race	11	White Black AmInd/NatAm Asian/PacIsl Other Unknown
Ethnicity	1	H = Hispanic N = Non-Hispanic U = Unknown
Provider	3	151 = Southland STD Clinic 152 = Southland Family Planning 153 = Southland Memorial Hospital 251 = Eastside STD Clinic 252 = Eastside Family Planning 253 = Eastside Memorial Hospital
Diagnosis	5	10274 = Chlamydia 10280 = Gonorrhea 10311 = Primary Syphilis 10312 = Secondary Syphilis 10313 = Early Latent Syphilis

3. Sample data file

In order to construct the import file definition, whoever creates the source data file must provide a sample file containing at least three records. The file can have any valid DOS file name but it should be unique enough to distinguish it from import files that are from other data sources. It should have a .TXT extension. The following is a sample data file in fixed-length ASCII text format. This example contains only a few of the variables that will be present in a complete morbidity record. For these six records, the following variables are included in this ASCII text file: Last Name, First Name, MI, DOB, SSN, Sex, Race, Ethnicity, Medical Record Number, Report Date, Age, Provider, Diagnosis Date, City, and State.

GA	SMITH	JOHN	T04151972436765345MALE	12003982273001061999N026	GC15101041999ATLANTA
GA	JONES	FRANK	R09191976436765345MALE	22003982273001061999N022	CT15112271998NORCROSS
GA	WILLIAMS	MICHELLE	L11091978436765345PEMALE	12003982273001061999Y020	GC15101051999ATLANTA
GA	BOUDREAUX	RONNIE	08081971436765345MALE	12003982273001061999N027ELL	L15101041999DUNWOODY
GA	TODD	STEPHEN	K10271980436765345MALE	22003982273001061999N018	GC15112291998ATLANTA
GA	ARIAS-SANCHEZ	TEOPILO	T02201979436765345MALE	11003982273001061999N019	CT15101041999ATLANTA

4. Provider list (External Look-up/three way table)

To help build the provider code translation table, the import program uses a list of providers saved in an ASCII text file. This file name will default to the same name as the morbidity import file but with an extension of .XPR. For example, if the morbidity import record is MYFILE.TXT, the provider code text file would be MYFILE.XPR. Do not change the name of the .XPR file, or the morbidity import program will be unable to use it. In this .XPR file are the provider names or codes that will be included in the morbidity import records, one provider name/code per line. An example of this .XPR file, assuming that the source import file uses codes, not names, to identify providers, would be constructed as follows:

151
152
153
251
252

NOTE: See Mapping the ASCII import record to STD*MIS variables section (Section II B, below) for a shortcut way to create this look-up file.

C. Import file transmission protocol

One of the greatest benefits of implementing electronic import of morbidity record data is the often significant improvement in the timeliness of reporting to the responsible public health agency. The frequency of this activity is determined locally, but written protocols should be established prior to implementing this mechanism of receiving morbidity record data electronically. Issues covered by this written protocol may include: date and time when an export file is created at the submitting facility; location where this file is placed; encryption scheme used to ensure the security of these data; transmission protocol format for transfer of the file to public health; name, title, phone number, etc., of a responsible person for sending the file; name, title, phone number, etc., of a person at the public health agency responsible for receiving the file; description of feedback to be received by the submitting facility following routine file transmission; procedures for handling failed transmission of files; procedure for handling correction of missing required fields on individual records; procedures for addressing other missing variable data; and list of diseases to be included in the export file.

D. Morbidity Record Patient/Provider Address Selection Synopsis

Electronically importing morbidity report data into STD*MIS requires that address information for the patient is available so that morbidity can be assigned to the correct geographical area. If the patient's address information is unavailable, the provider's address information, from the provider reference file, will be substituted. As each record is imported, STD*MIS uses the city, county, state and zip code variables to create an address record, relating the available information with the Geo_Area database.

*For further information on this process, please see Address Algorithm Document.

II. Setting up the Morbidity Record Import Mapping and Look-Up Definitions

The first time the IMPORT/ASCII menu selection is made a window requiring a password appears. This password can be obtained by contacting your STD*MIS technical support person. It is used to help ensure that proper training has been provided before an attempt to import morbidity record data is made. Once the correct password is supplied, this prompt will not reappear.

Procedures for establishing a morbidity report import definition are discussed below. They include mapping the ASCII record to the STD*MIS variables, creating look-up definitions for those variables that can be translated upon import, completing the other import menu options, and actually running an import of ASCII morbidity record data.

A. Creating a new morbidity record import definition

After accessing the IMPORT/ASCII IMPORTS/MORBIDITY menu option, press the F3 function key to begin the process of defining a new morbidity record import definition. **Note: The first time an import is created, the F3 key does not need to be pressed.** Select "New Definition" from the pop-up window that appears. Four fields must be entered to create a new import definition.

ASCII Import Title: Enter a name or description that will easily identify the source of this import file. This can be up to 15 characters. Examples include "DALLAS CLINIC", or "MAINFRAME LEGACY DATA".

Input Drive Letter: Enter the PC or Network drive letter where the ASCII import file stored (e.g. C or N).

Input Directory: Enter the folder (subdirectory) location where the ASCII import file is stored (e.g. ASCII_IMPT or APPS\IMPORT). Use the backslash key "\ " to designate the root directory, when appropriate.

Input File Name: Enter the complete name of the ASCII import file to be processed (e.g. Dallashd.txt or mainfram.txt). NOTE: this file must be a fixed-length ASCII file. The file name must conform to the DOS 8.3 format, and must have a .txt extension.

B. Mapping the ASCII import record to STD*MIS variables

After creating an ASCII import record, select the F5 function key to modify the variable mapping for the selected import file. The “ASCII Import: Modify Morbidity Definition” window appears on the screen. Use the up and down arrow keys to select the field name to be mapped from the list appearing in the lower part of the screen. Then, using the Record Layout and the Data Dictionary described above, use the right and left arrow keys to position the cursor at the beginning column for that field name. When you press the enter key to indicate the beginning of this field the cursor turns red. Then use the right arrow key to reposition the cursor to the last column for this field. The currently selected columns will appear in red background. Press the enter key to complete the mapping for this field, changing the background color for the selected columns to blue. A check mark will appear in the first column on this screen, indicating that the field is mapped to the ASCII file. Repeat this process for all variables included in the ASCII import file that can be mapped to STD*MIS fields. NOTE: fields that are indicated by a shaded box in the first column on this screen are fields that must be defined in the ASCII import file. Fields that are displayed in white require that a look-up cross reference table be defined to link the incoming field values with the STD*MIS matches. (See Section II C below for instructions on creating look-up tables.)

To remove a single field’s mapping to the import ASCII file, highlight the desired field and press the delete key. Press the F8 function key to remove all field mappings.

When all imported fields are mapped and the cross-references are designated, press the F10 function key to save the definitions. You can save partially mapped definitions, returning later when more information is available.

C. Creating Two and Three Way Look-Up tables

Two-way tables

Press the F2 function key to create look-ups for those variables displayed in white foreground text. The Look-up Cross-reference values screen appears. Press the enter key to modify any displayed import value, the F3 function key to add a new value, or the F4 function key to delete any existing value. Repeat this to cross-reference all import values to the STD*MIS values. It is possible to map more than one import value to a single STD*MIS value. Do not, however, map one import value to two or more STD*MIS values. Over time it may be necessary to add new

import file values as new tests, results, etc. are exported by the lab. **Note: It is not possible to delete or modify any STD*MIS values on two-way tables, but only to match incoming codes to these values.**

Three-way tables

The only three way look-up table for the morbidity import is for the provider. This means that prior to creating the look up table; you must first map the field, and then press the F9 function key to see the frequency distribution within the current ASCII import file for this field. From within the displayed frequency counts screen you can change the sort order of the displayed data using the F7 (sort by value) and F8 (sort by count) function keys. Press the F6 function key to generate an ASCII file that can be used by STD*MIS to identify the providers (e.g., MYFILE.XPR.) Remember, do not change this name, or the import program will not be able to use this file. Return to the previous screen by pressing the escape key. Then press the F2 function key to create the look-up for this variable.

Once you press F2 to create the look-up, you will see three columns. The first is “X-reference value,” the second, is “Import value,” and the third is “STD*MIS value.” In the three-way table, values can be manipulated in the first two columns. The first task is F7 to auto-select any identical matches between the second and third columns. Then use F2 to manually select matches: place the cursor on a value in column two, press “tab” to move to column three and then use the arrow keys to locate a corresponding value. Once the matching value has been highlighted in column three, press enter to make a match which will appear in column one. Continue this until all imported records have a match. It is possible to map more than one import value to a single STD*MIS value. Do not, however, map one import value to two or more STD*MIS values. Over time it may be necessary to add new import file values as new tests, results, etc. are exported by the lab.

The F3 key will add a new value that does not exist in either in the import values or the given STD*MIS reference table of interest; the F4 key will delete any cross-reference record (includes removing the import value from the list displayed); and the F5 key can edit an existing value in columns one or two. F6 can create a default value, which will be displayed in blue in the first column.. **Note: The F6 function will not work in the provider reference table where all providers must have a match created, and no provider names can be blank.**

When you have finished building a look-up table, press F10 to save the table.

D. Other menu options required prior to starting an import of data

The following are menu options presented in the “ASCII Morbidity Import Selection” window:

Press the F2 function key to change the selected morbidity import definitions including the import file name, the location (drive or directory) of the import file, or the import file name.

The F4 or the Delete Key will delete the selected morbidity import definition.

If you do not wish to bring in a particular disease in the ASCII Morbidity file, do not give it a translate value to an STD*MIS diagnosis code. For example, if you have a diagnosis code of "800" in your ASCII Import file, change your translate value for that diagnosis to "888". Thus, it will not find a match for an STD*MIS diagnosis and will **NOT** be imported. The F6 function key will allow you to determine which diagnoses to bring in as non-named morbidity. All other diagnoses will be brought in as named morbidity.

Within the "ASCII Morbidity Import Selection" window, the F7 function key is used to define the algorithm for identifying potential duplicate patient records. There are seven variables to be defined in the "Close Match Patient Fields" window. To view the choices available for each variable, toggle through the options by pressing F5, the Enter key, or the space bar. For both the Last Name and the First Name fields, if the "First N Chars" choice is made, you must then provide the number of characters (from 1 to 20) that will be used to identify a potential duplicate name. Use the F7 key to increase the number of characters, or the F8 key to decrease the number of characters. Save this configuration by pressing the F10 key. The purpose of the duplicate match definition screen is to create ways that STD*MIS can assign imported patient named records into one of three groups: true duplicates, possible duplicates, and new records not duplicating an existing record. As a record is imported, STD*MIS will evaluate each of the seven fields listed in this screen. An imported patient record is considered "new" if no existing patient record matches all the specified field definitions (e.g. exact, ignore, etc.). An imported patient record is considered a possible match, or close match, if an existing patient record matches all seven specified field definitions. These possible matches are added to the STD*MIS Duplicate File, found in the Duplicate Patient Report section of the System Utilities Menu. It is important that this list of potential duplicate patient records be reviewed after each import. Finally, STD*MIS will determine that an incoming patient record exactly matches an existing patient record if the last name, first name, date of birth and sex exactly match (date of birth cannot be blank). When this occurs, the incoming morbidity record is appended to the existing records for the matching patient record within STD*MIS. If a new address for an existing patient record is associated with a morbidity report, the new address record is appended to the existing record.

E. Running the import program

After completing all steps described above, STD*MIS is now ready to process a file containing morbidity records. ***Note: All users must be off STD*MIS before a morbidity import can be executed. Also, immediately following a morbidity import, duplicate patient maintenance should be performed on the "near duplicate" file created by the morbidity import. *Note: It is advisable on your first import that you import records into a backup copy of STD*MIS, until you are sure that the morbidity import outcome is to your liking.** To begin

the file import function press the Enter key with the desired import definition choice highlighted. You will be asked, twice, to be sure you wish to proceed. This extra confirmation is intended to encourage you to be sure that the designated file is the one you want to import. It should be noted that the only way to un-import these records on a live database, if necessary, is to restore a back-up copy of the STD*MIS.

Assuming that the file contains data in the correct ASCII format, and that the file definitions include the required field mappings, the import program will begin to process the file, one record at a time. A summary of the import progress will be displayed. When all records have been processed, information supplied on this window will be used to identify whether additional work remains to be done before all of the records in the file are successfully imported. Once your file has been imported, the file extension will change from *filename.txt* to *filename.****.

III. Post-Import Activities

Once the ASCII file has been processed by STD*MIS, there still remain important activities that must be completed before importing additional files.

A. Review errors

Based on the STD*MIS definitions you have created for importing a file, any errors found in the morbidity record file that cannot be successfully imported will be written to a dBASE file with the same name as the imported file, with an .err extension (*filename.err*). Records that are imported successfully but that contain warnings or default value selections are also written to this file. In addition, all records that are not imported are written to an ASCII text file, with an .rjx extension (*filename.rjx*). See Review and Correct Failed Records (below). Each time a morbidity record file is processed by STD*MIS, this file will be newly created. Therefore it is important to review the information contained in this file each time that an ASCII import is completed. Be sure to rename the file if you cannot complete the review of the contents prior to starting subsequent imports of data.

The table provided below lists the codes and descriptions of records that may be written to this file. For the nine types of fatal records (F prefix), import of this record could not be done. The specific reason for this failure to import the record is provided in the description of the error code. There are five types of records written to this file with the default (D prefix) code. These records are imported into STD*MIS using a default value rather than the data provided in the transmitted ASCII file. Finally, there are fourteen types of warning records (W prefix). These records are also imported into STD*MIS but alert the STD program to missing values in the imported file, or STD*MIS reference table look up files. These errors primarily refer to problems in the patient or provider address. Contact your STD*MIS technical support person for additional information of these codes.

Code	Error Code Description
D000	Default: General: Default Value Substituted for Missing One
D001	Empty Value Found for External Lookup. Default Provided
D002	Empty Value Found for Internal Lookup. Default Provided
D003	Invalid Value found. External Lookup Failed. Default Used
D004	Invalid Value found. Internal Lookup Failed. Default Used
F000	Fatal: General: Fatal Exception Occurred. Record Failed
F001	Empty Required Value Found. Default Not Provided. Fatal
F002	Invalid Required Value found. External Lookup Match Failed
F003	Invalid Required Value found. Internal Lookup Match Failed
F004	Bad Date: Incorrect Date Range Error. (i.e. 15th month)
F005	Missing State OR State Differs from STDSYS-> State. Fatal
F006	Missing State. Zipcode search Failed in State Matchup. Fatal.
F007	STDMIS Lookup Failed (in Pre Codeblock). Required Value
F008	Required Value Found Empty (after Pre-Processing). Fatal
F009	Required Value Found Empty (after Mid-Processing). Fatal
F010	First and/or Last Name Blank (required for Named Configuration)
W000	Warning: General: Non-Fatal Exception Occurred
W001	Invalid Value Found. External Look Match Failed. Left Alone
W002	Invalid Value Found. Internal Look Match Failed. Left Alone
W003	Invalid Date Format Found. Date Blanked Out (Empty Date)
W005	Duplicate Morbidity Record Found. Used Existing Morbidity
W006	Duplicate Address Found. Old Address Record Used Instead
W009	Patient's Zipcode Bad/Missing--Used City/State for Address
W010	Patient's Zipcode Missing--Used City/County for Address
W011	Patient's Address Bad--Used Provider Zipcode for Address
W012	Patient, Provider Address. Bad-Used Provider.DBF Zip for Address
W013	Patient, Provider Zip Bad-Used Provider City/St. for Address
W014	Patient, Provider Zip Bad-Used Provider.DBF City/St. for Address
W015	Zipcode Missing; City/County Found Multiple Zips; 99999 Used.
W016	Invalid Zipcode Found: Defaulted Zipcode to 99999.

W017	Patient City Missing: Used Zipcode to Look-up Geo Area City.
W018	Bad Patient Zip: Used City/County for District; Zip as 99999.
W019	Bad Zip/No County: City Spans Counties: Address Set to Unknown.
W020	Bad Zip/No County; Single County for City found in Geo area.
W021	Bad Zip/City; County Found: City Set as Unknown/Zip as 99999.
W022	Patient State Missing: Used Zipcode to Determine State.
W089	Length Of Import Line longer or shorter than other lines
W099	Close Patient Match Found. Patient Record Added Anyway

From the ASCII Morbidity Import Selection window press the F9 function key to access the records written to this error file. Your choices are: Show All, Warning, Defaults, or Fatal Error records. Once a selection is made, all records that meet the criteria will be displayed in a list. Use the arrow and page up/page down keys to scroll through the displayed list. Press the enter key to view all the available information for the selected record. You will then be able to print the list of error codes (F8 function key) that appears below and print the list of selected errors for this record (F9 function key). This last printout will be especially useful in evaluating the reasons that records were written to this file and, if appropriate, make those changes in STD*MIS that will reduce or eliminate future problems on import from this submitting morbidity report source.

B. Review and correct failed records

Imported records that cannot be processed by STD*MIS (failed records), will need to be reviewed after each file import. When possible, you should correct the record and re-import the file. All records that fail to be imported are written to a file that has an .RJX extension, (e.g. *filename.rjx*). This is an ASCII record that contains all the data for these records. In addition, at the end of the line of data for each record, STD*MIS has appended the line number where this record was found in the source import file. For those records that contain diagnoses that you had specified to not be imported, STD*MIS will also append the label “IGNORED” to the end of the record for that test result. Therefore, if you had instructed STD*MIS to skip HIV morbidity records, for example, all records in the import file that contained these diagnoses would be labeled “failed” and would have the “IGNORED” label appended to the record within the .RJX file. Any DOS text editor such as WordPad, EDIT, or EPED can be used to edit the rejected record file, although column shifting during the editing must be carefully corrected. **Note: Please see the “Appendix to Laboratory and Morbidity Import Instructions” document for instructions on using MS Access 2000 to edit this file.** Be sure to change the name of this file back to the original file name (e.g. *filename.txt*) before re-importing the data. As with the .ERR file, future imports of morbidity data from this site will generate a new .RJX file with the same file name, overwriting the information with the new record information. Thus it is critical that this file be reviewed and, if possible, corrections made as soon as possible. After re-importing

the rejected records, another reject file may be created and the same correction process followed.

C. Modify the STD*MIS import definitions or reference tables

A review of the information supplied in the .ERR file will help identify additional modifications that need to be made to the ASCII import definitions or to the STD*MIS reference tables. For example, if a record fails because the provider code in the imported record does not match one in STD*MIS, you will need to edit this look-up table in the import definitions. A review of the 28 error codes shows that many of the possible reasons relate to a failure to match existing codes within STD*MIS. This process will probably be ongoing as the environment itself is fluid. New providers, different cities and zip codes, etc., are a reality that will require close scrutiny to keep the STD*MIS import of these records working as intended.

D. Monitor and address completeness of provider records

Early reports from several pilot ELR projects suggest that record completeness, in addition to reporting timeliness, show significant improvement when the data arrive electronically. There will still be, however, differences among providers in the completeness of the data that is routinely included in the electronic transmission. To identify which providers fail to supply all needed data routinely, STD*MIS includes a report that you may find helpful. Within the Morbidity Reports menu of the Reports Menu, choose the Check for Missing Values report. After specifying a time frame, selecting a disease category, the type of providers to be included, and the type of output (file or printer), the report includes a table that lists the provider name, number of total morbidity records received, and the number and percentage of those records with missing or unknown data for age, race, gender, county, or zip code. Use information provided in this report to focus your efforts to improve record completeness most effectively.

E. Process duplicate patient file after each import.

Following each import it is important to review the list of potential patient duplicates. If these are determined to be true duplicates, merge the two patient records. From the System Utilities Menu select Duplicate Patient Maintenance. Patient records that the import program identifies as potential duplicates will be added to the existing list found in the Merge Duplicates menu selection. Select Duplicate File, Manual Merge Process from this menu to begin the process of determining whether the two matching patient records are for the same person. Follow screen prompts to merge records, when appropriate. After processing the patient merge file, you should then go to the Quality Assurance Reports within the Report Menu, and choose the Patients with Multiple Morbidity Report. After specifying a time frame, selecting a threshold of "2", and choosing a single diagnosis, you should check for records which may represent multiple reports for one event of morbidity. Use this information to determine the reason for duplication, e.g., data entry errors, reporting from two laboratories, and on morbidity reports, reporting on hard copy and in electronic format, etc.

F. File cleanup

Each time you import a file from a submitting source, the file must be the name you listed in the definition screen for the ASCII import program. Therefore future imported record files will have the same name as the current file (*filename.txt*). After each successful import be sure to remove this file from the location where the STD*MIS import program will read the data in subsequent file imports. Delete, rename, or relocate this file each time. Also, the .ERR and .RFX files will be recreated after each import, overwriting any files with the same name already in the directory where the import file data is located. As with the .TXT file, either delete, rename, or relocate these files each time you complete the import and subsequent error record review.

G. Issues Related to Morbidity Record Changes or Deletions

The morbidity record import function was not specifically designed to handle issues associated with changes that may be made in a morbidity record after it has been imported into STD*MIS. For those file imports that represent a one-time upload of these data this is not an issue since the source data are no longer open for change or deletion. For those sites, however, that intend to periodically import newly entered morbidity data, this is an important consideration. The problem occurs when a morbidity record is uploaded into STD*MIS but is subsequently edited or deleted at the source. Depending on how this is managed by the host software program, the result may be that STD*MIS will have two records for the patient or not receive the corrected information at all. Since this process will vary in each situation, it is the responsibility of the local STD*MIS support staff to ensure that alternative processes are developed for this purpose.

One recommendation would be to generate a list each week of all morbidity records that have been uploaded to STD*MIS that are edited or deleted subsequently within the source software program. This list could then be used to individually edit each STD*MIS morbidity record, based on the changes that were made to the morbidity report. Whatever the decisions that are made, we recommend that a written protocol be established to handle these changing morbidity records and that routine review of the expected work be assured by program management.

Appendix to Laboratory and Morbidity Import Instructions
How to use Microsoft Access 2000 to evaluate/edit your ASCII file prior to import
(preprocessing), and to edit your rejected records

Launch Microsoft Access

Create a new database using the **Blank Database**; specify name and location for the new database and click create. Click OK. (The file will automatically be given an extension of .MDB).

When the window showing the options for Creating a Table appears (Create table in design view, Create table by using Wizard, Create table by entering data) Click on File (in the upper left hand corner of the large window).

Choose Get External Data, then Import. When the import window appears, change the choice for Files of type to "text files". Find the drive and directory where your original lab import file is located, highlight this file and then click on Import.

When the **Import Text Wizard** window appears, choose Fixed Width for the type of data file, and then click on Next.

Then use your mouse to signify the field breaks. Click once to create a field break, twice to delete a field break. Use your file layout document to determine where to place the file breaks. Choose these breaks very carefully and make sure they are accurate. After creating all required field breaks, click on Advanced to access the **Import Specification** window.

Look at each field type to assure that they are all data type "Text". For those that are not, click in the data type column on the value that is not denoted as "Text" and choose "Text" from the pull down menu. When finished changing all data types to "Text" click "Ok". Then click "Next" to continue.

Your default choice on the next screen will be to store the data in a new table. Choose this, and click on Next. The next screen asks you to specify information about each field you are importing. Just click Next to skip over this and continue.

The next screen asks if you would like to create a primary key. Choose "no primary key" and click on Next.

You are next asked for a name for your table. Give the file a new name at this time. If your ASCII file was GADOHLAB.txt, make the new name of the file something like GALABFIX.

Now click Finish. You will then see a window telling you the data have finished importing. Click OK.

Next you will see a small window with the name of your new Access database highlighted. Double click your new table and it will open in Access format.

From this data table, you can view, sort, and edit your lab import data. When you have made all appropriate changes to your data, close the table. Choose File from the upper left-hand menu. Choose Export. At the Save as type line, choose Text Files. Use the same name for this file as you did for your Microsoft Access file (mdb) and then click "Save". When the Export Text Wizard appears, choose "Fixed Width" for the type of file to create, and then click "Next". The next screen will display the field breaks previously defined, click "Next" to continue. The subdirectory and filename where the file will be saved will appear. If the subdirectory and filename displayed is correct, click "Finish". If not, enter the appropriate location and name and then click "Finish". You will then see a window telling you the data has finished exporting. Click OK.

Close Microsoft Access and go to STD*MIS to run the import procedure.