

RHEUMATIC HEART DISEASE REGISTER

User Guide *Simple Database*

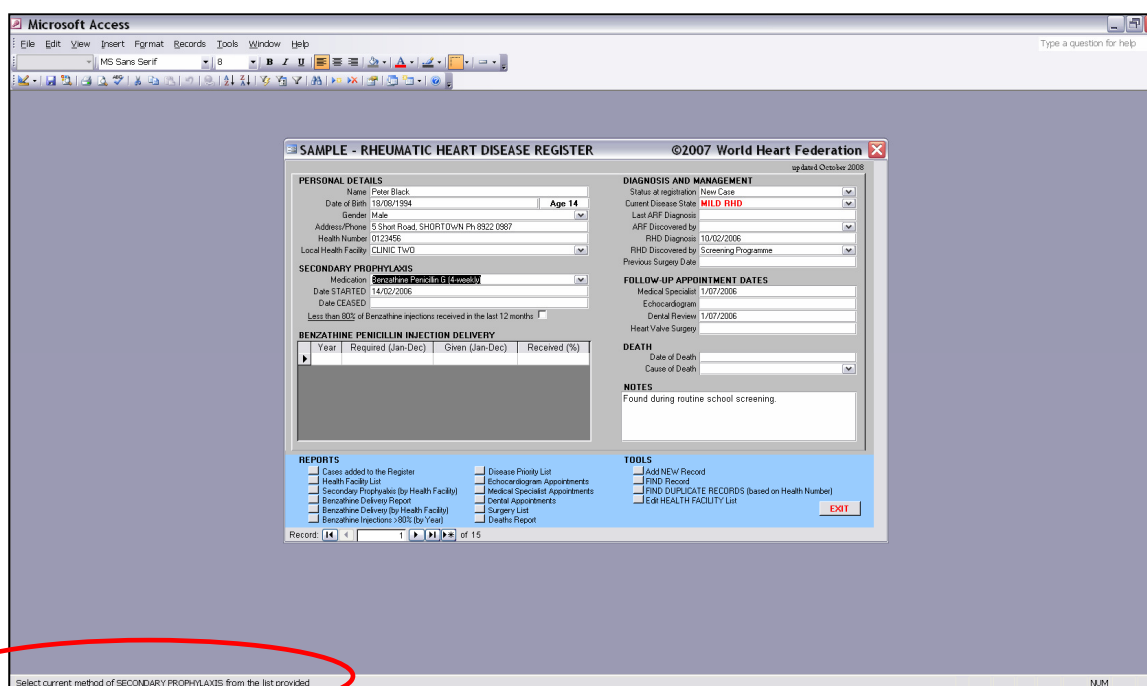
This database has been designed to be used as part of a comprehensive Rheumatic Heart Disease control programme. The main functions of this database are to

1. Identify people in the community with confirmed or suspected Acute Rheumatic Fever (ARF) and Rheumatic Heart Disease (RHD);
2. Identify people with severe RHD and those at increased risk of developing severe disease;
3. Help monitor and improve secondary prophylaxis delivery;
4. Help coordinate ongoing medical care;
5. Report ARF/RHD epidemiology.

GENERAL INFORMATION

Database Fields

The spaces on the main form are called *fields*. Each piece of information is typed into a separate field. A new form is created for each person. Once created, a form can be updated with new information at any time. Instructions for completing each field can be found on the bottom left section of the computer taskbar (*circled below*) [E.g. click into the *Medication* field and see the instruction “*Select current method of Secondary Prophylaxis from the list provided*”]



The screenshot shows a Microsoft Access window titled "SAMPLE - RHEUMATIC HEART DISEASE REGISTER" with a copyright notice for ©2007 World Heart Federation. The form is divided into several sections:

- PERSONAL DETAILS:** Name: Peter Black, Date of Birth: 15/02/1994, Gender: Male, Age: 14, Address/Phone: 5 Short Road, SHORT DWN Ph 8922 0887, Health Number: 0123456, Local Health Facility: CLINIC TWO.
- SECONDARY PROPHYLAXIS:** Medication: Benzathine Penicillin G (4 weekly), Date STARTED: 14/02/2006, Date CEASED: (empty), Less than 60% of Benzathine injections received in the last 12 months: (checkbox).
- BENZATHINE PENICILLIN INJECTION DELIVERY:** A table with columns: Year, Required (Jan-Dec), Given (Jan-Dec), Received (%).
- DIAGNOSIS AND MANAGEMENT:** Status at registration: New Case, Current Disease State: MILD RHD, Last ARF Diagnosis: (empty), ARF Discovered by: (empty), RHD Diagnosis: 10/02/2005, RHD Discovered by: Screening Programme, Previous Surgery Date: (empty).
- FOLLOW-UP APPOINTMENT DATES:** Medical Specialist: 1/07/2006, Echocardiogram: (empty), Dental Review: 1/07/2006, Heart Valve Surgery: (empty).
- DEATH:** Date of Death: (empty), Cause of Death: (empty).
- NOTES:** Found during routine school screening.
- REPORTS:** Cases added to the Register, Health Facility List, Secondary Prophylaxis (By Health Facility), Benzathine Delivery Report, Benzathine Delivery (By Health Facility), Benzathine Injections >60% (By Year), Disease Point List, Echocardiogram Appointments, Medical Specialist Appointments, Dental Appointments, Surgery List, Death Report.
- TOOLS:** Add NEW Record, FIND Record, FIND DUPLICATE RECORDS (based on Health Number), Edit HEALTH FACILITY List.

At the bottom left, a red circle highlights the instruction: "Select current method of SECONDARY PROPHYLAXIS from the list provided".

Search the Database

- Open the database;
- Click the **Find a Record** button under TOOLS;
- Type any known information [e.g. surname or health number] in the *Find What* box;
- Click *Find Next* and continue to click *Find Next* until the correct record has been found;
- When the correct record has been found [or not found] click *Cancel*.

Add a New Record

- Open the database;
- Click the **Add NEW Record** button under TOOLS;
- Add any available information for this person.

NOTE: Each person has a separate form to record personal and medical information. Unique information including health number and name must be included when adding a new record.

To find DUPLICATE RECORDS

- Open the database;
- Click the **Find DUPLICATE RECORDS (based on Health Number)** button under TOOLS;
- View the list of possible duplicates.

This report lists all records where the same Health Number is entered more than once. The list is a guide to check and correct records that may have been entered with incorrect information.

Edit HEALTH FACILITY List

The names of Health Facilities [including hospitals and clinics] are unique to each region. To create or edit a list of Health Facilities:

- Open the database;
- Click on the **Edit HEALTH FACILITY List** button under TOOLS;
- Type the names of local Health Facilities as instructed on the form;
- Click the **Close this list** button.

Date Fields

All *dates* are entered as 6 letters, and will appear according to the computer's date format setting.

To enter 4th October 1990: type **041090** (day, month, year), or Type **100490** (month, day, year).

NOTE: For all dates, if exact date is unknown, enter year known as default date: e.g. if 1990, enter as 1st July 1990.

Option Fields

Option fields have a small arrow on the right and allow selection from a list of set options. Most option fields have standard options [e.g. *Gender* options are MALE and FEMALE]. Only options in the list can be selected.

Text Fields

Text fields require information to be typed. There are no rules for these fields and care must be taken with spelling and accuracy [e.g. *Name*, *Health Number*].

Tick Box

A *tick box* indicates 'NO' when not ticked and 'YES' when ticked. A black tick appears when selected.

DATABASE FUNCTIONS

Filter Information

Filtering allows the user to select all records that have exactly the same information. For example, filtering is a quick method to count the number of males registered in the database.

EXAMPLE: To filter the total number of males in the database:

- Click into a *Gender* field where MALE has been selected
- Click the FILTER BY SELECTION icon in the toolbar (see right)



The number of males will be displayed at the bottom of the database screen, e.g. "*of 10 (filtered)*". This indicates that there are 10 males currently registered in the database.

To remove the filter, click the **Remove Filter** icon.



Edit Local Health Facility List

The names of Local Health Facilities [including hospitals, clinics, nursing stations] are unique to each region. To create and edit this list:

- Open the database;
- Click on **CLICK to Edit List**;
- Type the names of local Health Facilities as instructed on the HEALTH FACILITY form;
- Click the **Close this list** button
- Only Health Facilities recorded on the list can be selected in the Local Health Facility field.

NOTE: The Health Facility where secondary prophylaxis is usually received and primary health care usually given should be selected from the list for each person.

Prevent Duplicate Records

IMPORTANT: Name and Health Number MUST be entered for every record. Together, this information will prevent the same person being registered more than once.

DATABASE REPORTS

Information typed into the database is reproduced in the Reports. All reports can be viewed; however a printer must be connected to the computer to print reports.

Cases added to the Register

This report lists individuals registered at each Health Facility within a specified time (including those who are deceased).

EXAMPLE: To view individuals added to the register in 2005:

- "Enter Start Date" – type **1/1/05** [i.e. 1st January 2005] ... Click OK
- "Enter End Date" – type **31/12/05** [i.e. 31st December 2005] ... Click OK

Age at Registration and Age at Death are calculated automatically.

Health Facility List

This report lists all individuals registered as receiving care at any specified Local Health Facility.

EXAMPLE: To individuals receiving care at HOSPITAL ONE:

- "Please Enter name of Health Facility" – **HOSPITAL ONE** ... Click OK

The name of the Health Facility must be entered as it appears in the Local Health Facility list.

Secondary Prophylaxis (by Health Facility)

This report lists all people registered to receive regular secondary prophylaxis by Health Facility.

EXAMPLE: To individuals receiving care at HOSPITAL ONE:

- "Please Enter name of Health Facility" – **HOSPITAL ONE** ... Click OK

This report includes the tick box that indicates whether or not the individual received less than 80% of planned injections in the previous 12 months.

Benzathine Delivery Report

This report shows the number of injections received for each full year for individuals at all Local Health Facilities.

This report includes the tick box that indicates whether or not the individual received less than 80% of planned injections in the previous 12 months.

Benzathine Delivery (by Health Facility)

This report shows the proportion of injections received for each calendar year for individuals at a specified Local Health Facility.

EXAMPLE: To view individuals scheduled to receive secondary prophylaxis at HOSPITAL ONE:

- "Please Enter name of Health Facility" – type **HOSPITAL ONE** ... Click OK

This report includes the tick box that indicates whether or not the individual received less than 80% of planned injections in the previous 12 months.

Benzathine Injections >80% (by Year)

This report automatically produces a graph to show the proportion of all people requiring Benzathine injections who received 80% or more of injections each year.

Disease Priority List

This report identifies individuals at all Health Facilities at a specified stage of disease.

EXAMPLE: To view persons with 'Severe RHD':

- "Please Enter 'Current Disease State' category e.g. ARF (no RHD)" – type **Severe RHD** ... Click OK

Echocardiogram Appointments, Medical Specialist Appointments, Dental Appointments, Surgery List

These reports list individuals who have future dates entered for echocardiogram, medical review and surgery. The following method is used to generate these reports.

EXAMPLE: To view individuals who require an Echocardiogram between January and July 2007:

- Click the *Echocardiogram Appointments* report button
- "Enter Start Date" – type 1/1/07 [i.e. 1st January 2007] ... Click OK
- "Enter End Date" – type 31/07/07 [i.e. 31st July 2007] ... Click OK

Deaths Report

This report describes deaths and causes of death for individuals registered on the database.

EXAMPLE: To view a list of persons with a date of death in 2004 and 2005:

- "Enter Start Date" – type **1/1/04** [i.e. 1st January 2004] ... Click OK
- "Enter End Date" – type **31/12/05** [i.e. 31st December 2005] ... Click OK

Age at death is calculated automatically.

DATA DICTIONARY

Field Name	Description	Data type	Field Format
Name	All known given and family names	Text	50 characters
Date of Birth	Date of birth (if exact date is unknown, default to year – e.g. 1/01/1987)	Date	00/00/00
Gender	Gender	Option List	OPTIONS: Male; Female
Address/Phone	Contact information including address, region, phone number	Text	100 characters
Health Number	Clinic or Hospital registration number (<i>unique for each person</i>)	Text	20 characters
Local Health Facility	The Local Health Facility where the person received regular secondary prophylaxis or medical care if not prescribed secondary prophylaxis.	Option List	50 characters <i>Generated by Database User</i>
Medication	Method of secondary prophylaxis (if any) currently prescribed by a Medical Specialist	Option List	OPTIONS: Benzathine Penicillin (3weekly); Benzathine Penicillin (4weekly); Penicillin V (2 daily); Erythromycin (2 daily); No Prophylaxis
Date STARTED	Date that secondary prophylaxis was started following initial diagnosis of ARF or RHD	Date	00/00/00
Date CEASED	Date secondary prophylaxis was ceased by a Medical Specialist	Date	00/00/00
Less than 80% of Benzathine injections received in last 12 months	When ticked, indicates that less than 80% of Benzathine injections were received during the last calendar year (as indicated in Injection Delivery sub form)	Tick Box	1 character
Status at Registration	The person had a known ARF or RHD diagnosis, or diagnoses was unknown (new) at the time of registration on the database	Option List	Known case; New case
Current Disease State	Current type and severity of disease (update as disease progresses)	Option List	OPTIONS: ARF (no RHD); Mild RHD; Moderate RHD; Severe RHD
Last ARF Diagnosis	Date of most recent ARF diagnosis	Date	00/00/00
ARF Discovered by	How the current diagnosis was discovered	Option List	OPTIONS: Clinical Presentation; Post Mortem; School Health Check; Screening Programme
RHD Diagnosis	Date of RHD diagnosis	Date	00/00/00

RHD Discovered by	How the diagnosis was discovered	Option List	OPTIONS: Associated ARF; Clinical Presentation; Coincidental Finding; Post Mortem; Pregnancy/Labour; School Health Check; Screening Program
Previous Surgery Date	Date of most recent heart valve surgery	Date	00/00/00
Medical Specialist	Scheduled date for next review with a Medical or Heart Specialist	Date	00/00/00
Echocardiogram	Scheduled date for next Echocardiogram	Date	00/00/00
Dental Review	Scheduled date for next Dental review	Date	00/00/00
Heart Valve Surgery	Date for proposed future heart valve surgery	Date	00/00/00
Date of Death	Date of death	Date	00/00/00
Cause of Death	The primary cause of death in a person with ARF or RHD	Option List	OPTIONS: Other Cause (not RHD); RHD-Haemorrhage; RHD-Heart Failure; RHD-Endocarditis; RHD-Stroke; Unknown Cause
BENZATHINE PENICILLIN DELIVERY			
Year	Calendar year (Jan to Dec) for which secondary prophylaxis delivery is being calculated (NOTE: prophylaxis must be prescribed for the full year)	Text	4 characters
Required (Jan-Dec)	The number of injections required for this person for the year (enter 13 for 4- weekly injections and 17 for 3- weekly injections)	Option List	OPTIONS: 17 (3 weekly); 13 (4-weekly)
Given (Jan-Dec)	The total number of injections given to this person over the full year. Record '0' if none were given during the year		
Received (%)	<i>The proportion of injections given from those required as a percent.</i>	<i>Automatically calculated field</i>	----
Notes	Important notes, comments and reminders about diagnosis or ongoing management	Text	255 characters