

DTIC FILE COPY.

NOTE:
Poor Copy
(Toward End)

①

AD-A198 167

USERS' MANUAL
MEDICAL EXAM SCHEDULING MODULE

DTIC
SELECTE
SEP 12 1988
S & D

Richard H. Fiddleman
Marianne Follingstad

The MITRE Corporation
January 16, 1987

DISTRIBUTION STATEMENT A

Approved for public release;
Distribution Unlimited

88 9 6 01 9

ADA 198167

50272-101

REPORT DOCUMENTATION PAGE		1. REPORT NO. DOD/SW/MT-88/017f	2.	3. Recipient's Accession No.
4. Title and Subtitle Navy Occupational Health Information Management System (NOHIMS) Medical Examination Scheduling (MES) User's Guide			5. Report Date 16 January 1987	
7. Author(s) Mitre Corporation			6.	
9. Performing Organization Name and Address Navy Regional Data Automation Center, Washington (Code 4443) Building 143 Washington Navy Yard Washington, DC 20374-0001			8. Performing Organization Rept. No.	
12. Sponsoring Organization Name and Address Navy Environmental Health Center Naval Station Norfolk, VA 23511-6695 (Attn: Code 40/CDR James W. Allen, MC, USN)			10. Project/Task/Work Unit No.	
15. Supplementary Notes For magnetic tape, see: ADA 198157			11. Contract(C) or Grant(G) No. (C) (G)	
16. Abstract (Limit: 200 words) The Medical Examination Scheduling (MES) module consists of a list of options that allow users to access the Navy Occupational Health Information Management System (NOHIMS) Industrial Hygiene (IH) Component database in order to perform these functions: ➤ (1) enroll and remove employees from Medical Programs manually. (2) schedule employees for examinations for Medical Programs. (3) maintain medical qualifications for employees. The System automatically enrolls employees for occupationally required programs and automatically removes them if terminated, program is deleted from occupational requirements, they have missed an excessive number of examinations. This manual provides an overview of the module's functions. Emphasis is on reports available from this module.			13. Type of Report & Period Covered	
17. Document Analysis a. Descriptors <i>Keywords: Management information systems, Occupational diseases, Occupational Health, Physical Exams, Health surveys, Industrial medicine, Medical examination. (SDU)</i>				
b. Identifiers/Open-Ended Terms				
c. COSATI Field/Group				
18. Availability Statement RELEASE UNLIMITED		19. Security Class (This Report) UNCLASSIFIED		21. No. of Pages 68
		20. Security Class (This Page) UNCLASSIFIED		22. Price

(See ANSI-Z39.18)

See Instructions on Reverse

OPTIONAL FORM 272 (4-77)
(Formerly NTIS-35)
Department of Commerce

TABLE OF CONTENTS

	<u>Page</u>
LIST OF FIGURES	v
LIST OF TABLES	v
1.0 BACKGROUND	1-1
1.1 Purpose of the Manual	1-1
1.2 References	1-1
1.3 Terms and Abbreviations	1-1
1.4 Medical Exam Scheduling Module Overview	1-3
2.0 NOHIMS OVERVIEW	2-1
2.1 NOHIMS Modules	2-1
2.2 System Environment	2-1
2.3 System Data Base	2-2
3.0 MEDICAL EXAM SCHEDULING MODULE INPUT PROCESS	3-1
3.1 Summary of Input Processes	3-1
3.2 Update Requirements	3-1
3.3 Maintain Enrollment Status	3-3
3.4 Schedule Appointments	3-5
3.5 Update Appointment History	3-8
3.6 Audit Files	3-11
3.7 Maintain Reference Files	3-11



Accession for	
NTS - CH-24	
UIC - 100	☐
UIC - 100	☐
UIC - 100	☐
UIC - 100	☐
NTIS PC- 14.95	
MF- 6.95	
CODE 23	
A-1 21	

DISCLAIMER NOTICE

**THIS DOCUMENT IS BEST QUALITY
PRACTICABLE. THE COPY FURNISHED
TO DTIC CONTAINED A SIGNIFICANT
NUMBER OF PAGES WHICH DO NOT
REPRODUCE LEGIBLY.**

TABLE OF CONTENTS (Concluded)

	<u>Page</u>
4.0 MEDICAL EXAM SCHEDULING MODULE OUTPUT PROCESSES	4-1
4.1 Summary of Output Processes	4-1
4.2 Produce Management Reports	4-1
4.3 Produce Clinic Reports	4-4
4.4 Product Discrepancy Reports	4-7
4.5 Produce Program Linkage Displays	4-9

APPENDICES

	<u>Page</u>
APPENDIX A: EXAMPLES OF OUTPUTS FROM PRODUCE MANAGEMENT REPORTS PROCESS	A-1
APPENDIX B: EXAMPLES OF OUTPUTS FROM PRODUCE CLINIC REPORTS PROCESS	B-1
APPENDIX C: EXAMPLES OF OUTPUTS FROM PRODUCE DISCREPANCY REPORTS PROCESS	C-1
APPENDIX D: EXAMPLES OF OUTPUTS FROM PRODUCE PROGRAM LINKAGE DISPLAYS PROCESS	D-1

LIST OF FIGURES

<u>Figure Number</u>	<u>Page</u>
1-1 OVERVIEW OF MEDICAL EXAM SCHEDULING MODULE	1-4
1-2 MEDICAL EXAM SCHEDULING DATA CYCLE	1-5
3-1 UPDATE REQUIREMENTS PROCESS	3-2
3-2 MAINTAIN ENROLLMENT STATUS PROCESS	3-4
3-3 SCHEDULE APPOINTMENTS PROCESS	3-6
3-4 UPDATE APPOINTMENT HISTORY PROCESS	3-9
3-5 AUDIT FILES PROCESS	3-12
3-6 MAINTAIN REFERENCE FILES PROCESS	3-13
4-1 PRODUCE MANAGEMENT REPORTS PROCESS	4-2
4-2 PRODUCE CLINIC REPORTS PROCESS	4-5
4-3 PRODUCE DISCREPANCY REPORTS PROCESS	4-8
4-4 PRODUCE PROGRAM LINKAGE DISPLAYS PROCESS	4-10

LIST OF TABLES

<u>Table Number</u>	<u>Page</u>
3-1 Medical Exam Scheduling Reference Files	3-14

USERS' MANUAL

MEDICAL EXAM SCHEDULING MODULE

1.0 BACKGROUND

1.1 Purpose of the Manual

This manual describes the capabilities of the Medical Exam Scheduling (MES) module of the Navy Medical Command's (NAVMED) Navy Occupational Health Information Management System (NOHIMS). After presenting some background information on the total NOHIMS, the manual describes the module's significant data input and output processes. Examples of the output reports appear in the appendices. The information in this document is intended to help the reader understand how this module can help manage the clinic's scheduling process, track employee medical qualifications, and ensure that employees receive necessary medical examinations in each Navy facility.

1.2 References

The following publications provide background information on the Medical Exam Scheduling module:

- o NOHIMS Medical Exam Scheduling Module Functional Design Specifications
- o Navy Occupational Safety and Health (NAVOSH) Program Manual, OPNAV Instruction 5100.23B
- o Department of Defense Occupational Health Surveillance Manual, DoD 6055.5-M

1.3 Terms and Abbreviations

The following terms and abbreviations are used in this manual:

- o Agency: An Executive Department, as defined in 5 U.S.C. 101, or any employing unit or authority of the Government of the United States not within an Executive Department to which the provisions of Executive Order 12196 are applicable.
- o Automated Scheduling System: Indicates that all appointments are filed into a schedule of dates and time slots. Each time slot included in an appointment is checked by the system for available capacity and for shift or program preferences.

- o Date Next Exam: For periodic program enrollments, this indicates the date by which the employee is expected to be scheduled for an exam. For one-time enrollments or for removed programs, this indicates the month and year in which the one-time or removal exam should be given.
- o Disposition: A determination of whether an appointment was attended, missed, or cancelled.
- o Expiration Date: The date on which an employee's periodic program qualification expires. As adjusted by the clinic-specified Qualification Grace Period, it is the program enrollment Date Next Exam or a scheduled appointment date, whichever is later.
- o Location: A four-tiered description of a physical place consisting of site, location, sublocation, and area.
- o Manual Scheduling System: Indicates that all appointments will be scheduled by the user with no system scheduling or checking on clinic availability.
- o MUMPS (Massachusetts General Hospital Utility Multi-Programming System): The programming language used to develop NOHIMS.
- o One-time: A program exam or enrollment that does not anticipate or require any periodic reexamination.
- o Operation: A defined set of procedures, each with its own code, that is used to classify specific tasks performed by employees in the course of their work.
- o Periodic: A program exam or enrollment indicating need for regular medical surveillance at the interval specified by the reexamination frequency. The exam results for these programs determine an employee's medical qualification status for related occupations, operations, locations, and stressors.
- o Program: A means of classifying employees for medical surveillance that specifies the protocol an employee should be subject to when working in an occupation, location, operation, or with a stressor, or when requiring evaluation based on past exposure to a stressor. Programs may be generic or specific to a stressor, operation, or occupation (e.g., sight conservation, asbestos, fork lift operator).
- o Program Preference: A medical program that is to be given preferential treatment in scheduling during specified time periods. e.g., an exam needing the presence of a special practitioner who is available one morning each week.

- o Protocol: The list of medical history items, physical examinations, and lab tests that an employee should be given during an examination for a medical program.
- o Stressor: Any chemical substance, biological agent (bacteria, virus, fungus, etc.), or physical stress, noise, heat, cold, hypo-hyperbaric pressure, etc., which is:
 1. Regulated by any NAVOSH standard or Federal law or rule due to a hazard to health.
 2. Listed in the latest printed edition of the National Institute for Occupational Safety and Health (NIOSH) Registry of Toxic Effects of Chemicals.
- o To Be Scheduled (TBS): A file of employee programs that await immediate scheduling by the clinic.

1.4 Medical Exam Scheduling Module Overview

The MES module tracks employee medical surveillance program exam requirements and medical qualification statuses, supports automatic or manual clinic scheduling with appointment notification and exam protocol generation, and provides data for monitoring employees' exam histories. Figure 1-1 shows the major processes, inputs, and outputs of the module.

The primary function of this module is to ensure that employees receive necessary medical surveillance. To accomplish this, the system relies on medical surveillance program enrollment, scheduling, and qualification tracking. Figure 1-2 illustrates the general flow of employee medical program data in this module.

The module first enables the user to establish medical surveillance programs and associated medical exam protocols that are linked by the user to appropriate locations, stressors, occupations, and operations. Employees in an occupation that is linked to medical programs are automatically enrolled in the programs for periodic surveillance, and the newly required programs are filed in the To Be Scheduled file. An employee who is over-exposed or over the medical surveillance action level for a stressor may be enrolled for a future one-time checkup or have an entry filed in the To Be Scheduled file for all programs linked to the stressor, depending on the monitoring recommended for that stressor. To supplement these automatic "required" occupation and "personal" exposure enrollments, the user can enroll employees into medical programs for "job-related" (operation, location) or other "personal" reasons. Enrollment is generally for periodic programs with annual, semiannual, or other frequencies, but it can also be used to ensure a one-time exam in the future.

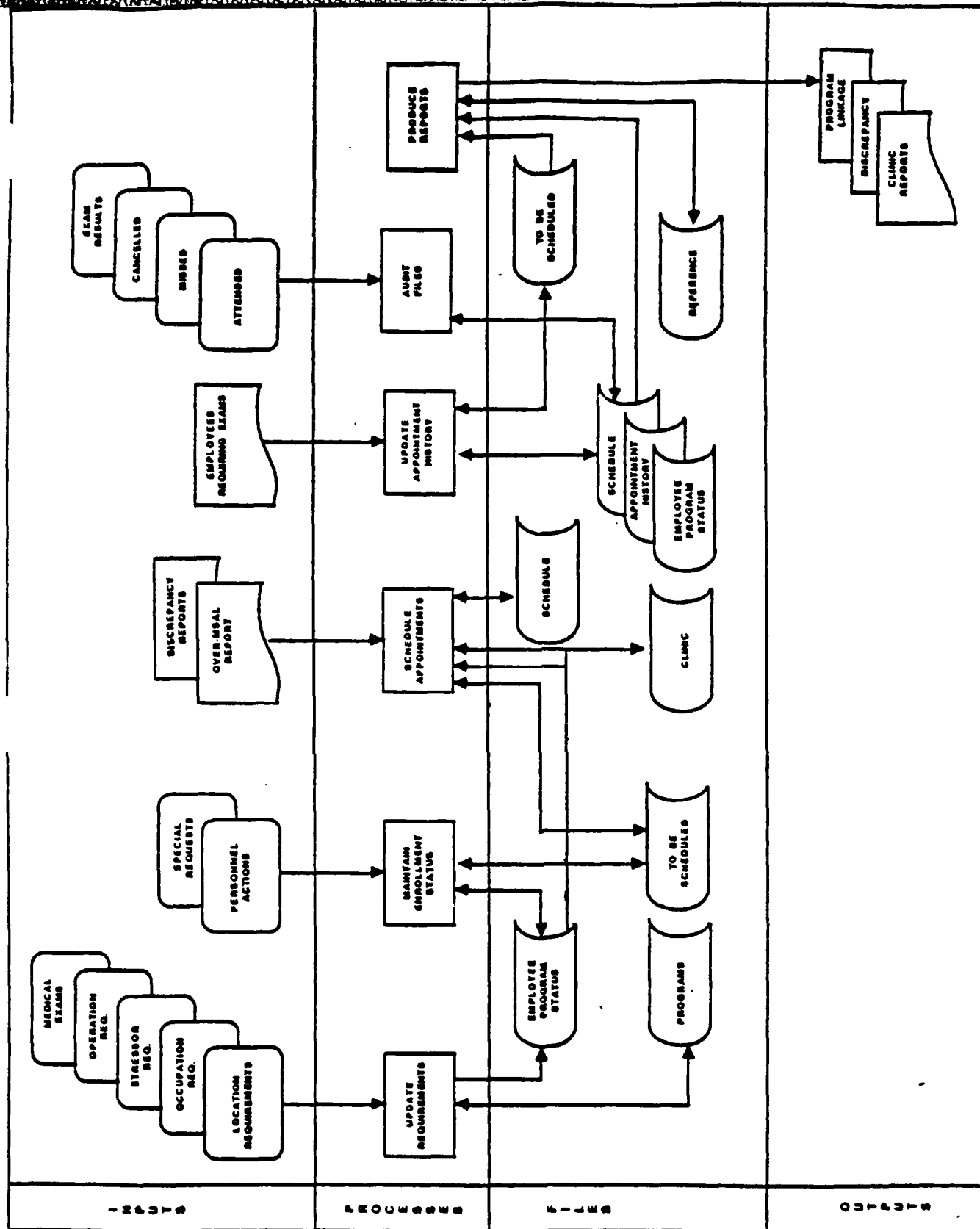


FIGURE 1-1
OVERVIEW OF MEDICAL EXAM
SCHEDULING MODULE

Personnel Actions
Exposures
Discrepancy Audits
Direct Decision

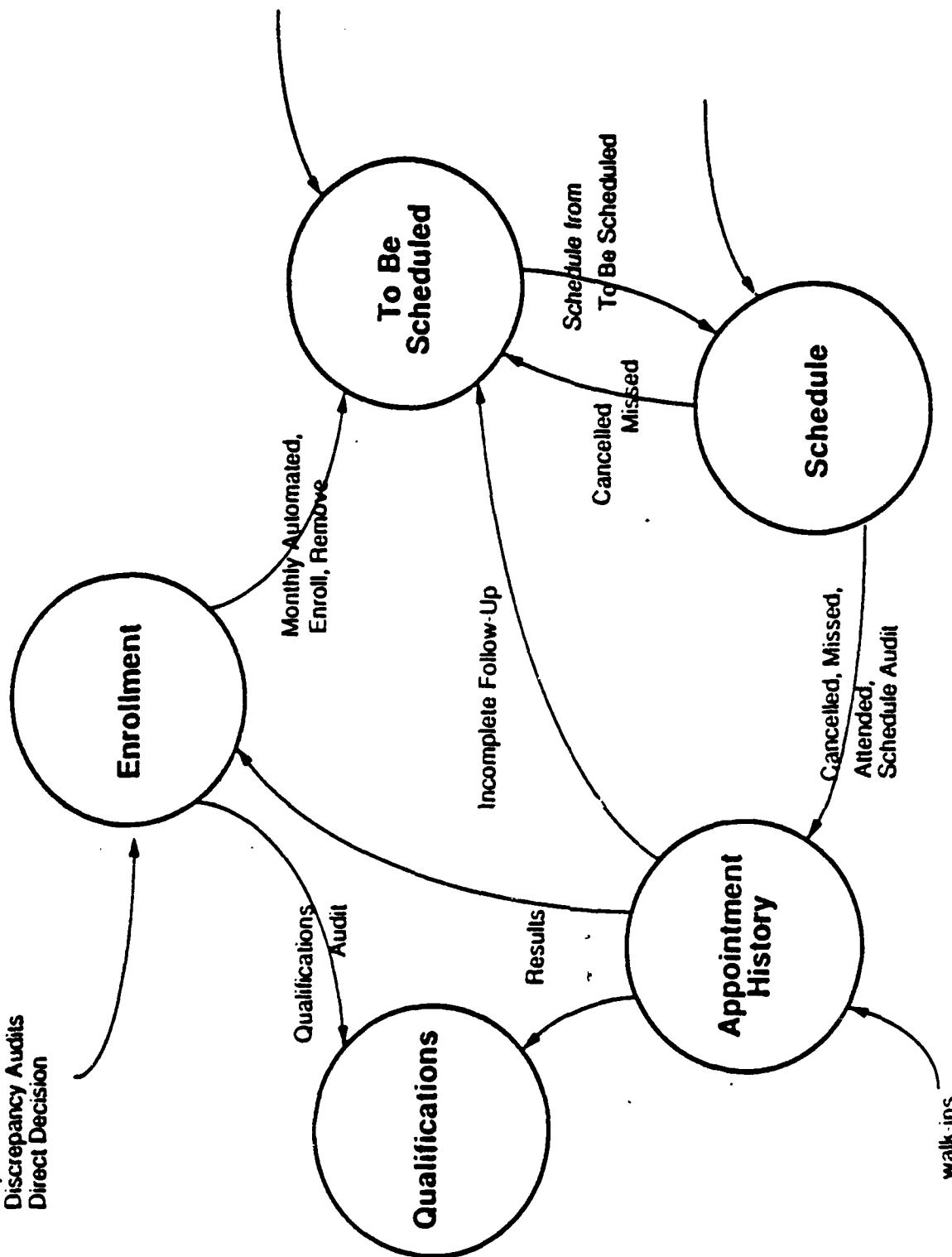


FIGURE 1-2
MEDICAL EXAM SCHEDULING
DATA CYCLE

Employees are automatically removed from enrollment when they are terminated, when a program is deleted from their occupation requirements, when the system determines that they have missed an excessive number of consecutive exams, or, for one-time enrollments, when the program is moved to the To Be Scheduled file. The user can also remove an enrollment directly, at which time the user specifies whether a removal exam is to be performed either now or in the future.

Once a month the clinic will have the system review all associated employee records and identify those having one-time or periodic program enrollments that need a baseline, periodic, or removal exam in the specified month. These programs are filed in the To Be Scheduled file.

Under the scheduling part of the system, each clinic will have the choice of a manual scheduling system or an automated scheduling system. Under either method, the user can at any time schedule or reschedule appointments directly and either incorporate programs that are in the To Be Scheduled file or enter other desired program data. In addition, under an automated scheduling system, the user can have the system schedule appointments for programs that need to be scheduled, or the user can have the system list the employees and programs that need to be scheduled and list "blank" time slots that are available by shop for scheduling. In the latter case, the shops will use the employee lists to assign appointments, and the clinic will enter the appointments directly. The system will distribute a shop's appointments or blank time slots over several days. System scheduling can be run more than once a month, if desired.

Under an automated scheduling system, the user can specify holidays, administrative time, availability of time slots, time slot length, and preference for seeing employees from a specific shift or program at specific dates and times.

Whenever an appointment date and time has been assigned or changed, the system prints out an appointment notice addressed to the employee listing the appointment date and time, medical programs covered by the appointment, and any pre-examination instructions that the employee should follow prior to the appointment. The clinic can, for a specific day or appointment, print individual appointment exam protocols that list exposure data, the employee's enrollments, the appointment programs and the medical history, physical exams, and lab tests appropriate to the employee's age and sex for the medical programs specified in the appointment. The physician will use this report to record program exam results of "qualified," "not qualified," or "incomplete." The clinic will enter missed, cancelled, or attended appointments directly or will flag an existing scheduled appointment as missed, cancelled, or attended. For cancelled or missed appointments, the clinic will be able to reschedule the appointment directly or file the programs in the To Be Scheduled file. For attended appointments, the clinic can add information on the employee's arrival and departure time and can enter program exam results as they become available.

The system also tracks the medical qualifications of each employee. When a user records an appointment as attended, a qualification of "pending" is filed in the employee record for each program covered by the appointment. When a program result is entered as "incomplete," the employee program qualification status is left as "pending" and the program is filed in the To Be Scheduled file for a follow-up exam. When results of "qualified" or "not qualified" are entered in the appointment history, the system also files them in the employee's program qualifications and increments the qualification expiration date by the examination frequency. For medical surveillance programs in which an employee is enrolled for periodic reexamination, the system will file a "not qualified" if the qualification expiration date is past. The system generates a regular report on employee qualifications and the user may request a special report at any time.

2.0 NOHIMS OVERVIEW

2.1 NOHIMS Modules

NOHIMS is divided into two separate components--the Industrial component and the Medical component. The Industrial component consists of four major application modules--Administration, Environmental Exposure, Medical Exam Scheduling, and Hazardous Materials Control--and various special purpose support modules. The Administration module maintains files that are used by all or most of the other application modules; these files contain data on employees, locations, operations, occupations, stressors, and agencies. The supporting modules, to be developed at a later date, will provide interfaces to statistical and graphics packages and will also permit transmission of data between NOHIMS computers. The Medical component of NOHIMS is a modification of the public-domain software package COSTAR (Computer-Stored Ambulatory Recordkeeping system).

2.2 System Environment

NOHIMS will be implemented in medical clinics at Naval Air Rework Facilities (NARF's) and Navy shipyards navy-wide; computer hardware dedicated for use by NOHIMS will be procured and installed there. The system will be hosted on minicomputers using video display terminals (VDT's), workstations, and printers located throughout the host facility. The size and number of minicomputers will differ from location to location depending on workload and geographic distribution considerations. Data will be entered on-line and will be able to be retrieved either on-line or via reports printed at night (or at any later time).

NOHIMS is programmed in the MUMPS programming language, the Veterans Administration (VA) FileMan and Kernel software packages, and the COSTAR software package. Initially developed at the Laboratory of Computer Science at Massachusetts General Hospital, the Massachusetts General Hospital Utility MultiProgramming System (MUMPS) programming language is a combination operating system, file handler, and interpreter. The language was designed from its conception for use in an on-line, multi-user environment. MUMPS is a general-purpose language especially suited to storing and retrieving hierarchical data and processing strings (e.g., free text data) efficiently.

Using the MUMPS language, the VA developed the VA FileMan software package. A programmer or an end-user can use the features of the VA FileMan to specify the characteristics of files and/or fields within these files and to save these specifications in a data dictionary, to specify standard input and output processes and to store these processes in templates, and to execute ad hoc queries against a VA FileMan data base. The VA Kernel displays and manages the system's menus, controls user and device access to the system, manages the security features associated with menus, devices, and users, provides electronic mail functions, and enables users to schedule jobs

for later execution. Most NOHIMS files and input and output processes are implemented using VA FileMan. Processes that could not be efficiently or effectively accomplished using the features available in VA FileMan were developed using the MUMPS programming language.

2.3 System Data Base

NOHIMS contains over 100 files. There are two types of files:

- o Application files--These files are primarily intended to support the functions of a specific module, although in certain cases they may be used by other modules. In addition, the contents of these files change frequently as new data is added to the files or old data is removed from these files.
- o Reference files--These files are primarily intended to be used by a specific module, although in certain cases they may also be used by more than one module. These files differ from application files in that they contain controlled vocabularies of terms. The contents of these files are usually static or change slowly over time.

In many cases, the contents of reference files have been received from various sources within the Navy. It is possible, however, for the local site to build its own reference files. The application files used by the Administration module--Agency, Employee, Location, Operation, Occupation, and Stressor--frequently act as reference files in that they control what data can be entered into certain data fields. The contents of three of these files, Agency, Employee, and Location, can be changed by the local site.

There are no software limitations on the size of files, the number of fields in the files, or the number of files in the system.

3.0 MEDICAL EXAM SCHEDULING MODULE INPUT PROCESS

3.1 Summary of Input Processes

The MES module contains many menu options that enable the user to enter data into the module's files or to edit or delete existing data. These options can be grouped into processes where each process performs enter, edit, or deletion activities on a specific type of data. There are six major input processes in the Medical Exam Scheduling module. These are:

- o Update Requirements
- o Maintain Enrollment Status
- o Schedule Appointments
- o Update Appointment History
- o Audit Files
- o Maintain Reference Files

The first process, Update Requirements, maintains the linkages between medical programs and the occupations and stressors that require medical evaluation or the locations and operations that indicate a need for medical evaluations. In the Maintain Enrollment Status process, changes are made to an employee's medical surveillance program enrollment according to a defined set of criteria. Employees are scheduled for appointments under a variety of circumstances, using one of the methods of scheduling available under the Schedule Appointments process. The user will record attended, cancelled, or missed appointments and the results of exams in the Update Appointment History process. The Audit Files process is used to maintain the integrity of the data in the files. The files that support the module are updated using the Maintain Reference Files process.

3.2 Update Requirements

The Update Requirements process (Figure 3-1) is used to enter data for defining medical surveillance programs, establishing exam protocols, and linking programs to appropriate locations, stressors, operations, and occupations. The user enters and updates data using the following functions:

- o Medical Program Table Entry/Edit--This function allows the user to identify the program, its status, valid reexamination frequencies, pre-exam instructions, and exam protocols

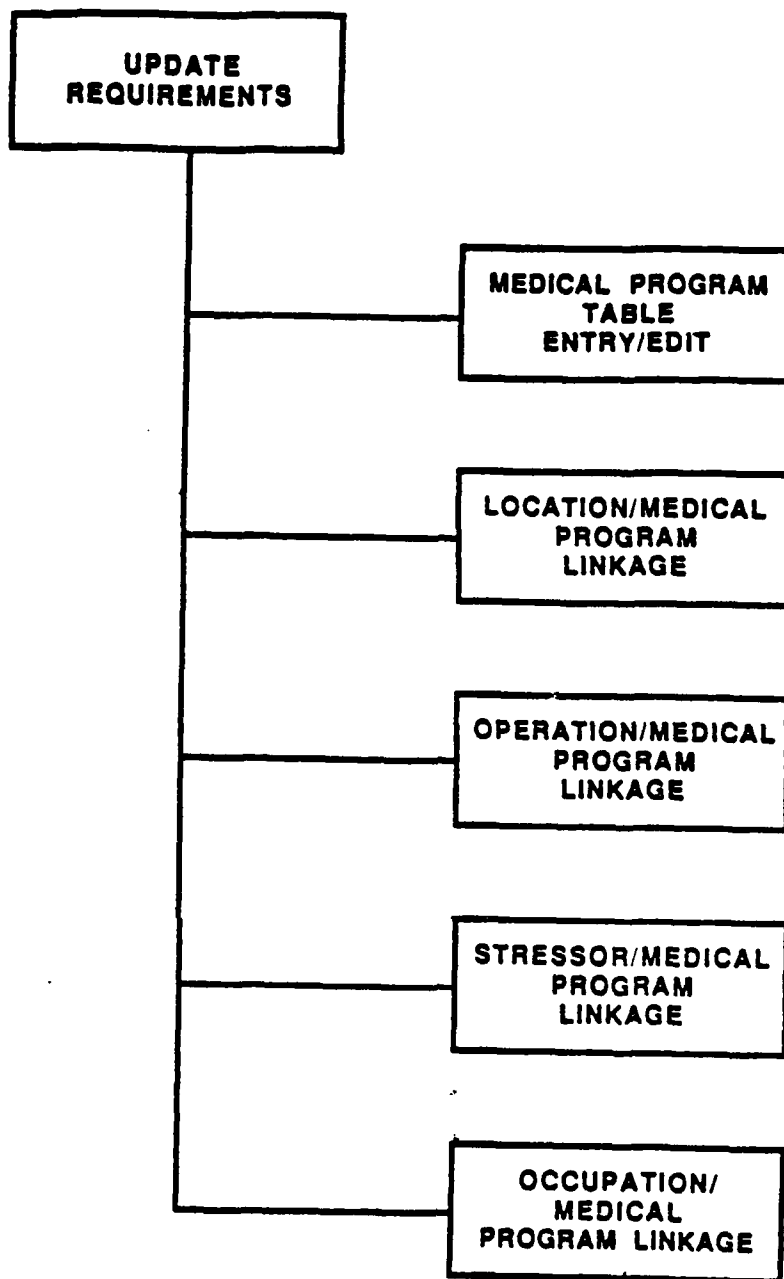


FIGURE 3-1
UPDATE REQUIREMENTS PROCESS

- o Location/Medical Program Linkage--This function defines the program requirements set by the user for employees working in specific locations
- o Operation/Medical Program Linkage--This function allows the user to establish program requirements for employees working in specific operations
- o Stressor/Medical Program Linkage--This function defines the program requirements set by the user for employees exposed to specific stressors
- o Occupation/Medical Program Linkage--Under this function, the user establishes the program requirements for employees working in specific occupations

This process should ensure that employee medical surveillance requirements are consistent with standards while requiring minimal user oversight. The MES module uses controlled vocabularies and data consistency checks to ensure data validity and completeness for minimal effort. Whenever a user changes program reexamination frequencies, inactivates a program, or modifies program/occupation links, the system will automatically review the Employee file for conflict with current enrollments, make changes when possible, and produce a Program/Occupation Changes Discrepancy Audit.

3.3 Maintain Enrollment Status

The Maintain Enrollment Status process (Figure 3-2) is used to enter data on employee medical surveillance programs and future one-time exams. The user can enter and update the enrollment data when using the following functions:

- o Enter/Edit Employee--User entry of a new or changed occupation will result in a system review of the employee's enrollment. The employee will automatically be enrolled for periodic surveillance and placed in the To Be Scheduled file for any newly-required programs. For current "job-related" or "personal" medical program enrollments that are newly-required, the enrollment will be upgraded to "required." The user will be warned about existing "required" enrollments that are not required for the new occupation.
- o Terminate Employee--The system will automatically remove an employee from all program enrollments upon termination.

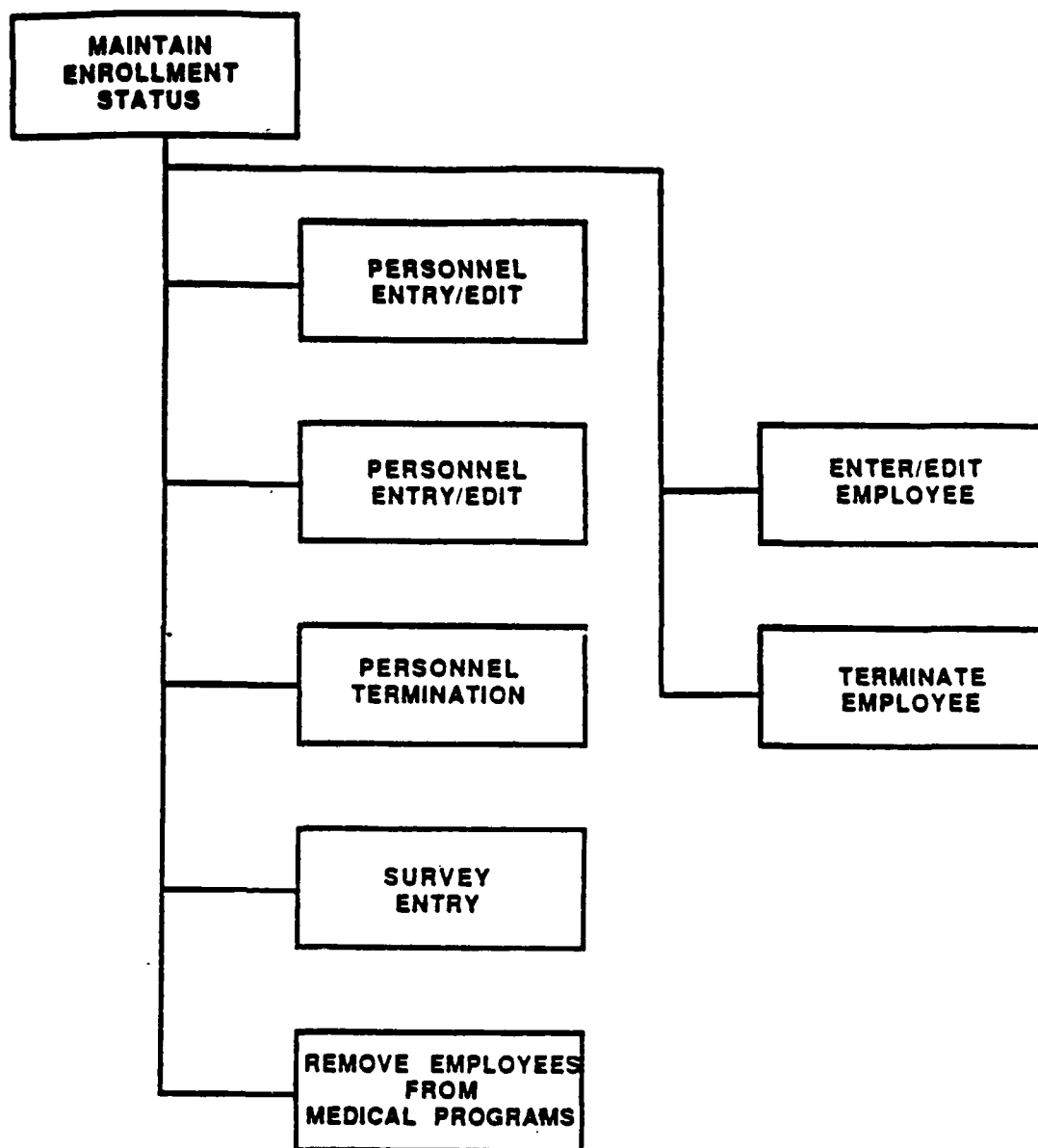


FIGURE 3-2
MAINTAIN ENROLLMENT STATUS PROCESS

- o Survey Entry--When a survey entry indicates that an employee has been exposed over the medical surveillance action level for a stressor with recommended medical monitoring, the system will enroll the employee in related programs for a one-time exam in the employee's birthmonth. (Note: For an over-exposure or an exposure over the medical surveillance action level to a stressor with mandatory medical monitoring, the employee will have related programs filed in the To Be Scheduled file.)
- o Enrollment into Medical Programs--The user can enter or modify program enrollment data as desired based on requests for "job-related" enrollments or need to modify system actions on exposures, audits, and discrepancy reports. The data includes reexamination frequency, date of next exam, reason for enrollment, exam type, and enrollment type. If the date of next exam is in the current month, the program will be filed in the To Be Scheduled file.
- o Remove Employees from Medical Programs--The user can enter or correct program removal data. As with enrollment data updating, the user will mainly use this function in response to requests or to system actions. The data that can be edited includes the reason for removal and, if desired, a removal exam date. If a removal exam date is specified for the current month, the program will be filed in the To Be Scheduled file.

Use of these functions should allow users to ensure consistent medical surveillance with little effort and maximum flexibility. In addition, the automated enrollments based on personnel actions and exposure entry will free users to focus on special cases and will decrease the time lags currently experienced before new hires are examined.

3.4 Schedule Appointments

The Schedule Appointments process (Figure 3-3) is used to enter data needed to schedule employee medical appointments. The following functions are available:

- o Clinic Table Entry/Edit--This function enables the user to define a clinic and to specify the scheduling system to be used by each clinic. If the user selects automatic scheduling, the system will collect data on the start and end of a typical clinic day and the length of time slots to be used. The system will then generate a generic Monday through Friday schedule using the entered parameters.

The user will modify this weekly template by specifying the time slot capacities, i.e., the number of people the clinic can handle for each time slot. Individual time slots can also be reserved for employees from a

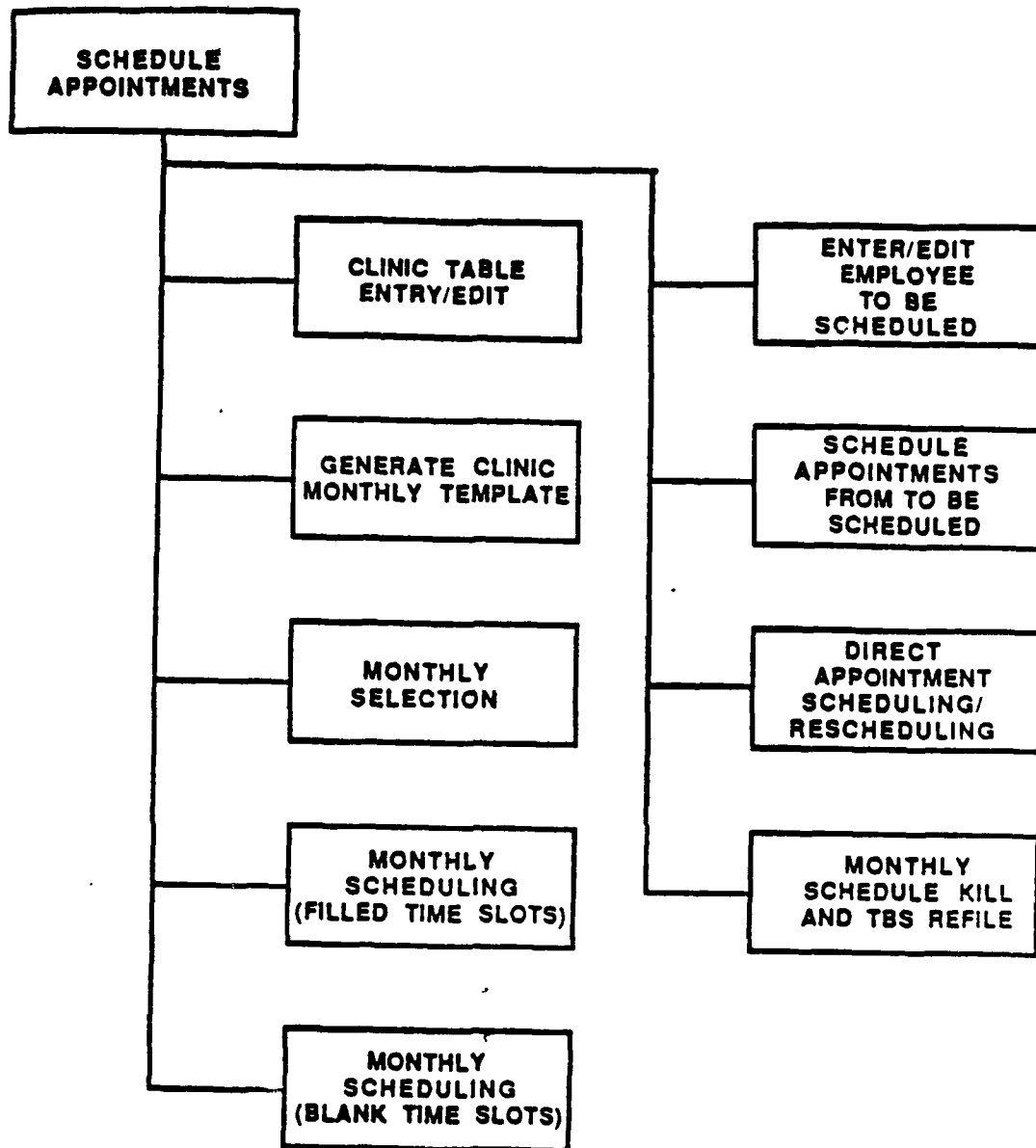


FIGURE 3-3
SCHEDULE APPOINTMENTS PROCESS

specified shift or requiring examination for a specified "preferred" program such as an exam needing the presence of a special practitioner who is only available one morning a week.

- o Generate Clinic Monthly Template--Under this function, the system uses the weekly template created for a clinic using automated scheduling to generate an empty schedule for the month, which can then be modified by designating holidays, administrative days, or administrative time slots or by changing the time slot capacities, shifts, or program preferences. This function can be reused at any time to modify time slot or day parameters for a future date.
- o Monthly Selection--For a clinic with a manual scheduling option, the system reviews all employee records, identifying those with programs having a date of next exam in a user specified month, and filing those programs in the To Be Scheduled file. This function can only be performed once monthly.
- o Monthly Scheduling (Filled Time Slots)--For a clinic with an automated scheduling option, the system will do monthly selection as described above and then will schedule any entries that are in the To Be Scheduled file. In doing the scheduling, the system will first add to an existing appointment for the employee. If there is no existing appointment, the system will search through the scheduling month specified by the user until it finds an available time period long enough to handle the programs needing scheduling and matching the employee's shift and program preferences. If an appointment is scheduled, the To Be Scheduled entry is deleted. While the Monthly Selection can only be done once for a month, the scheduling step can be rerun multiple times.
- o Monthly Scheduling (Blank Time Slots)--This function is similar to Monthly Scheduling (Filled Time Slots), except that the clinic is specifying that, while the system will automatically generate a suggested schedule, shops will be determining the ultimate schedule. Once the user indicates that an acceptable suggested schedule has been created, the system will print the Blank Appointment List and Personnel Requiring Exams reports and move the appointment data back into the To Be Scheduled file.
- o Enter/Edit Employees To Be Scheduled--This function allows the user to enter programs for subsequent scheduling and to modify employee program data already in the To Be Scheduled file.
- o Schedule Appointments from To Be Scheduled--Under this function, the user can select an employee with programs in the To Be Scheduled file and either schedule a new appointment or add the programs to an existing appointment.

- o Direct Scheduling/Rescheduling--This function allows the user to enter or change appointment data on date, time, reason for visit, whether the visit is initial or follow-up, and program data for the visit.
- o Monthly Schedule Kill and TBS Refile--This function enables the user to move all appointments made for a specified month in an automated scheduling system into the To Be Scheduled file. If the schedule had significant problems, this would allow the user to make major changes to the monthly schedule template and then rerun either version of automated scheduling.

Use of this part of the module should reduce clerical scheduling efforts, particularly if the clinic uses automated scheduling. In addition, the monthly selection function will ensure that employees in need of medical surveillance will be identified and scheduled. Since scheduling, and changes in scheduling, will result in system-generated appointment notices, use of the module should reduce the number of missed appointments. Where shops do the scheduling, the number of shop-cancelled appointments and employee-missed appointments should decline.

3.5 Update Appointment History

The Update Appointment History process (Figure 3-4) is used to record data on missed, cancelled, and attended appointments, the results of program examinations, program qualification statuses, the date the next periodic exam is due, and employee time spent in the clinic. The following functions are available:

- o Cancel Individual Medical Appointments--Under this function the user can enter or modify a cancelled appointment or flag a future scheduled appointment as cancelled, with the option to reschedule it now or file the programs in the To Be Scheduled file for later rescheduling. The user must indicate whether the shop or the clinic cancelled the appointment.
- o Block Cancellation of Medical Appointments--The user can specify a date and a starting and ending time for which all appointments starting during one of the included time slots will be cancelled and, if desired, the programs will be filed in the To Be Scheduled file. For a clinic using automated scheduling, the file can also specify that the time slots covered be made unavailable for scheduling.

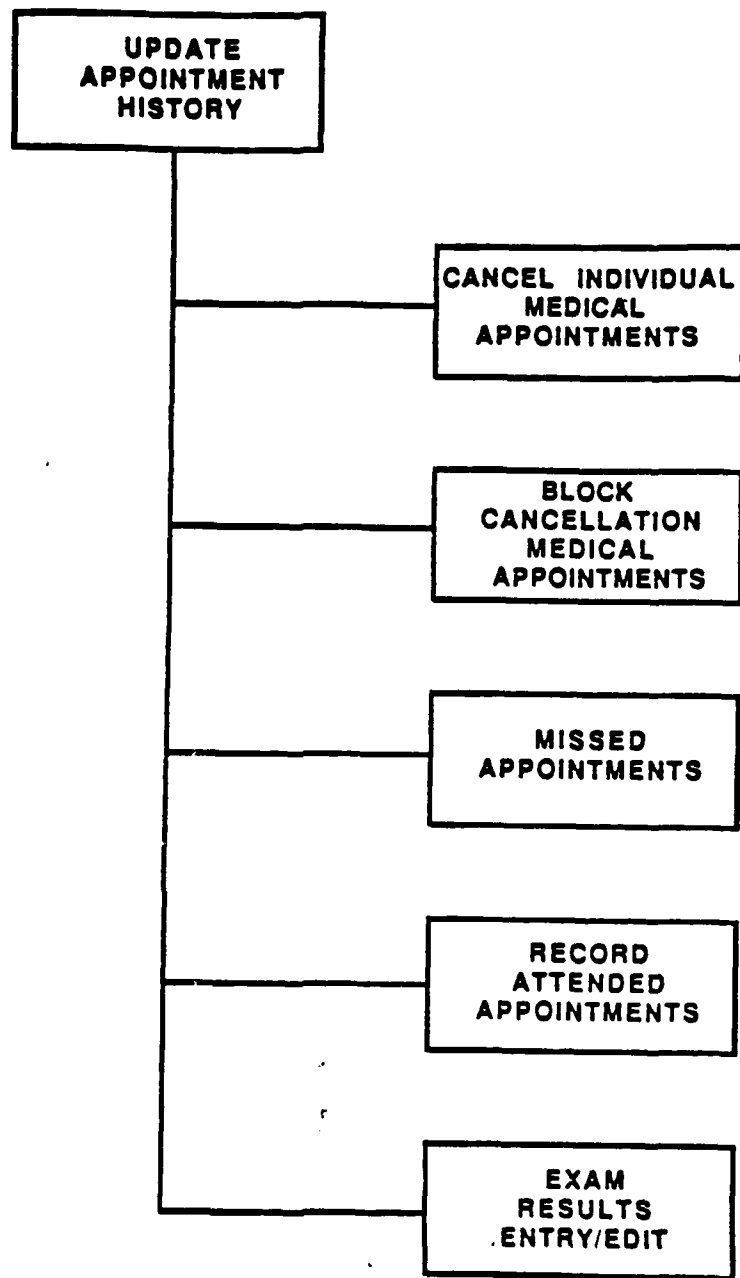


FIGURE 3-4
UPDATE REQUIREMENTS PROCESS

- o Missed Appointments--This function allows the user to enter or modify a missed appointment or to flag a past scheduled appointment as missed, with the option to reschedule it now or file the programs in the To Be Scheduled file for later rescheduling. The user can also use this function to enter a missed appointment justification. For an employee having excessive consecutive missed appointments as defined for the clinic, the system will remove the employee from all programs except asbestos.
- o Record Attended Appointments--Under this function, the user can enter or modify attended appointment data or create an attended appointment record from a past scheduled appointment. The user must indicate whether the appointment was scheduled or unscheduled and the time the employee entered the clinic. The system will file "pending" as the exam result for all programs in the appointment and as the employee's program qualification status on the date of the exam.
- o Exam Results Entry/Edit--This function allows the user to enter or modify the times the employee entered and left the clinic and program exam results. For "incomplete" program results, the user must enter the reason incomplete, and the system will file the program in the To Be Scheduled file for a follow-up exam. For programs with periodic exam results of "qualified," or "not qualified" the system will increment the enrollment date next exam by the reexamination frequency, and the user will be allowed to modify this date. When there is no current enrollment, or only a one-time enrollment and the exam is periodic, the user will be allowed to enroll the employee in the program. The user will also be allowed to remove an existing one-time enrollment or modify the date next exam from this function.

These functions should increase the accuracy and availability of employee qualification data. The number of missed and cancelled appointments should be reduced by increased management ability to hold shops and clinics accountable and by the forced removal of certification for employees who habitually miss appointments. Exam results should be available sooner and be more accessible to management and clinic staff.

3.6 Audit Files

The Audit Files process (Figure 3-5) will provide a system check on data integrity for schedules and for qualification data. The following two functions should be run daily:

- o Schedule Audit--This function will review the schedule for past due appointments that have not been recorded as cancelled, missed, or attended. Appointments that are older than the clinic-specified grace period will be treated as missed appointments.
- o Qualification Audit--This function reviews employee periodic program enrollments for expiration dates that are past the clinic allowed grace period. For such enrollments, the system will file a "not qualified" in the employee's program qualification status. Also, if the system locates an asbestos program enrollment for which the employee is older than 45, it will change the program reexamination frequency from sixty months to twelve months and will adjust the date of the next exam appropriately.

The Audit functions will improve the accuracy of qualification data and missed appointment data with no clerical effort. In addition, the automatic maintenance of asbestos program enrollments frequency will ensure adequate surveillance under this program.

3.7 Maintain Reference Files

Many of the data input questions (referred to as "prompts") require the data entry person to select a term from a controlled vocabulary of terms, e.g., selecting an occupation from a list of occupations. These controlled vocabularies are stored in reference files. The local System Manager will use the Maintain Reference Files processes (Figure 3-6) to create or update the reference files described in Table 3-1. The Preexam Instructions file, Medical Program Tests file, and Appointment Notices file will be modified by the local System Manager working in conjunction with the clinics using the systems.

In addition to these Reference files, the module uses six Administration module files as reference files. The Agency Unit file is used to look up agencies and subordinate units for reporting. The Employee file is used to identify personnel during data entry and reporting. The Location, Operation, Occupation, and Stressor file entries are linked by this module to Medical Program file entries to establish medical surveillance requirements.

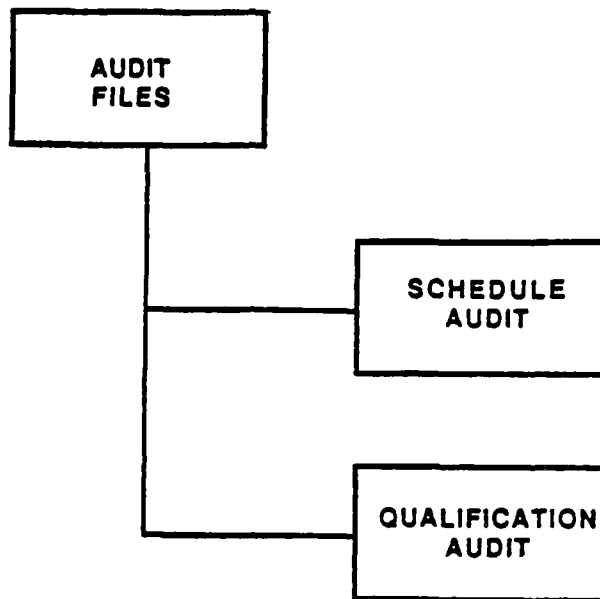


FIGURE 3-5
AUDIT FILES PROCESS

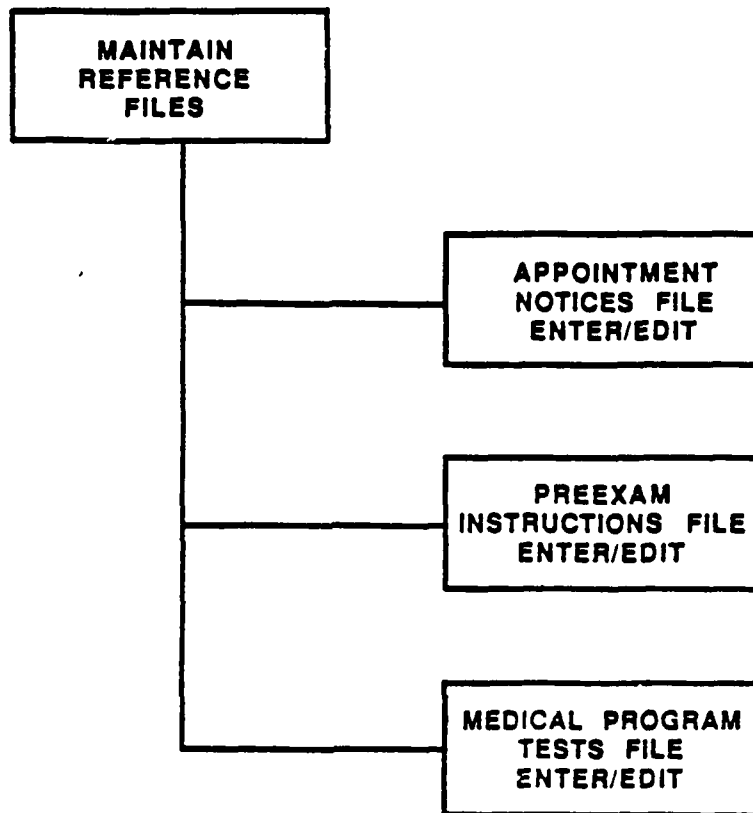


FIGURE 3-6
MAINTAIN REFERENCE FILES PROCESS

TABLE 3-1
MEDICAL EXAM SCHEDULING REFERENCE FILES

FILE NAME	FILE CONTENTS
Appointment Notices File	The appointment notice format specifying the test and the data items to be inserted from the Employee, Medical Appointment, and Preexam Instruction files.
Preexam Instructions File	Categories of instructions to appear on the employees' appointment notices.
Medical Program Tests File	The full exam protocol stored in hierarchical structure. Each item has a name, number, and an ascendant entry under which it is always listed.

4.0 MEDICAL EXAM SCHEDULING MODULE OUTPUT PROCESSES

4.1 Summary of Output Processes

The MES module contains many menu options that enable the user to obtain needed information from the module. These options can be grouped into processes, where each provides a specific type of information. The MES module has the following four output processes:

- o Produce Management Reports
- o Produce Clinic Reports
- o Produce Discrepancy Reports
- o Produce Program Linkage Displays

The Produce Management Reports process generates reports for use by agency, clinic, and OSH management in evaluating employee qualifications, program requirements, examination costs, and the effectiveness of agency and clinic attendance policies and procedures. The Produce Clinic Reports process provides the clinics, shops, and employees with information needed to schedule, modify, and conduct appointments. The reports available through the Produce Discrepancy Reports process alert users to possible problems in the medical enrollment data, which can then be corrected as deemed necessary. The Produce Program Linkage Displays process provides data needed to evaluate employee enrollment needs.

4.2 Produce Management Reports

The following reports are generated by the Produce Management Reports process (Figure 4-1).

- o Qualification Status Report--This report is sorted by shop and employees for a selected agency. It lists the employee's current qualification statuses for the medical programs in which the employee is enrolled and the training courses for which the employee should be qualified. The user can run this report for medical programs only, training courses only, or both.
- o Removal Report--This report is sorted and selected by agency, shop, and employee. It shows any of the medical programs from which an employee has been removed during a user-specified date range, including the date removed, reason removed, and enrollment type (required, job-related, or personal).

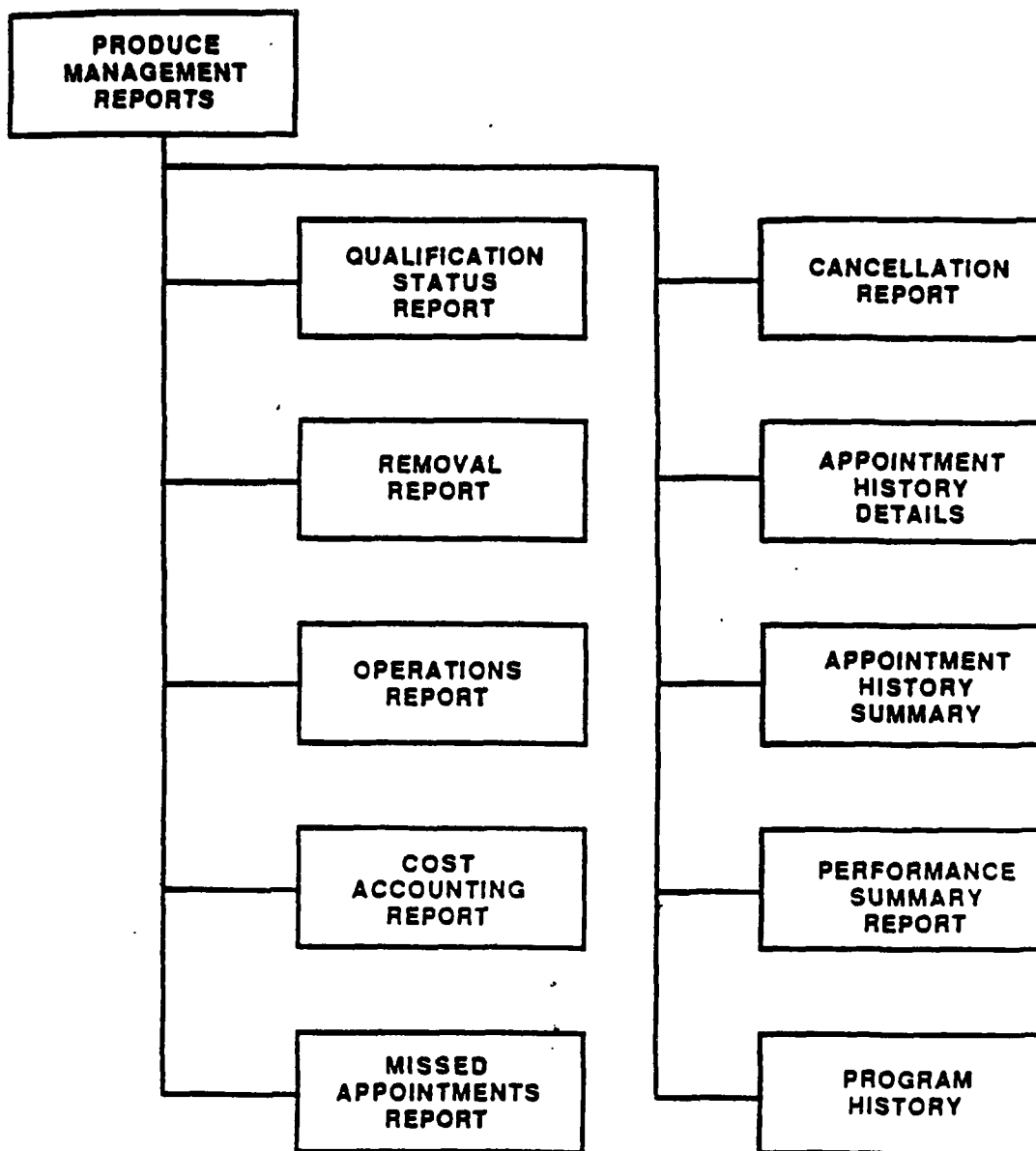


FIGURE 4-1
PRODUCE MANAGEMENT REPORTS PROCESS

- o **Operations Report**--This report is selected and sorted by operation and includes a list of the medical programs in which employees should be enrolled if they are performing an operation. A copy of the report is produced for each shop in the user-specified agency.
- o **Cost Accounting Report**--This report provides cost estimates of employee time spent getting clinic exams for a user-specified agency or shop during a selected date range. Total exam times and estimated shipyard travel time between the shop and clinic are multiplied by the employee's wage and summarized by shop. The report also lists identifying information on medical appointments or which the time in, time out, or employee wage rate are missing.
- o **Missed Appointments Report**--This report lists employees in a selected agency or shop who have missed appointments within a given date range. It also provides any available justification for missing the appointment. A summary of the number of scheduled and missed appointments for the shop and the number that were and were not justified is also provided.
- o **Cancellation Report**--This report lists employees in a selected agency or shop who have had an appointment cancelled in the user-specified date range. The report also provides shop totals with a breakdown for shop cancellations and clinic cancellations.
- o **Appointment History Details**--This report lists details on scheduled appointments during a specified date range, including employee data, the medical programs covered, and any exam results. The report is selected and sorted by employee, shop, or occupation, with additional selection on program and on disposition (missed, cancelled, or attended).
- o **Appointment History Summary**--This report provides counts of the attended, missed, and cancelled appointments in a specified date range for each shop in a selected agency with summary totals for the agency. In addition, the missed appointments are subtotalled by justified and unjustified missed appointments, and the cancelled appointments are subtotalled by clinic-cancelled and shop-cancelled appointments.
- o **Performance Summary Report**--This report summarizes, for a selected clinic and agency (sorted by selected medical programs), the number of attended, missed, and cancelled appointments within a user-specified date range. It also summarizes the number of

incomplete exams and the reason each exam was incomplete. The report can be limited to scheduled or unscheduled appointments if desired.

- o Program History--This report details the most recent enrollment and removal data for any medical programs in which the specified employee has ever been enrolled.

Examples of these reports are included in Appendix A.

The Qualification Status Report will enable shop supervisors to identify employees' current medical program and training course qualifications and requalification needs. The Removal Report will allow shop supervisors to identify instances when employees need to be re-enrolled in necessary medical programs and to correct trends in removals caused by management or employee actions. The Operations Report will help shop supervisors plan ahead and ensure that they have properly qualified employees for operations that are new or have new requirements. Management will use the Cost Accounting Report to identify trends and problems of lengthy, costly absences for medical surveillance in a specific shop or within an agency. Management will use the Missed Appointments Report and the Cancellation Report to reduce the number of appointments not attended by tracking the reasons for cancelled and missed appointments. The Appointment History Details Report on employee, shop, or occupation can be used by managers and clinics to review attendance performance or to determine whether changes are needed in program requirements. The Appointment History Summary Report and the Performance Summary Report will help the clinics identify trends in appointments attended, missed, and cancelled, which can be further traced using the Appointment History, Missed Appointments, and Cancellation reports.

4.3 Produce Clinic Reports

The Produce Clinic Reports process generates the following outputs (Figure 4-2):

- o Personnel Requiring Exams--This report lists employees for a given clinic who need to be scheduled for medical evaluation in one or more medical programs; the information is selected by agency and employee and sorted by shop.
- o Available Capacity Grid--This display shows the availability of appointment time slots for a user selected clinic, date range, and time range.

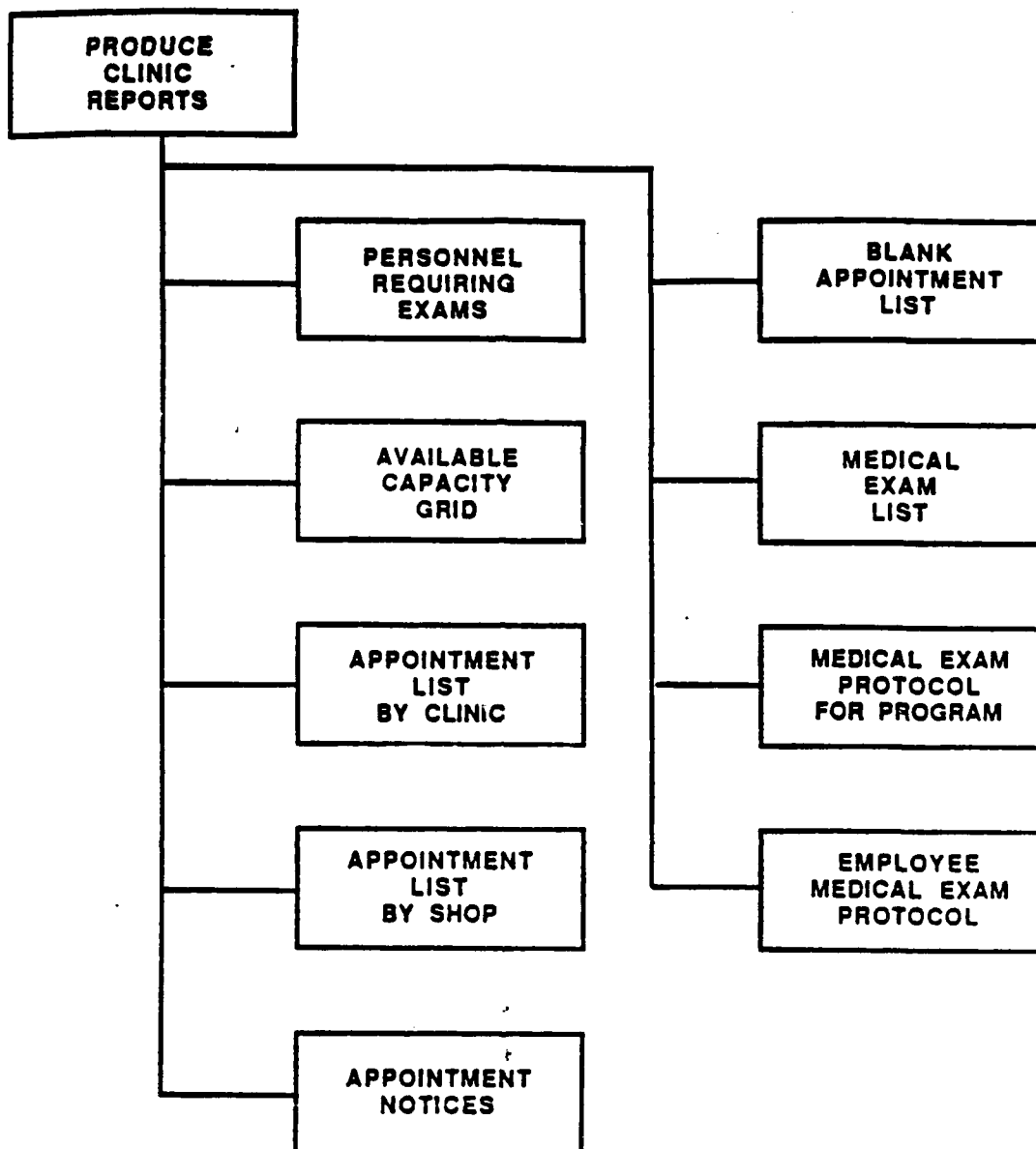


FIGURE 4-2
PRODUCE CLINIC REPORTS PROCESS

- o Appointment List by Clinic--This report shows employee and medical program data on appointments for a selected clinic and date/time range, sorted by date and time.
- o Appointment List by Shop--This report is essentially the same as the Clinic Appointment List except that the appointments listed are selected and sorted by agency and shop.
- o Appointment Notices--Each notice identifies the employee, shop, and appointment date and time and provides instructions on eating, smoking, and other behavior that the employee must limit prior to the appointment. The user may select the notices by agency, shop, and employee.
- o Blank Appointment List--This report lists available appointments allocated to each shop by the selected clinic. The report has room for the shops to fill in employee data.
- o Medical Exam List--This report describes the protocol of all medical exams performed by the clinic. It includes medical history, physical exam, and laboratory test items and lists any gender restrictions.
- o Medical Exam Protocol for Program--This list contains the history, physical exam, and lab test protocol that is standard for a selected medical program, including any age and gender restrictions that apply and the exam types (baseline, periodic, or removal) which use each item.
- o Employee Medical Exam Protocol--This report is selected by clinic, date, and time or by specific appointment. For each appointment it provides employee demographic data, exposures within the past year, and an unduplicated exam protocol appropriate for the appointment programs, program exam types, and employee's age and gender.

Examples of these reports are included in Appendix B.

The Available Capacity Grid will aid clinic personnel in determining when to schedule appointments and in modifying the automated scheduling parameters. The Appointment List by Clinic will enable clinic personnel to identify attended and missed appointments.

The Appointment List by Shop and Appointment Notices will help reduce the number of missed and incomplete appointments by alerting the shops and employees of appointments and informing employees of fasting or other

requirements that must be met to ensure valid testing. The Blank Appointment List and Personnel Requiring Exams report will enable the shops to schedule appointments, while allowing the system to allocate the available appointments as appropriate for the clinic and ensuring that all shop personnel are not sent to the clinic at the same time. The Personnel Requiring Exams report will also assist the clinics that do automated or manual scheduling by providing data on employees that have not yet been scheduled. The Medical Exam Protocol, Medical Exam List for Program, and Employee Medical Exam Protocol will allow the clinics to specify standard protocols and will ensure that physicians are aware of the exams appropriate to a specific employee's visit in an organized, unduplicated format.

4.4 Product Discrepancy Reports

The Produce Discrepancy Reports process (Figure 4-3) generates the following:

- o Report of Date Next/Birth Month Discrepancies--This report lists employees enrolled in medical programs with a projected Next Exam Date that is not in phase with the employee's birthdate and reexamination frequency. The report is selected by agency and sorted by employee.
- o Discrepancy Audit of Personnel File--This report shows changes needed in employee's enrollment to coincide with the programs required by the employee's occupation. The system also checks for invalid reexamination frequencies. The report is selected by agency and sorted by employee.
- o Discrepancy Audit for Program/Occupation Changes--This report provides data by employee on enrollment changes made as a result of modifications in Occupation/Program requirements or in program frequencies or status. It also lists discrepancies that could not be resolved by the system.

Examples of these reports are included in Appendix C.

The Report of Date Next/Birth Month Discrepancy will enable users to reduce employee visits to clinics by alerting them to enrollment data that conflicts with the practice of coordinating exams by birthmonth. The Discrepancy Audit of Personnel File will provide management oversight of employee enrollment to ensure that employees are enrolled in required medical surveillance programs. The Program/Occupation Changes Discrepancy Audit is automatically produced by the system to document the effects of changes to major files on employee medical surveillance and to provide management with information needed to rectify any resultant or unresolved problems.

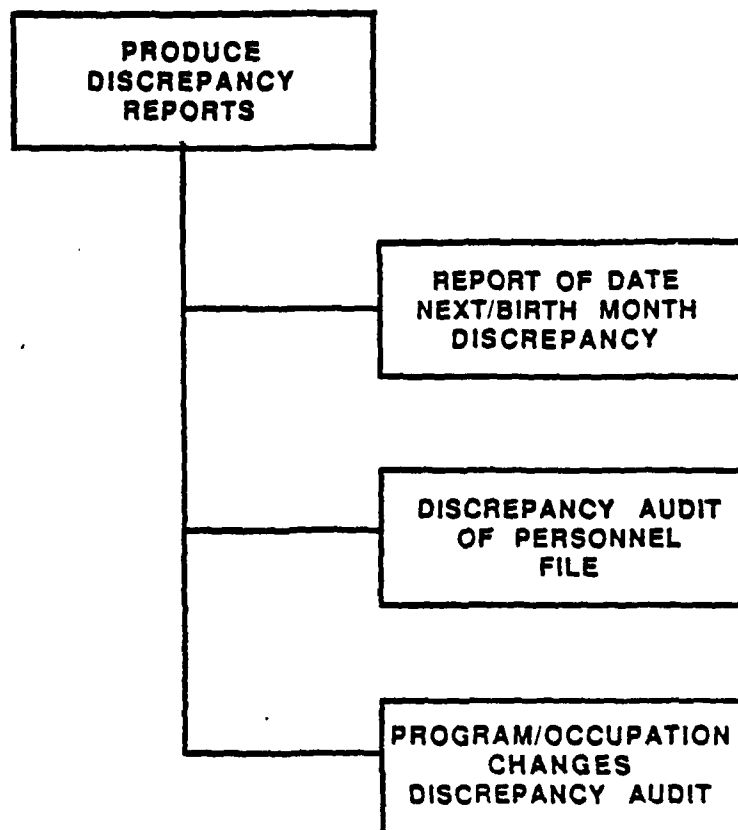


FIGURE 4-3
PRODUCE DISCREPANCY REPORTS PROCESS

4.5 Produce Program Linkage Displays

The following displays and reports are produced by this process (Figure 4-4):

- o Location/Medical Program Display--This display shows medical programs that are associated with specific locations in the facility. The display may be sorted by location or by program. The user may specify either a single location or program, or all locations or programs.
- o Operation/Medical Program Display--This display lists medical programs that are associated with specific operations in the facility. The display may be sorted by operation or by program. The user may specify either a single operation or program, or all operations or programs.
- o Occupation/Medical Program Display--This display shows medical programs that are associated with specific occupations in the facility. The display may be sorted by occupation or by program. The user may specify either a single occupation or program, or all occupations or programs.
- o Stressor/Medical Program Display--If selected by stressor, this display details data on a specific stressor and the medical programs and training courses that are associated with the stressor. The user can specify a single stressor, all stressors, or a class of stressors. The user can specify a single program or all programs. In the latter case, the display shows all stressors associated with a specific program, sorted by program.

Examples of these reports appear in Appendix D.

The Program Linkage displays provide management with data that can be used to ensure that employees new to a location, operation, occupation, or stressor receive needed baseline exams and are enrolled in appropriate medical surveillance programs. When the employee shows up as a walk-in prior to an occupation change or after an exposure, clinics can use the Occupation/Medical Program and Stressor/Medical Program displays to determine the programs for which an employee should be examined. Supervisors can use the Operation/Medical Program and Location/Medical Program displays to identify medical surveillance needed by employees moved to a new location or beginning to perform an operation.

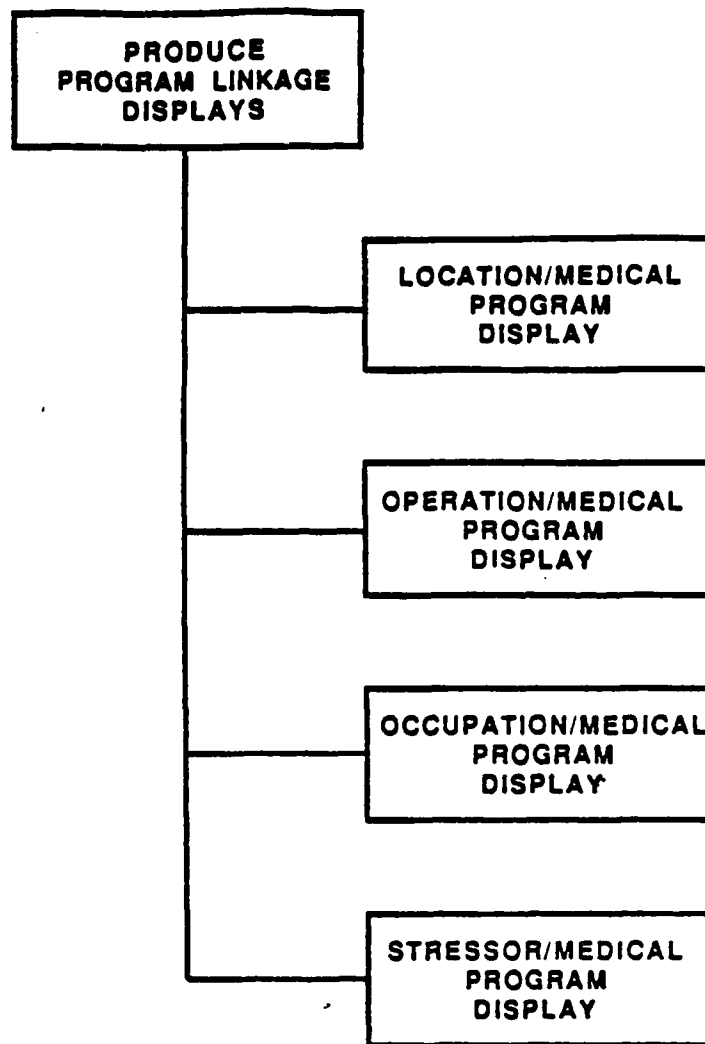


FIGURE 4-4
PRODUCE PROGRAM LINKAGE DISPLAYS PROCESS

APPENDIX A

EXAMPLES OF OUTPUTS FROM
PRODUCE MANAGEMENT REPORTS PROCESS

NAME

SSN

SHIFT

BIRTHDAY

SHOP

AGENCY

BADGE

SHIFT

BIRTHDAY

SHOP

SHOP: 106.2

NADISON, JAMES

784453333 7667

EVENING

MAR 4, 1909

WG3722 COLD WORKER

MINS
CODE 02 R MEDICAL PROGRAM NAME
09 R HEARING
40 R RESPIRATORY PROTECTION
16 R TRAINING COURSE
MOSL-04-112 PROPER PACKAGING

MANCHESTER, MELLISA

000000009 1801

DAY

MAY 2, 1948

GS0018 SAFETY & OCCUPATIONAL HEALTH M

MINS
CODE 08 R MEDICAL PROGRAM NAME
09 R CHROMIUM
09 R HEARING

MANX, GREGORY

575557777 222222

EVENING

JUN 30, 1948

GS0690 INDUSTRIAL HYGIENE

MINS
CODE 02 R MEDICAL PROGRAM NAME
09 R ASBESTOS
40 R HEARING
40 R RESPIRATORY PROTECTION
16 R SIGHT CONSERVATION
25 R SOLVENTS

MOUSE, MICKEY

599105555 765076

DAY

JUL 1, 1951

GS0690 INDUSTRIAL HYGIENE

MINS
CODE 02 R MEDICAL PROGRAM NAME
09 R ASBESTOS
40 R HEARING
40 R RESPIRATORY PROTECTION
16 R SIGHT CONSERVATION
25 R SOLVENTS

NIXON, RICHARD

799667777 030393

EVENING

JUL 7, 1934

GS0018 SAFETY & OCCUPATIONAL HEALTH M

MINS
CODE 08 R MEDICAL PROGRAM NAME
09 R CHROMIUM
09 R HEARING

FALBY, PATTI

580888888 777777

EVENING

SEP 1, 1946

GS0690 INDUSTRIAL HYGIENE

MINS
CODE 02 R MEDICAL PROGRAM NAME
09 R ASBESTOS
40 R HEARING
40 R RESPIRATORY PROTECTION
16 R SIGHT CONSERVATION
25 R SOLVENTS

SHAWER, ROBERT

572221117 416323

DAY

AUG 8, 1958

GS0690 INDUSTRIAL HYGIENE

MINS
CODE 02 R MEDICAL PROGRAM NAME
09 R ASBESTOS
40 R HEARING
40 R RESPIRATORY PROTECTION
16 R SIGHT CONSERVATION

REMOVAL
THIS REPORT

AGENCY: MIMS SHOP: 911
CONTAINS INFORMATION PROTECTED BY THE PRIVACY ACT OF 1974

DATE: SEP 17, 1986

EMPLOYEE NAME SSN BADGE SHIFT BIRTHDATE OCCUP. JOB TITLE

FIISK, BONNIE 588904848 969484 DAY DEC 24, 1954 W63502 LABORING

CODE	PROGRAM	REMOVED	REASON REMOVED	TYPE
04	LEAD	JUL 31, 1986	SET UP FOR SCHEDULING	PERSONAL
04	LEAD	JUL 30, 1986	SET UP FOR SCHEDULING	PERSONAL
38	VISION (NEAR VISION)	JUL 31, 1986	SET UP FOR SCHEDULING	PERSONAL
38	VISION (NEAR VISION)	JUL 30, 1986	SET UP FOR SCHEDULING	PERSONAL
33	BENZENE	JUL 31, 1986	SET UP FOR SCHEDULING	PERSONAL
33	BENZENE	JUL 30, 1986	SET UP FOR SCHEDULING	PERSONAL

FORD, GERALD 77711777 8934934 DAY AUG 30, 1961 091311 PHYSICAL SCIENCE TECHNICIAN

CODE	PROGRAM	REMOVED	REASON REMOVED	TYPE
08	CHROMIUM	JUL 31, 1986	EXCEEDED ALLOWED NUMBER OF MISSED APPOINTMENTS	PERSONAL
08	CHROMIUM	JUL 29, 1986	SET UP FOR SCHEDULING	JOB RELATED
09	HEARING	JUL 29, 1986	I FELT LIKE IT	REQUIRED
10	HYDROCARBONS	JUL 31, 1986	EXCEEDED ALLOWED NUMBER OF MISSED APPOINTMENTS	PERSONAL
04	LEAD	JUL 31, 1986	SET UP FOR SCHEDULING	PERSONAL
04	LEAD	JUL 30, 1986	SET UP FOR SCHEDULING	PERSONAL
40	RESPIRATORY PROTECTION	JUL 31, 1986	EXCEEDED ALLOWED NUMBER OF MISSED APPOINTMENTS	REQUIRED
25	SOLVENTS	JUL 31, 1986	EXCEEDED ALLOWED NUMBER OF MISSED APPOINTMENTS	PERSONAL
37	VISION (COLOR)	JUL 31, 1986	EXCEEDED ALLOWED NUMBER OF MISSED APPOINTMENTS	REQUIRED
38	VISION (NEAR VISION)	JUL 31, 1986	EXCEEDED ALLOWED NUMBER OF MISSED APPOINTMENTS	REQUIRED
47	WELDERS EXAM	JUL 31, 1986	EXCEEDED ALLOWED NUMBER OF MISSED APPOINTMENTS	REQUIRED
33	BENZENE	JUL 31, 1986	SET UP FOR SCHEDULING	PERSONAL
33	BENZENE	JUL 30, 1986	SET UP FOR SCHEDULING	PERSONAL

SMIDELY, WALTER 000000042 38204 DAY JUN 5, 1944 W63820 SHIPFITTING

CODE	PROGRAM	REMOVED	REASON REMOVED	TYPE
04	LEAD	JUL 31, 1986	SET UP FOR SCHEDULING	PERSONAL
04	LEAD	JUL 30, 1986	SET UP FOR SCHEDULING	PERSONAL

SH001	SHAPING OPS, BENDING, BENDING	04	LEAD
SHF001	SHAPING OPS, FILING, FILING	25	SOLVENTS
SHF101	SHAPING OPS, FORGING, FORGING	25	SOLVENTS
SOL0001	SOLID OPS, BALLAST, CANNING	25	SOLVENTS
SOL0002	SOLID OPS, BALLAST, CONVEYOR	08	CHROMIUM
Z0001	MISCELLANEOUS, BAGGING, BAGGING	02	ASBESTOS

COST ACCOUNTING REPORT AGENCY: NIMS FROM: JAN 1:1700 TO: JAN 1:2200 DATE: SEP 17, 1986
 THIS REPORT CONTAINS INFORMATION PROTECTED BY THE PRIVACY ACT OF 1974
 EMPLOYEE SSM BADGE SHIFT BIRTHDATE OCCUP JOB TITLE TIME IN TIME OUT WAGE RATE VISIT REASON

ERROR REPORT

SNOP	APPTS.	TIME	JOB ORDER	COST
104	1	0:45		17.38
923	1	2:00		25.22
911	2	3:30		48.57
TOTAL	4	4:15		91.18

MISSED MEDICAL REPORT AGENCY: FISHH FROM DATE: JAN 1, 1900 TO DATE: JAN 1, 2000 JUL 24, 1986
 THIS REPORT CONTAINS INFORMATION FROTECTED BY THE PRIVACY ACT OF 1974
 SHOP: 190

EMPLOYEE, SSM BADGE SHIFT BIRTHDATE OCCUP. JOB TITLE
 FOLLINGSTAD, MARIANNE 346346346 66666 1 APR 2, 1949 WG3506 LABORER
 APPOINTMENT: MAY 7, 1986
 02 ASBESTOS (PERSONAL)
 JUSTIFICATION: THIS IS A TEST OF THE MISSED APPOINTMENT JUSTIFICATION TO SEE IF THE ROUTINE WILL PRINT OUT SEVERAL
 LINES OF TEXT THE TEXT HAS TO BE LONG ENOUGH TO FILL UP ON 132 CHARACTER LINE WIDTH OR ELSE THE TEST WONT
 WORK

FOLLINGSTAD, MARIANNE 346346346 66666 1 APR 2, 1949 WG3506 LABORER
 APPOINTMENT: APR 30, 1986
 FOLLINGSTAD, MARIANNE 346346346 66666 1 APR 2, 1949 WG3506 LABORER
 APPOINTMENT: MAY 1, 1986
 FOLLINGSTAD, MARIANNE 346346346 66666 1 APR 2, 1949 WG3506 LABORER
 APPOINTMENT: MAY 1, 1986
 89 40 HOUR HEARING EXAM (PERSONAL)

FOLLOW, I WANNA 213339999 OCCUPATIONAL EXPOSURE 1 MAY 5, 1945 WG3506
 APPOINTMENT: MAY 1, 1986
 02 ASBESTOS
 25 SOLVENTS

FOLLOW, I WANNA 213339999 OCCUPATIONAL EXPOSURE 1 MAY 5, 1945 WG3506
 APPOINTMENT: MAY 7, 1986
 02 ASBESTOS (PERSONAL)

SCHED.	MISSED		JUSTIFIED		UNJUSTIFIED	
	TOTAL	PCT	NO.	PCT	NO.	PCT
15	6	40.0	1	15.6	5	83.3

CANCELLATION REPORT AGENCY: FTSMH LABOR DATE: JAN 1, 1900 TO DATE: JAN 1, 2000 JUL 19, 1986
 THIS REPORT CONTAINS INFORMATION PROTECTED BY THE PRIVACY ACT OF 1974
 SHOP: 190

EMPLOYEE	SSN	WAGE	SHIFT	BIRTHDATE	OCCUP.	JOB TITLE
FOLLINGSTAD, MARIANNE	346346346	44666	1	APR 2, 1949	WG3506	LABORER
APPOINTMENT: MAY 14, 1986 SPECIAL REQUEST FOLLOWUP CANCELLED ON MAY 14, 1986 SHOP CANCELLED						
PROGRAM: 02 ASBESTOS (PERSONAL)						
FOLLINGSTAD, MARIANNE	346346346	44666	1	APR 2, 1949	WG3506	LABORER
APPOINTMENT: MAY 14, 1986 SPECIAL REQUEST FOLLOWUP CANCELLED ON MAY 14, 1986 CLINIC CANCELLED						
PROGRAM: 02 ASBESTOS (PERSONAL)						

SCHED.	TOTAL	PCT	SHOP		CLINIC	
			NO.	PCT	NO.	PCT
14	2	14.2	1	50.0	1	50.0

APPOINTMENT HISTORY REPORT FOR SELECTED EMPLOYEE
 THIS REPORT CONTAINS INFORMATION PROTECTED BY THE PRIVACY ACT OF 1974
 DATE: JUL 19, 1986

SSN: 346346346 66666 DAY: APR 2, 1949 WGS506 LABORER
 AGENCY: PTSMH SHOP: 190
 EXAM DATE: 1 MAY 84 SCHED/UNSCHED: SCHEDULED
 VISIT REASON: OCCUPATIONAL EXPOSURE INITIAL/FOLLOWUP: INITIAL
 CANCEL DATE: CANCEL REASON:
 MISSED APPT. JUSTIFICATION:

FULLINGSTAD, MARIANNE
 346346346 66666 DAY: APR 2, 1949 WGS506 LABORER
 AGENCY: PTSMH SHOP: 190
 EXAM DATE: 1 MAY 84 SCHED/UNSCHED: SCHEDULED
 VISIT REASON: OCCUPATIONAL EXPOSURE INITIAL/FOLLOWUP: INITIAL
 CANCEL DATE: CANCEL REASON:
 MISSED APPT. JUSTIFICATION:

PROGRAM: NAME ENROLL TYPE EXAM STATUS REEXAM FREQ REASON INCOMPLETE

02 ASBESTOS PERSONAL QUALIFIED 60
 05 SOLVENTS JOB RELATED NOT QUALIFIED 12
 09 HEARING PERSONAL QUALIFIED 0
 08 CHRONIUM JOB RELATED QUALIFIED 12

FULLINGSTAD, MARIANNE
 346346346 66666 DAY: APR 2, 1949 WGS506 LABORER
 AGENCY: PTSMH SHOP: 190
 EXAM DATE: 1 MAY 84 SCHED/UNSCHED: SCHEDULED
 VISIT REASON: OCCUPATIONAL EXPOSURE INITIAL/FOLLOWUP: INITIAL
 CANCEL DATE: CANCEL REASON:
 MISSED APPT. JUSTIFICATION:

PROGRAM: NAME ENROLL TYPE EXAM STATUS REEXAM FREQ REASON INCOMPLETE

89 40 HOUR HEARING EXAM PERSONAL 0

FULLINGSTAD, MARIANNE
 346346346 66666 DAY: APR 2, 1949 WGS506 LABORER
 AGENCY: PTSMH SHOP: 190
 EXAM DATE: 7 MAY 84 SCHED/UNSCHED: SCHEDULED
 VISIT REASON: OCCUPATIONAL EXPOSURE INITIAL/FOLLOWUP: INITIAL
 CANCEL DATE: CANCEL REASON:
 MISSED APPT. JUSTIFICATION: THIS IS A TEST OF THE MISSED APPOINTMENT JUSTIFICATION TO SEE IF THE ROUTINE WILL PRINT OUT SEVERAL LINES OF TEXT THE TEXT HAS TO BE LONG ENOUGH TO 6 WRAF ON 132 CHARACTER LINE WIDTH OR ELSE THE TEST WONT WORK

PROGRAM: NAME ENROLL TYPE EXAM STATUS REEXAM FREQ REASON INCOMPLETE

02 ASBESTOS PERSONAL PENDING 60

FULLINGSTAD, MARIANNE
 346346346 66666 DAY: APR 2, 1949 WGS506 LABORER
 AGENCY: PTSMH SHOP: 190
 EXAM DATE: 9 MAY 84 SCHED/UNSCHED: SCHEDULED
 VISIT REASON: OCCUPATIONAL EXPOSURE INITIAL/FOLLOWUP: INITIAL
 CANCEL DATE: CANCEL REASON:
 MISSED APPT. JUSTIFICATION:

PROGRAM: NAME ENROLL TYPE EXAM STATUS REEXAM FREQ REASON INCOMPLETE

02 ASBESTOS PERSONAL PENDING 0
 04 HEARING PERSONAL PENDING
 08 CHRONIUM PERSONAL PENDING

AFFIRMATION HISTORY SUMMARY REPORT FROM: JAN 1, 1900 TO: JAN 1, 2200 AGENCY: FISH DATE: JUL 21, 1984

SCHEU	ATTENDED		MISSED		CANCELED		JUSTIFIED		UNJUSTIFIED		CLINIC		CANCELED		SHOP		
	NO.	PCT	NO.	PCT	NO.	PCT	NO.	PCT	NO.	PCT	NO.	PCT	NO.	PCT			
SHOP: 011																	
3	2	66.6	1	33.3	0	0.0	0	0.0	1	100.0	0	0.0	0	0.0	0	0.0	
SHOP: 030																	
1	0	0.0	0	0.0	1	100.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	
SHOP: 051																	
1	0	0.0	1	100.0	0	0.0	1	100.0	0	0.0	0	0.0	0	0.0	0	0.0	
SHOP: 190																	
11	6	42.8	6	42.8	2	14.2	1	16.6	5	83.3	1	50.0	1	50.0	1	50.0	
TOTALS:	16	8	42.1	8	42.1	3	15.7	2	25.0	6	75.0	1	50.0	1	50.0	1	50.0

202

APPOINTMENT HISTORY PERFORMANCE SUMMARY REPORT FROM: JAN 1,1900 TO: JAN 1,2200 AGENCY: PTSMH DATE: JUN 19,1986

PROGRAM	APPTS.	MISSED	ATTEND	CLINIC	SHOP	NO	INCON.	MACH.	OPER.	EMPLOY	SHOP	RESULT
				CANCEL	CANCEL	RESULT	RESULT	MALFUN	ABSENT	LEFT	RECALL	PEND
ASBESTOS	5	1	2	1	1	0	0	0	0	0	0	2
CHROMIUM	2	0	2	0	0	0	0	0	0	0	0	1
HEARING	1	0	1	0	0	0	0	0	0	0	0	0
LEAD	1	0	1	0	0	0	0	0	0	0	0	1
SOLVENTS	1	0	1	0	0	0	0	0	0	0	0	0
TOTAL:	10	1	7	1	1	0	0	0	0	0	0	4

PROGRAM NAME: FOLLINGSTAD, MARIANNE 190
 AGENCY: PISHM
 SSN: 346346346 6656
 RACE: AFR 2, 1949
 SHIFT: P14THGATF
 OCCUP: WGI505 LABOURER

PROGRAM: 02 ASBESTOS

DATE LAST: DATE NEXT: 6 MAY 86
 LAST QUAL STATUS: NOT QUALIFIED
 LAST QUAL DATE: 13 JUN 86
 DATE ENROLLED: 6 MAY 86
 ENROLL TYPE: REQUIRED
 REASON ENROLLED: CHANGE IN OCCUPATION
 DATE REMOVED: REEXAM FREQ: 12
 REASON REMOVED:

PROGRAM: 04 LEAD
 DATE LAST: DATE NEXT: 27 MAY 86
 LAST QUAL STATUS: NOT QUALIFIED
 LAST QUAL DATE: 16 JUN 86
 DATE ENROLLED: 27 MAY 86
 ENROLL TYPE: REQUIRED
 REASON ENROLLED: CHANGE IN OCCUPATION
 DATE REMOVED: 21 MAY 86
 REEXAM FREQ: 4
 REASON REMOVED: SET UP FOR SCHEDULING

PROGRAM: 25 SOLVENTS
 DATE LAST: DATE NEXT: 1 JUL 86
 LAST QUAL STATUS: NOT QUALIFIED
 LAST QUAL DATE: 1 MAY 86
 DATE ENROLLED: 3 JUL 86
 ENROLL TYPE: PERIODIC
 REASON ENROLLED: SPECIAL REQUEST
 DATE REMOVED: 20 MAY 86
 REEXAM FREQ: 12
 REASON REMOVED: SOMGMDWHH

PROGRAM: 79 15 HOUR HEARING EXAM
 DATE LAST: DATE NEXT: 27 MAY 86
 LAST QUAL STATUS: NOT QUALIFIED
 LAST QUAL DATE: 23 JUL 86
 DATE ENROLLED: 27 MAY 86
 ENROLL TYPE: REQUIRED
 REASON ENROLLED: CHANGE IN OCCUPATION
 DATE REMOVED: 27 MAY 86
 REEXAM FREQ: 0
 REASON REMOVED: SET UP FOR SCHEDULING

PROGRAM: 89 40 HOUR HEARING EXAM
 DATE LAST: DATE NEXT: 27 MAY 86
 LAST QUAL STATUS: NOT QUALIFIED
 LAST QUAL DATE: 23 JUL 86
 DATE ENROLLED: 27 MAY 86
 ENROLL TYPE: REQUIRED
 REASON ENROLLED: CHANGE IN OCCUPATION
 DATE REMOVED: 27 MAY 86
 REEXAM FREQ: 0
 REASON REMOVED: SET UP FOR SCHEDULING

PROGRAM: 01 ABRASIVE BLASTING
 DATE LAST: 1 MAR 86
 DATE NEXT: 27 JUN 86
 LAST QUAL STATUS: NOT QUALIFIED
 LAST QUAL DATE: 13 JUN 86
 DATE ENROLLED: 27 MAY 86
 ENROLL TYPE: REQUIRED
 REASON ENROLLED: CHANGE IN OCCUPATION
 DATE REMOVED: REEXAM FREQ: 12
 REASON REMOVED:

PROGRAM: 08 CHROMIUM
 DATE LAST: DATE NEXT: 27 MAY 86
 LAST QUAL STATUS: NOT QUALIFIED
 LAST QUAL DATE: 16 JUN 86
 DATE ENROLLED: 27 MAY 86
 ENROLL TYPE: REQUIRED
 REASON ENROLLED: CHANGE IN OCCUPATION
 DATE REMOVED: 21 MAY 86
 REEXAM FREQ: 12
 REASON REMOVED: SET UP FOR SCHEDULING

PROGRAM HISTORY	SSN	BADGE	SHIFT	BIRTHDATE
NAME				
OCCUP				
AGENCY				
JOB TITLE				
SHOP				

SMART, MAXWELL	897344987			AUG 8, 1956
UG3504 LABORER				
LBNV				
104				
02 ASPESTOS				
ENROLL: ENROLLED	DATE LAST: 24 JUN 84	DATE NEXT: 17 JUN 84		
EXAM: BASELINE	STATUS: NOT QUALIFIED	LAST QUAL. DATE: 23 JUL 84		
DATE ENROLLED: 17 JUN 84	ENROLL TYPE: REQUIRED			
REASON ENROLLED: NEW HIRE				
DATE REMOVED:	REEXAM: 12			
REASON REMOVED:				
04 LEAD				
ENROLL: ENROLLED	DATE LAST:	DATE NEXT: 17 JUN 84		
EXAM: BASELINE	STATUS: NOT QUALIFIED	LAST QUAL. DATE: 23 JUL 84		
DATE ENROLLED: 17 JUN 84	ENROLL TYPE: REQUIRED			
REASON ENROLLED: NEW HIRE				
DATE REMOVED:	REEXAM: 6			
REASON REMOVED:				
79 15 HOUR HEARING EXAM				
ENROLL: REMOVED	DATE LAST:	DATE NEXT: 17 JUN 84		
EXAM: BASELINE	STATUS:	LAST QUAL. DATE: 23 JUL 84		
DATE ENROLLED: 17 JUN 84	ENROLL TYPE: REQUIRED			
REASON ENROLLED: NEW HIRE				
DATE REMOVED: 17 JUN 84	REEXAM: 0			
REASON REMOVED: SET UP FOR SCHEDULING				
08 CHROMIUM				
ENROLL: ENROLLED	DATE LAST:	DATE NEXT: 17 JUN 84		
EXAM: BASELINE	STATUS: NOT QUALIFIED	LAST QUAL. DATE: 23 JUL 84		
DATE ENROLLED: 17 JUN 84	ENROLL TYPE: REQUIRED			
REASON ENROLLED: NEW HIRE				
DATE REMOVED:	REEXAM: 12			
REASON REMOVED:				

APPENDIX B

EXAMPLES OF OUTPUTS FROM
PRODUCE CLINIC REPORTS PROCESS

PERSONNEL REQUIRING EXAMS AGENCY: PTSMH CLINIC: HEALTH RESEARCH DATE: JUL 24, 1986
 THIS REPORT CONTAINS INFORMATION THAT IS PROTECTED BY THE PRIVACY ACT OF 1974
 EMPLOYEE SSM BADGE SHIFT BIRTHDATE OCCUP JOB TITLE

SHOP: 11

FIDULEMAN, RICHARD 444339876 66289 MAY 5, 1940 651515 TEST OCCUPATION TITLE

PROGRAM	DATE LAST	DATE NEXT	DATE ENROLL	TYPE	LENGTH	TYPE	EXAM REASON	INIT/FOLL.
02 ASBESTOS	MAY 5, 1987	0	PERSONAL	120		BASELINE OCCUPATIONAL EXPOSUR	INITIAL	
04 LEAD	MAY 5, 1987	0	PERSONAL			BASELINE OCCUPATIONAL EXPOSUR	INITIAL	
08 CHROMIUM	MAY 5, 1987	0	PERSONAL	60		BASELINE OCCUPATIONAL EXPOSUR	INITIAL	
69 MONSENSE	JUN 3, 1986	60	REQUIRED			BASELINE INJURY/ILLNESS	INITIAL	
LUVL 11, 160	888110202		JUN 6, 1936	MO3506	LABORER			
PROGRAM	DATE LAST	DATE NEXT	DATE ENROLL	TYPE	LENGTH	TYPE	EXAM REASON	INIT/FOLL.
04 LEAD	JUL 19, 1986	12	REQUIRED			BASELINE NEW HIRE	INITIAL	
25 SOLVENTS	JUL 19, 1986	12	REQUIRED	60		BASELINE NEW HIRE	INITIAL	
79 15 HOUR HEARING EXAM	JUL 19, 1986	0	REQUIRED			BASELINE NEW HIRE	INITIAL	
08 CHROMIUM	JUL 19, 1986	12	REQUIRED	60		BASELINE NEW HIRE	INITIAL	

MEDICAL AFFIDAVIT LIST FROM: JAN 1, 1900 0000 TO: JAN 1, 2000 2400 CLINIC: HEALTH RESEARCH DATE: JUL 19, 1996
 THIS REPORT CONTAINS INFORMATION PROTECTED BY THE PRIVACY ACT OF 1974

EXAM DATE TIME EMPLOYEE REASON FOR VISIT SSN BADGE SHIFT WORKING DATE OCCUP. JOB TITLE
 PKG CODE MEDICAL PROGRAM

17 JUN 86 1500 PIE, HUNBLE 333441111 4444 4 APR 80 GS1515 OPERATIONS RESEARCH ANALYST
 CHANGE IN OCCUPATION FOLLOWUP
 02 ASBESTOS
 25 SOLVENTS
 17 JUL 86 1000 CRAWFORD, JOAN 332876099 4 APR 82 GS1515
 CHANGE IN OCCUPATION FOLLOWUP
 02 ASBESTOS

Select CLINIC:

MEDICAL APPOINTMENT LIST BY SHOP
 FROM: JAN 1,1900 0000 TO: JAN 1,2200 2400 CLINIC: BRANCH CLINIC MARE ISLAND DATE: AUG 19,1986
 THIS REPORT CONTAINS INFORMATION PROTECTED BY THE PRIVACY ACT OF 1974
 EXAM DATE TIME EMPLOYEE SSN BADGE # SHIFT BIRTHDATE OCCUP JOB TITLE
 REASON FOR VISIT INIT/FOL
 PKG CODE MEDICAL PROGRAM

SHOP: 104

25 AUG 86 700	JACKSON, JANET	551111113	567891	DAY	29 SEP 71	650690	INDUSTRIAL HYGIENE
PERIODIC		INITIAL					
08	CHROMIUM						OCCUPATIONAL EXPOSURE
04	LEAD						OCCUPATIONAL EXPOSURE
40	RESPIRATORY PROTECTION						OCCUPATIONAL EXPOSURE
25	SOLVENTS						CHANGE IN MS REQUIREMENTS
21 AUG 86 1445	TAPPAN, NINE	554555111	000005	EVENING	13 DEC 14	650690	INDUSTRIAL HYGIENE
PERIODIC		INITIAL					
02	ASBESTOS						CHANGE IN MS REQUIREMENTS
09	HEAVY METALS						CHANGE IN MS REQUIREMENTS
40	RESPIRATORY PROTECTION						CHANGE IN MS REQUIREMENTS
16	SIGHT CONSERVATION						CHANGE IN MS REQUIREMENTS
25	SOLVENTS						CHANGE IN MS REQUIREMENTS

MEDICAL EXAMINATION APPOINTMENT FORM

TIME IN_____ TIME OUT_____

FROM: BRANCH CLINIC HARE ISLAND

DATE: SEP 17, 1986

VIA: MIKE NOEL

MAIL STOP: T-56

TO: MARX, GROCHO

SSN: 575557777

DOB: JUN 30, 1948

BADGE: 222222

SHIFT: EVENING

OCCUPATION: GS0690

INDUSTRIAL HYGIENE

SHOP: 106.2

EXAM DATE: AUG 29, 1986

TIME: 1445

VISIT REASON: PERIODIC

INITIAL/FOLLOWUP: INITIAL

PROGRAMS: 02 ASBESTOS
09 HEARING
40 RESPIRATORY PROTECTION
16 SIGHT CONSERVATION
25 SOLVENTS

INSTRUCTIONS:

NO SMOKING FOUR HOURS BEFORE EXAM
NO LOUD NOISES FOR 24 HOURS BEFORE EXAM
FAST FOR 12 HOURS BEFORE EXAM--NO FOOD OR COFFEE

*****THIS NOTICE CONTAINS INFORMATION SUBJECT TO THE PRIVACY ACT OF 1974*****

PLEASE MATCH EMPLOYEES TO TIME SLL EX HS WILL ALLOW

SSM PAGE 9

EXAM DATE START TIME STOP TIME SHIFT EMPLOYEE

AGENCY1 MINS

SHOP: 104.2

4 AUG 84	1445	1600	EVENING	
7 AUG 84	700	715	DAY	
12 AUG 84	1445	1515	EVENING	
13 AUG 84	1445	1515	EVENING	
14 AUG 84	700	845	DAY	
14 AUG 84	1445	1515	EVENING	
15 AUG 84	700	800	DAY	
24 AUG 84	700	745	DAY	
27 AUG 84	1445	1600	EVENING	
28 AUG 84	1445	1600	EVENING	
29 AUG 84	1445	1600	EVENING	

LIST OF MEDICAL TESTS

DATE: AUG 19, 1984

1000000	HISTORY:
1100001	FAMILY HISTORY:
1100050	INCLUDING
1100100	GENERAL
1100150	BLOOD DYSCRASIAS (INCL. LEUK.)
1110000	GENETIC FACTORS
1120000	ILLNESS WITH SYSTEMIC DYSFUNG.
1130000	USE OF ALCOHOL
1140000	SMOKING
1200001	PERSONAL HISTORY:
1200050	MEDICAL
1200060	SMOKING
1200070	ALCOHOL INGESTION
1200080	PAST HISTORY OF HEPATITIS
1200090	BLOOD TRANSFUSIONS
1200095	HOSPITALIZATION
1200101	RESPIRATORY SYMPTOMS
1200150	EXP. TO HEPATOTOXIC AGENTS
1200151	INCLUDING DRUGS/CHEMICALS
1200505	USE OF DRUGS
1200513	PREV. EXP. TO LEAD PROD.
1200950	ILLNESS WITH SYSTEM. DYSFUNG.
1200960	STEROID/CYTOTOXIC TREATMENT
1300001	WORK HISTORY:
1300100	GENERAL
1300110	PREV. EXP. TO DUSTY OCC.
1300150	PREV. EXPOSURE TO LEAD
1300160	PREV. EXPOSURE TO ASBESTOS
1300170	PREV. EXP. TO BENZENE
1300180	EXP. TO MYELOTOXIC CHEM/DRUGS
1300190	EXP. TO CHROMIUM/CHROMIC ACID
1300200	PREV. EXP. TO FREE SILICA
1300201	EXPOSURE TO HYDROGEN FLUORIDE
1300202	EXP. TO INORGANIC FLUORIDES
1300203	EXP. TO RESP./SKIN IRRITANTS
1300204	EXP. TO PULM. CARCINOGENS
1300210	EXPOSURE TO COAL DUST
1300300	EXP. TO KNOWN CARCINOGENS
1300310	PREV. SENSITIZATION TO TDI
1300320	ALLERGIES (ASTHMA/HAY FEVER)
1400001	PAST MEDICAL HISTORY/ROS
1400004	REPRODUCTIVE SYSTEM
1400006	HISTORY
1400008	ATOPY
1400400	MEDICATIONS TAKEN REGULARLY
1400600	DRUG HISTORY
1400601	USE OF ANTIHYPERTENSIVE DRUGS
1400602	USE OF ALCOHOL
1400603	USE OF BAKESITE/CLAY
1400604	HEPATOBLASTIC AGENTS
1500000	ENVIRONMENTAL FACTORS
1500500	GENERAL/NONSPECIFIC SYMPTOMS

LIST OF MEDICAL TESTS FOR PROGRAM: PS SOLVENTS

DATE: JUN 19, 1986

	BASELINE	PERIODIC	REMOVAL	AGE	AGE	SEX
1000000						
1100001	YES					
1200001	YES					
1400001	YES					
2000000						
2020000	YES	YES				
2070100	YES	YES				
2140000						
2140200	YES	YES				F
2145200	YES	YES				M
3000000						
3010000	YES	YES				
3020000						
3020400	YES	YES				
3080000	YES	YES				
3090000	YES	YES				
				40		
				39		

HISTORY:

- FAMILY HISTORY:
- PERSONAL HISTORY:
- PAST MEDICAL HISTORY/ROS
- PHYSICAL EXAMINATION:
- SAIN
- MUCOUS MEMB. (EYE, NOSE, MOUTH)
- GENITOURINARY TRACT
- PREGNANCY
- TESTICAL SIZE
- TESTS AND PROCEDURES
- HEMATOLOGY
- CHEMISTRY
- LIVER PROFILE:
- CARDIOLOGY
- X-RAY

MEDICAL EVALUATION FOR: FOLLINGSIDE, MARLENE

SSN: 346346346
 MAGGE: 46556
 TITLE: LABORER
 SHOF: 190
 AGENCY: FTSMH
 CLINIC: HEALTH RESEARCH
 APPT: JUL 24, 1986 1200

DATE: JUL 24, 1986
 FOR: APR 2, 1949

TIME IN: -----
 TIME OUT: -----

QUAL/NOT QUAL/INC

PHYSICIAN

02 ASBESTOS
 ENROLLMENT TYPE: REQUIRED
 EXAM REASON: CHANGE IN OCCUPATION
 EXAM TYPE: BASELINE
 FOLLOWUP FLAG: FOLLOWUP

MEDICAL PROTOCOL:

HISTORY:
 FAMILY HISTORY:
 BLOOD DYSCKASIAS (INCL. LEUK.)
 TESTS AND PROCEDURES
 HEMATOLOGY
 REG BLOOD COUNT
 CHEMISTRY
 LIVER PROFILE:

COMMENTS:

MEDICAL EVALUATION FOR: FULLINGSTAD, MORTANNE
SSN: 346346346
BAND: 00000
OCCUP: WG3506
TITLE: LABORER
AGENCY: FTSMH
SHUP: 190
CLINIC: HEALTH RESEARCH
AFFT: JUN 24, 1986

DATE: JUN 24, 1986
DOB: APR 2, 1949

SURVEY B86-0001-TST
SAMPLED/IN AREA: SAMPLED
FPE:
NOISE
NOISE
NOISE

DOCUMENT: 92222
RESPIRATOR:
78 DBA (TWA)
DBA (PEAK)
PERCENT (OTHER)

DATE: MAR 15, 1986

SURVEY B86-0001-TST
SAMPLED/IN AREA: SAMPLED
FPE:
MUNZENE

DOCUMENT: 92223
RESPIRATOR: SOME RESPIRATOR
43 MG/M3 (TWA)

DATE: MAR 20, 1986

APPENDIX C

EXAMPLES OF OUTPUTS FROM
PRODUCE DISCREPANCY REPORTS PROCESS

***** THIS REPORT CONTAINS INFORMATION PROTECTED BY THE PRIVACY ACT OF 1974 *****

DATE: JUL 24, 1986
SMOF

PERSONNEL FILE DISCREPANCY AUDIT AGENCY: LMSY BIRTH DATE OCCUP. JOB TITLE
NAME SSN BADGE

FORBES-HAMILTON, RICHARD 775646464 650061 TEST OCCUPATION 260

PROGRAM: 49 NONSENSE DATE LAST: DATE NEXT:

EXAM TYPE: BASELINE KEEAM FREQ: 55 DATE EXPOSURE AFFORTED:
ENROLLED: JUL 21, 1986 ENROLL. STATUS: REMOVED ENROLL. TYPE: REQUIRED
REASON ENROLLED: CHANGE IN MS REQUIREMENTS
REMOVED: JUL 21, 1986 REASON REMOVED: CHANGE IN MS REQUIREMENTS

DISCREPANCY: BIRTHDATE MISSING

HUTTON-HEAD, AEN 315738548 JUN 6, 1978 W03506 LABORER 180

PROGRAM: 02 ASBESTOS DATE LAST: DATE NEXT: JUN 17, 1986

EXAM TYPE: BASELINE KEEAM FREQ: 12 DATE EXPOSURE AFFORTED:
ENROLLED: JUN 17, 1986 ENROLL. STATUS: ENROLLED ENROLL. TYPE: REQUIRED
REASON ENROLLED: NEW MIKE
REMOVED: REASON REMOVED:

PROGRAM: 04 LEAD DATE LAST: DATE NEXT: JUN 17, 1986

EXAM TYPE: BASELINE KEEAM FREQ: 6 DATE EXPOSURE AFFORTED:
ENROLLED: JUN 17, 1986 ENROLL. STATUS: ENROLLED ENROLL. TYPE: REQUIRED
REASON ENROLLED: NEW MIKE
REMOVED: REASON REMOVED:

PROGRAM: 79 15 HOUR HEARING EXAM DATE LAST: DATE NEXT: JUN 17, 1986

EXAM TYPE: BASELINE KEEAM FREQ: 0 DATE EXPOSURE AFFORTED:
ENROLLED: JUN 17, 1986 ENROLL. STATUS: REMOVED ENROLL. TYPE: REQUIRED
REASON ENROLLED: NEW MIKE
REMOVED: REASON REMOVED: SET UP FOR SCHEDULING

PROGRAM: 08 CHROMIUM DATE LAST: DATE NEXT: JUN 17, 1986

EXAM TYPE: BASELINE KEEAM FREQ: 12 DATE EXPOSURE AFFORTED:
ENROLLED: JUN 17, 1986 ENROLL. STATUS: ENROLLED ENROLL. TYPE: REQUIRED
REASON ENROLLED: NEW MIKE
REMOVED: REASON REMOVED:

DISCREPANCY: EXAM DATE NOT IN LINE WITH BIRTHDATE (02 ASBESTOS)

DISCREPANCY: EXAM DATE NOT IN LINE WITH BIRTHDATE (04 LEAD)

DISCREPANCY: EXAM DATE NOT IN LINE WITH BIRTHDATE (08 CHROMIUM)

JACKSON, JESSE 554700666 W03506 LABORER 210

DISCREPANCY: BIRTHDATE MISSING

JACKSON, JESSIE 554700666 W03506 LABORER 210

DISCREPANCY: BIRTHDATE MISSING

80000 THIS REPORT CONTAINS INFORMATION PROTECTED BY THE PRIVACY ACT OF 1974 00000

DATE: JUL 24, 1986
SHOP

PERSONNEL FILE DISCREPANCY AUDIT
NAME

SSN
BUDGE

BIRTH DATE OCCUP. JOB TITLE

AAA7000 234647585 JUN 6, 1966 651515 OPERATIONS RESEARCH ANALYST 225

OCCUPATION REQUIREMENTS:

ASBESTOS
ABRASIVE BLASTING

DISCREPANCY: ADD PROGRAM (ASBESTOS)
(KEXAM FREQUENCIES: 0 12 60)

DISCREPANCY: ADD PROGRAM (ABRASIVE BLASTING)
(KEXAM FREQUENCIES: 0 12)

CLAUS, SANTA 239680367 2457 JAN 1, 1901 003506 LABORER 100

OCCUPATION REQUIREMENTS:

LEAD
SOLVENTS
15 HOUR HEARING EXAM
CHROMIUM

DISCREPANCY: ADD PROGRAM (LEAD)
(KEXAM FREQUENCIES: 0 6 12)

DISCREPANCY: ADD PROGRAM (SOLVENTS)
(KEXAM FREQUENCIES: 0 12)

DISCREPANCY: ADD PROGRAM (15 HOUR HEARING EXAM)
(KEXAM FREQUENCIES: 0)

DISCREPANCY: ADD PROGRAM (CHROMIUM)
(KEXAM FREQUENCIES: 0 12)

CRAFFORD, J. CARTER, JR. 333445555 67890 JAN 1, 1924 003506 340

OCCUPATION REQUIREMENTS:

LEAD
SOLVENTS
15 HOUR HEARING EXAM
CHROMIUM

DISCREPANCY: ADD PROGRAM (LEAD)
(KEXAM FREQUENCIES: 0 12 60)

DISCREPANCY: ADD PROGRAM (SOLVENTS)
(KEXAM FREQUENCIES: 0 12)

DISCREPANCY: ADD PROGRAM (15 HOUR HEARING EXAM)
(KEXAM FREQUENCIES: 0)

DATE: SEP 17, 1986
AGENCY SHOP

DISCREPANCY AUDIT OF PERSONNEL FILE

J TITLE

BIRTH DATE

BADGE

SSN

MINS 130

QUALITY ASSURANCE

JAN 1, 1951 GS1910

000000004 1301

ROMANOV, IVAN

PROGRAM: 09 HEARING

EXAM TYPE: BASELINE REEXAM FREQ: 12
ENROLLED: JUL 28, 1986 ENROLL. STATUS: ENROLLED
REASON ENROLLED: CHANGE IN MS REQUIREMENTS
REMOVED: REASON REMOVED:

DATE LAST:

DATE NEXT: JUL 28, 1986

DATE EXPOSURE REPORTED:
ENROLL. TYPE: REQUIRED

PROGRAM: 14 SIGHT CONSERVATION

EXAM TYPE: BASELINE REEXAM FREQ: 24
ENROLLED: JUL 28, 1986 ENROLL. STATUS: ENROLLED
REASON ENROLLED: CHANGE IN MS REQUIREMENTS
REMOVED: REASON REMOVED:

DATE LAST:

DATE NEXT: JUL 28, 1986

DATE EXPOSURE REPORTED:
ENROLL. TYPE: REQUIRED

OCCUPATION REQUIREMENTS:

SIGHT CONSERVATION
VISION (NEAR VISION)

DISCREPANCY: REMOVED - NO LONGER REQUIRED (09 HEARING)

DISCREPANCY: ENROLLED - NEW REQUIREMENT (38 VISION (NEAR VISION))

C 5

TIDE, RIDE THE

411449999 096656

JUL 14, 1956 GS1910

QUALITY ASSURANCE

HARF 42000

PROGRAM: 09 HEARING

EXAM TYPE: BASELINE REEXAM FREQ: 12
ENROLLED: JUL 28, 1986 ENROLL. STATUS: ENROLLED
REASON ENROLLED: CHANGE IN MS REQUIREMENTS
REMOVED: REASON REMOVED:

DATE LAST:

DATE NEXT: JUL 28, 1986

DATE EXPOSURE REPORTED:
ENROLL. TYPE: REQUIRED

PROGRAM: 14 SIGHT CONSERVATION

EXAM TYPE: BASELINE REEXAM FREQ: 24
ENROLLED: JUL 28, 1986 ENROLL. STATUS: ENROLLED
REASON ENROLLED: CHANGE IN MS REQUIREMENTS
REMOVED: REASON REMOVED:

DATE LAST:

DATE NEXT: JUL 28, 1986

DATE EXPOSURE REPORTED:
ENROLL. TYPE: REQUIRED

OCCUPATION REQUIREMENTS:

SIGHT CONSERVATION
VISION (NEAR VISION)

DISCREPANCY: REMOVED - NO LONGER REQUIRED (09 HEARING)

DISCREPANCY: ENROLLED - NEW REQUIREMENT (38 VISION (NEAR VISION))

APPENDIX D

EXAMPLES OF OUTPUTS FROM
PRODUCE PROGRAM LINKAGE DISPLAYS PROCESS

MEDICAL PROGRAMS BY LOCATION LIST
LOCATION NAME

AUG 19, 1984 11:23 PAGE 1

CODE MEDICAL PROGRAM NAME

MI-BLDG 300-RM 21

07 ISOCYANATES
40 RESPIRATORY PROTECTION

OPERATION LIST

CODE OPERATION NAME

CODE MEDICAL PROGRAM NAME

AUG 19, 1984 11:23 PAGE 1

SOL800J	SOLID OPS,BALLAST,FORKLIFT	35	CRANE AND CONSTRUCTION EXAM
		09	HEARING
		04	LEAD
		14	SIGHT CONSERVATION

MEDICAL PROGRAMS BY OCCUPATION LIST
 OCC CODE OCCUPATION TITLE

AUG 19, 1986 11:22 PAGE 1

CODE MEDICAL PROGRAM NAME

WG3414	MACHINING	09	HEARING
		40	RESPIRATORY PROTECTION
		16	SIGHT CONSERVATION
		25	SOLVENTS
		37	VISION (COLOR)

STRESSOR ENTRY INFORMATION
CLASSIFICATIONS:
CARCINOGEN

BENZENE

SYNONYMS:

BENZOLE
 BENZOL
 COAL NAPHTHA
 COAL TAR NAPHTHA
 CYCLOHEXATRIENE
 PHENE
 PHENYL HYDRIDE

NIOSH #: **WAC:**
 CAS #: 71-43-2

HEP. MON: MANDATORY
 MAX. DAYS PER QUARTER:
 YEAR:

UNITS:PPM
 PEL TLV NAVY OTHER:
 CEILING 25 25
 TWA 10 10
 STEL 25
 MSAL: 5

UNITS:MG/M3
 PEL TLV NAVY OTHER:
 CEILING 50 30 50
 TWA 75
 STEL 75
 MSAL: 25

TRAINING COURSES INFORMATION
 CODE DESCRIPTION RETRAIN FREQ. COURSE STATUS COURSE TYPE
 (IN MONTHS) (ACT/INACT)
 MOSL-04-48HAZARD COMMUNICATIONS 6 ACTIVE OTHER
 MOSL-04-100DETECTING GAS & RADIAT 12 ACTIVE INTERNAL SAFETY

MEDICAL PROGRAM INFORMATION
 CODE DESCRIPTION
 10 HYDROCARBONS
 40 RESPIRATORY PROTECTION
 33 BENZENE

ACUTE EFFECTS:
 THE ACUTE EFFECTS OF BENZENE INTOXICATION INCLUDE HEADACHE, VOMITTING,
 DIZZINESS, AND DISORIENTATION

CHRONIC EFFECTS:
 THE CHRONIC EFFECTS OF BENZENE EXPOSURE ARE SEVERE AND ACQUIKE LONG TERM
 FOLLOWUP; THE SYMPTOMS INCLUDE FATEINIG, AND MEMORY LOSS; THERE IS SOME
 INCREASE IN THE LIKELIHOOD OF LUNG CANCER