

# VETERINARY INFORMATION SYSTEM



# USER MANUAL

Version 1: October 2022



## National Centre for Animal Health

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## **ABBREVIATIONS**

AHD	Animal Health Division
CID	Citizenship Identity Number
DoL	Department of Livestock
DPM	Dog Population Management (Sterilization)
DVH	Dzongkhag Veterinary Hospital
LEC	Livestock Extension Centre
MDV	Mass Dog Vaccination
MRN	Mass Registration Number
NCAH	National Centre for Animal Health
NVH	National Veterinary Hospital
OID	Outbreak Identity Number
PID	Patient Identity Number
PRN	Pet Registration Number
RLDC	Regional Livestock Development Centre
RNR-EC	Renewable Natural Resource – Extension Centre
TVH&SL	Thromde Veterinary Hospital and Satellite Laboratory
VIS	Veterinary Information System

## INTRODUCTION

The Veterinary Information System (VIS), <https://vis.ncah.gov.bt/>, is an online animal health information management system in Bhutan. It records data concerning veterinary services delivery in all the animal health extension centres and other relevant agencies in the country.

The technical services available in the system (Figure 1) are:

- Individual: records clinical, vaccination, deworming and sterilization data at individual animal's level.
- Mass: records clinical, vaccination and deworming data at herd or flock level.
- Pet Information Management: records information about pet animals such as initial registration, renewal of registration, information update and ownership transfer.
- DPM/MDV: records individual dog's (owned and unowned) data concerning sterilization and vaccination against rabies.
- Disease Outbreaks: records data about the outbreak of notifiable animal diseases in the country.

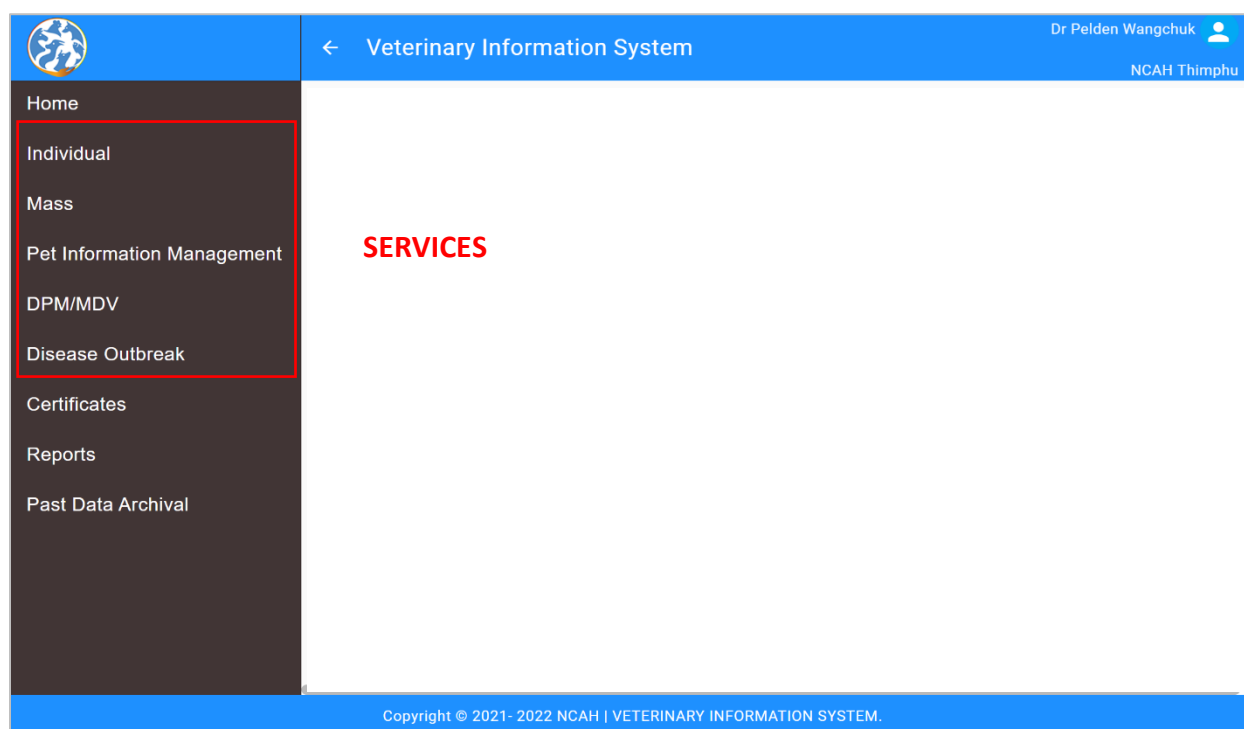


Figure 1: Technical services in VIS

The system can generate reports on all the services and certificates of some services. The system also archives all the past animal health data, including the notifiable disease outbreaks reported

in the country since 1996. The National Centre for Animal Health (NCAH) is the system's administrator.

## LOGIN PAGE

- The system's admin shall register field users of the system based on some personal information such as CID, full name, email, designation, centre's location, etc. (Figure 107).
- The login credential (username and password) of the registered user shall be communicated through an email from [vis@moaf.gov.bt](mailto:vis@moaf.gov.bt).
- Click on/ copy-paste in the browser, the link, <https://vis.ncah.gov.bt/>, to access the system. The link shall redirect the user to the login page (Figure 2).
- Enter the Username and Password provided through an email (Figure 2).

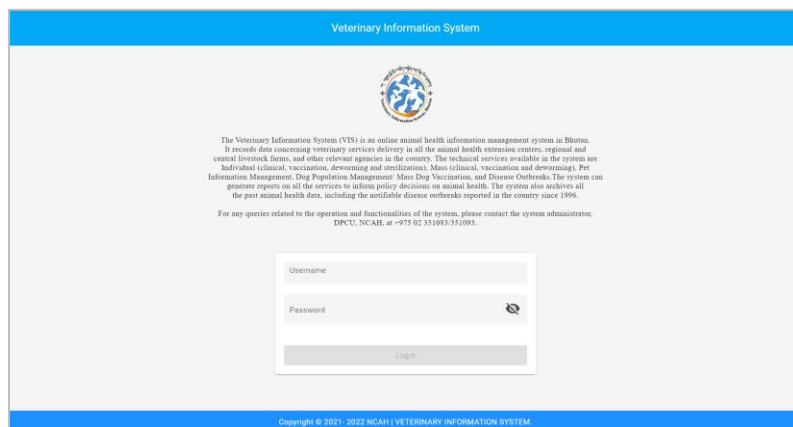


Figure 2: VIS's login page

- After the first login, change the password from the default one (Figure 3). On updating with the new password, it will redirect to the Dashboard.

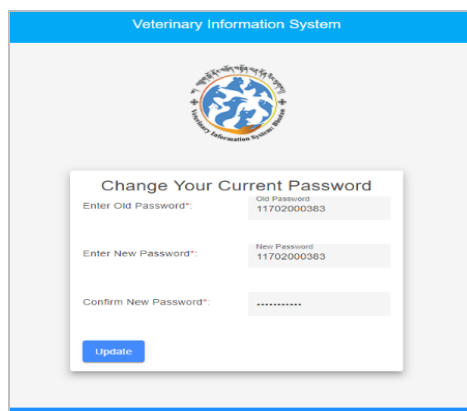


Figure 3: Change password page



## THE DASHBOARD

The system's dashboard shows the number of counts for different services at the national level. The data recorded in all the animal health extension centres in the country are added to form the displayed cumulative Figures (Figure 4). It shows the number of:

- i. Individual animals treated, sterilized, dewormed and vaccinated in the country: displayed under INDIVIDUAL
- ii. Herds/ flocks treated, dewormed and vaccinated in the country: displayed under MASS
- iii. Pet animals registered in the country: displayed under PET REGISTRATION
- iv. Notifiable animal diseases reported in the country: displayed under DISEASE OUTBREAK

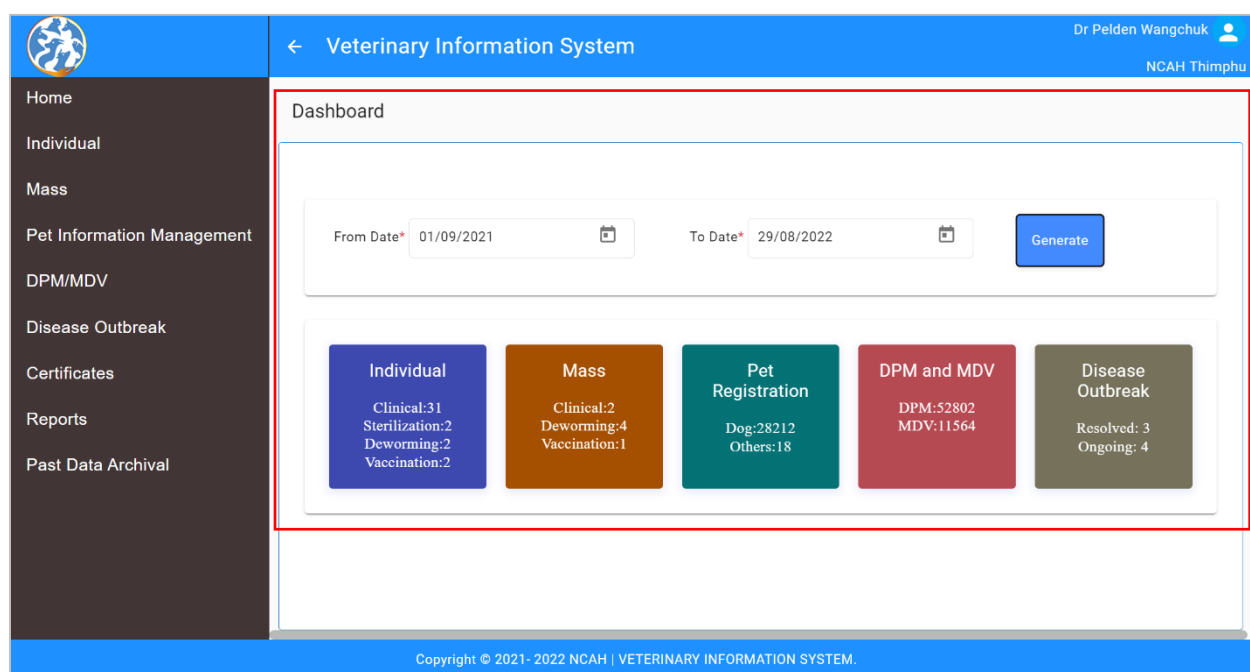


Figure 4: System's dashboard

To count the number or process the data, we need to enter the “From Date” and “To Date” and generate.

## 1. INDIVIDUAL

This service shall be used for recording data during the registration of a patient and provision of clinical, vaccination, deworming and sterilization services to the registered patient (Figure 5).

### 1.1. PATIENT REGISTRATION (INDIVIDUAL)

- When a patient is presented to a clinic for the first time, the patient must undergo the registration process.
- Click on INDIVIDUAL, followed by Patient Registration (Figure 5).

**Veterinary Information System** Dr Pelden Wangchuk  
NCAH Thimphu

**Individual**

- Search Patient
- Patient Registration**

**Mass**

**Pet Information Management**

DPM/MDV

Disease Outbreak

Certificates

Reports

Past Data Archival

**Patient Registration**

**Owner Details**

☒ Bhutanese ☐ Non-Bhutanese

CID Number\*  Owner Name\*

Present Address

Dzongkhag\*  Gewog\*

Village  Locality

Mobile Number\*  Email ID

**Patient Details**

Animal Ownership Type\*  Species\*

Animal Type\*  Pet Registration Number

Ear Tag Number  Microchip Number

Animal Name

Breed\*  Age  Year  Month  Day

Sex\* ☐ Male ☐ Female  Body weight (KG)

Figure 5: Individual service and patient registration fields

- Enter all the mandatory fields, marked by an asterisk (Figure 5).
- In the Age field, the age of the patient in terms of the approximate no. of years, months or days must be entered (Figure 5).
- Owner and Animal Details shall be recorded. If the patient's owner is Bhutanese, the CID number must be entered, and the full name shall be fetched accordingly from the census registry (Figure 5).
- For non-Bhutanese, the passport/ work permit number must be entered followed by the country name (Figure 6).
- For Bhutanese without a CID card, Per ID (identity number provided by the Department of Civil Registration and Census) must be entered and select Bhutan from the country name list. The owner's name must be entered manually (Figure 6). It must be remembered that the registration procedure in this system doesn't validate the individual's citizenship and it's solely for the purpose of registering an animal for treatment or any other relevant veterinary services.

Figure 6: Registration for non-Bhutanese or Bhutanese without CID

- Locality, Email ID, Pet Registration Number, Ear Tag Number and Microchip Number (PRN) are the non-mandatory fields (Figure 5).
- If a pet animal is brought to the clinic and has never been registered before, the animal must first get registered as a pet (See 3.1), following which PRN and Microchip Number obtained must be entered here in the patient registration form. This will enable the linking of individual services with the pet information.
- During registration, if some mandatory fields are to be filled later, the process can be paused here by clicking "Save as Draft" and later continued (Figure 5). Only a single entry can be kept

in draft mode, and it must be submitted first to clear the fields and enable subsequent registration. If the drafted registration is to be discontinued or cancelled, refresh the browser (Ctrl+Shift+R) or clear browsing history (Ctrl+Shift+Del).

- After filling up all the fields of the patent registration, click on the “Submit” button. A Patient ID No. (PID) will be generated by the system (Figure 7). Click OK to continue. Use PID or other relevant details (Section 4.2) to search for the patient later.



Acknowledgement

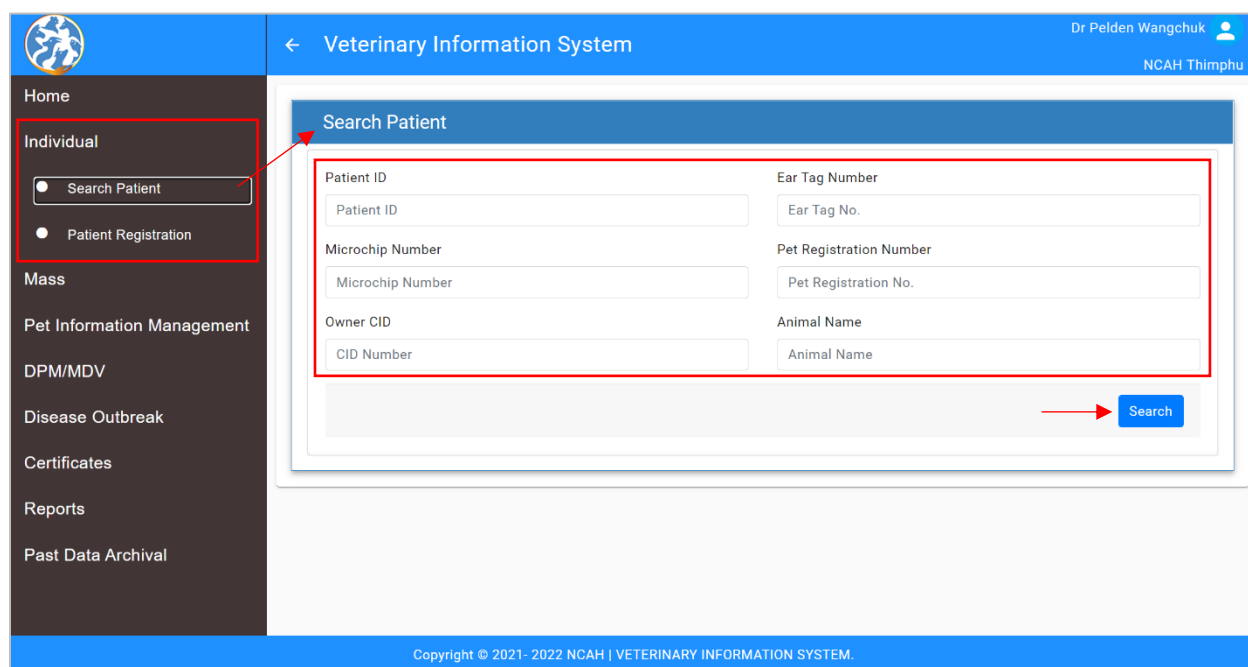
Sent for Follow Up PID2022181920078

OK

Figure 7: PID generated

## 1.2. SEARCH PATIENT (INDIVIDUAL)

- A registered patient can be searched through this sub-service, following which the data concerning clinical treatment, deworming, vaccination and sterilization services provided against the patient can be recorded (Figure 8).
- Any parameter -- from Patient ID, Ear Tag Number, Microchip Number, Pet Registration Number, Owner CID and Animal Name -- used during patient registration can be used to search for the patient details (Figure 8).



The screenshot shows the 'Veterinary Information System' interface. On the left is a dark sidebar with a menu: Home, Individual (selected), Mass, Pet Information Management, DPM/MDV, Disease Outbreak, Certificates, Reports, and Past Data Archival. The 'Individual' section is expanded, showing 'Search Patient' and 'Patient Registration'. The main content area is titled 'Search Patient' and contains a form with the following fields:

Patient ID	Ear Tag Number
Patient ID	Ear Tag No.
Microchip Number	Pet Registration Number
Microchip Number	Pet Registration No.
Owner CID	Animal Name
CID Number	Animal Name

Below the form is a blue 'Search' button. A red box highlights the form fields, and a red arrow points from the 'Search Patient' menu item to the form. The footer of the page reads: Copyright © 2021- 2022 NCAH | VETERINARY INFORMATION SYSTEM.

Figure 8: Search patient parameters

- Upon correctly entering one/more parameters against the registered patient and clicking on the Search button, the animal(s) registered as a patient will be displayed in the search detail table (Figure 8).
- Click on the View Cases button to view the animal owner, the animal and case details (Figure 9)
- Owner and Patient Details can be viewed on unhiding (v symbol) the content. If a case has been registered against the same patient, case details can be viewed (Figure 9).

**Search Patient**

Patient ID:  Ear Tag Number:

Microchip Number:  Pet Registration Number:

Owner CID:  Animal Name:

**Search Details**

Patient ID	Ear Tag No.	Microchip No.	Pet Registration No.	Animal Name	Action
PID2022010010005	ETN111			Gawjei	<input type="button" value="View Cases"/>
PID2022141510014				Cattle	<input type="button" value="View Cases"/>
PID2022010010016				Dawamo	<input type="button" value="View Cases"/>
PID2022010010035		123123	PRN2022001	Lucky Ali	<input type="button" value="View Cases"/>
PID2022010010040	ETN			Kasham	<input type="button" value="View Cases"/>

Patient ID: PID2022010010040

Figure 9: Search details based on the search field(s)

- Under Owner and Patient Details, details recorded during registration of the patient can be viewed. The age and body weight of the patient can be edited -- which will be required when the same patient is presented to a clinic after a certain period -- and updated.
- It's very important to note that this search function enables a clinician to follow up on case referred from another clinic. When a referred patient arrives the clinic where referred to, search the patient through any available details (Figure 8) and proceed.

Patient ID: PID2022010010040

**Owner and Patient Details**

**Owner Details**

CID Number  
10807001416

Dzongkhag  
Bumthang

Village  
Chakhar

Mobile Number  
12222222

Owner Name  
Pelden Wangchuk

Gewog  
Chhoeckhor

Locality

Email ID

**Patient Details**

Animal Ownership Type \*  
Government

Animal Type  
Cattle

Ear Tag Number  
ETN111

Animal Name  
Gawjei

Breed  
Local pure

Sex  
Female

Species  
Bovine

Pet Registration Number \*

Microchip Number

Neuter status

Age  
Year \*  
3

Month \*  
0

Day \*  
0

Body weight (KG)  
122

Note : Age and body weight can be updated.

[Update](#)

Figure 10: Owner details and update options

### 1.3. ADDING CASE (INDIVIDUAL)

Patient ID: PID2022010010040

**Owner and Patient Details**

**Case Details**

CLINICAL    STERILIZATION    DEWORMING    VACCINATION

Sl.No.	Date	Status	View/Edit
Items per page: 5    0 of 0     < < > >			

[Add New Case](#)

Figure 11: Add a new case against a registered patient

- Under Case Details, if a case (clinical, sterilization, deworming and vaccination) has been previously recorded against the same patient, details will show in the Case Details table.

- To add a new clinical, deworming, vaccination, or sterilization case against the registered patient, click on “Add New Case” (Figure 11).
- Upon clicking the “Add New Case” button, options to select the veterinary service type will appear (Figure 12).
- Choose one to proceed; more than one service cannot be selected. If more than one service is required, for example, a patient availing sterilization and vaccination services at a time, one of the two services must be selected and completed and then proceed with the search patient process and complete the other one.

The screenshot shows a web interface titled "Case Details" with a header bar containing four tabs: "CLINICAL", "STERILIZATION", "DEWORMING", and "VACCINATION". The "CLINICAL" tab is currently selected. Below the tabs is a table with columns: "Sl.No.", "Date", "Status", and "View/Edit". Below the table is a pagination bar showing "Items per page: 5", "0 of 0", and navigation arrows. A red rectangular box highlights a section below the table. This section contains the text "Patient ID: PID2022010010035" and a heading "Select Service Type". Under this heading are four radio buttons labeled "Clinical", "Sterilization", "Deworming", and "Vaccination". At the bottom of the form is a blue button with a plus icon and the text "Add New Case".

Figure 12: Options to choose the type of veterinary services

### 1.3.1. Clinical (Individual)

Treatment details against a registered patient are recorded under this service.

- Click on the “Clinical” radio button to open the treatment form/ clinical case sheet.
- Fill in the details as required (Figure 13).
- After selecting the Tentative Diagnosis, if Diagnostic Test Request is not required, the Tentative Diagnosis shall be read as the Final Diagnosis.
- If a Diagnostic Test Request is required, the Final Diagnosis fields (system and condition) can be updated according to the lab findings (Figure 14).
- Under the Treatment section, there are two parts: Procedure and Medications

- More than one procedure can be selected from the Procedure list. For example, pus draining, suturing and dressing can be selected together for a single case.

Patient ID: PID2022141510024

Select Service Type

☒ Clinical ☐ Sterilization ☐ Deworming ☐ Vaccination

**Clinical**

Treatment Date

Anamnesis(Case History)

Observation

**Tentative Diagnosis**

System  Condition\*

Differential Diagnosis\*

**Diagnostic test(s) request**

Diagnostic test(s) request ☐ Yes ☐ No

**Treatment**

Procedure

Brief Remarks

**Medications**

[+ Add](#)

Sl.No.	Medicine Class	Medicine Name	Dose	Dose Unit	Route	Frequency	Duration	Edit	Delete

Items per page: 5 0 of 0 |< < > >|

Advice

[Save As Draft](#) [Follow-Up](#) [Complete](#) [Print](#)

[Add New Case](#)

Figure 13: Clinical (individual) case sheet



**Tentative Diagnosis**

System Condition\*

Select system Select Condition

Differential Diagnosis\*

**Diagnostic test(s) request**

Diagnostic test(s) request ☒ Yes ☐ No

Diagnostic test

**Final Diagnosis**

System Condition

Select system Select Condition

Figure 14: Diagnostic test requested

#### 1.3.1.1. Medications (Individual – Clinical)

- Click on the “Add” button under Medications to show the page where details concerning the medicine administered can be captured (Figure 15).
- Select the Class and Name of the medicines administered, based on which details such as Composition, Presentation, Stock Unit and Stock Balance of the selected medicine shall be fetched from the G2C Veterinary Medicine database maintained for the respective Animal Health Centres.
- Enter Dose, Dose Unit, Route, Frequency and Duration for the medicines administered or to be administered (Figure 15).
- If veterinary medicine is being dispensed with a course to be completed, the course duration must be entered in no. of days in the field “Duration (Days)” (Figure 15).
- For one-time medication or medicines to be administered in the following days (Follow-up cases) in the clinic, enter 1 (one) in the Duration field (Figure 15).
- Click on the “Add” button to add it to the list of medicines administered (Figure 15).
- To add more medicines to the table, click on the “Add” button (Figure 16). It shall redirect the medication page (Figure 15).
- Medicine details can be edited and updated by clicking on the edit (pen) icon or deleted from the same table by clicking on the delete icon (Figure 16).

The screenshot shows the 'Medications' section with a '+ Add' button. A red arrow points from this button to the 'Medication' form. The form contains the following fields:

- Class\***: Select Medicine Class (dropdown)
- Medicine\***: Select Medicine (dropdown)
- Composition**: Composition (text input)
- Presentation**: Presentation (text input)
- Stock Unit**: Unit (text input)
- Stock Balance**: 0 (text input)
- Dose \***: Dose (text input)
- Dose Unit\***: (dropdown)
- Route\***: Select Route (dropdown)
- Frequency\***: Select Frequency (dropdown)
- Duration (Days)\***: Duration (text input)

At the bottom of the form are 'Add' and 'Close' buttons.

Figure 15: Medication page

The screenshot shows the 'Medications' section with a '+ Add' button. A red arrow points from this button to the table. The table has the following columns: Sl.No., Medicine Class, Medicine Name, Dose, Dose Unit, Route, Frequency, Duration, Edit, and Delete.

Sl.No.	Medicine Class	Medicine Name	Dose	Dose Unit	Route	Frequency	Duration	Edit	Delete
1	Antimicrobials	Cefotaxime Inj.	1	ml	Intramuscular	BID/Two times	1		

Figure 16: Medication table and adding more medicines

### 1.3.1.2. End Command Buttons (Individual – Clinical)

At the end of the treatment form, there are four function buttons: Save as Draft, Follow-up, Complete and Print (Figure 13).

- “Save as Draft” saves the page as a draft and it can be completed later; however, another clinical case cannot be processed without completing the draft case or sending it for follow-up.
- If the case needs follow-up treatments, click on the “Follow-up” button.
- If the treatment is a one-time process, end the case by clicking on the “Complete” button.
- The case sheet can be printed by clicking on the “Print” button.

### 1.3.1.3. Completed and Follow-up Clinical Case (Individual – Clinical)

- Depending on the command button, Complete or Follow-up, chosen at the end of the case sheet, the status of the case will be shown accordingly under the Case Details table of a searched patient (Figure 17).
- Case status will show as “Completed” if the Complete command was chosen. It can only be viewed by clicking on the eye icon (Figure 17).
- For Follow-up cases, the status will be shown as “Ongoing” (Figure 17).

**Search Details**

Patient ID	Ear Tag No.	Microchip No.	Pet Registration No.	Animal Name	Action
PID2022010010005	ETN111			Gawjeey	<a href="#">View Cases</a>
PID2022141510014				Cattle	<a href="#">View Cases</a>
PID2022010010016				Dawamo	<a href="#">View Cases</a>
PID2022010010035		123123	PRN2022001	Lucky Ali	<a href="#">View Cases</a>
PID2022010010040	ETN			Kasham	<a href="#">View Cases</a>

Patient ID: PID2022010010040

**Owner and Patient Details**

**Case Details**

CLINICAL    STERILIZATION    DEWORMING    VACCINATION

Sl.No.	Date	Status	View/Edit
1	Aug 7, 2022	Completed	<a href="#">View</a>
2	Aug 20, 2022	Ongoing	<a href="#">Edit</a>

Items per page: 5    0 of 0    < > >|

[Add New Case](#)

Figure 17: The case history of a registered patient

- To complete the follow-up case, click on the pen icon against the ongoing case. It will enable the Follow-up button (Figure 18).
- Click on the “Add Follow-up” button. It will redirect to open the clinical case sheet where all the treatment details can be recorded (Figure 13).
- To add a new case against the same animal, click on the “Add New Case” button (Figures 17 & 18) which will open a new case sheet where all the treatment details can be recorded (Figure 13). If the same animal is presented to a clinic after a few days, weeks, months, or years, this process can be used to record treatment details, thus forgoing the registration process.

**Case Details**

CLINICAL      STERILIZATION      DEWORMING      VACCINATION

Sl.No.	Date	Status	View/Edit
1	Aug 7, 2022	Completed	
2	Aug 20, 2022	Ongoing	

Items per page: 5      0 of 0      |< < > >|

Sl.No.	Date	View
1	Aug 20, 2022	

Items per page: 5      0 of 0      |< < > >|

**+ Add Follow-Up**

**+ Add New Case**

Figure 18: Adding a follow-up case

### 1.3.2. Sterilization (Individual)

This service shall be used during the sterilization of an animal. It records detailed medication information, unlike the DPM service (See 4.1) where, in the interest of time and work intensity, medication details are not captured.

- Under Select Service Type (Figure 12), select the radio button “Sterilization”. It will open the page where details concerning the sterilization of the patient can be recorded (Figure 19).
- Fields to be filled are Sterilization Date, Brief Observation, Medications and Advice (Figure 19).
- The medication section is exactly like a clinical service where details concerning all the medicines administered must be recorded (Figure 15).
- Sterilization is a single process, and it can be ended by clicking on the “Complete” button (Figure 19).
- In a situation where the patient is presented to a clinic with post-surgical complications calling for treatment procedures, it must be entered as a new case, now under the “Clinical” service type. Click on the “Add New Case” button to start a case (Figures 17 & 18).
- Viewing the sterilization case details is the same as the “Clinical” service type.

Patient ID: PID2022010010035

Select Service Type

☐ Clinical ☒ Sterilization ☐ Deworming ☐ Vaccination

### Sterilization

Sterilization Date\*

28/08/2022

Brief Observation

Normal RPT

Medications

+ Add

Sl.No.	Medicine Class	Medicine Name	Dose	Dose Unit	Route	Frequency	Duration	Edit	Delete
1	Analgesic and antipyretics	Tramadol inj.	0.3	ml	Intramuscular	OID/One time	1		

Items per page: 5 0 of 0 |< < > >|

Brief Advice

Regularly monitor the suture site and wound healing progress

Complete Save As Draft

Figure 19: Sterilization (individual) case sheet

### 1.3.3. Deworming (Individual)

This service is to record information during the deworming of an individual animal. During the deworming of a herd/flock, details must be recorded through the Mass Deworming service (See 2.3.2).

- Click the “Deworming” radio button to record data during deworming of a patient, fill in the required details and end the process by clicking the “Complete” button (Figure 20).

Patient ID: PID2022010010035

Select Service Type

☐ Clinical ☐ Sterilization ☒ Deworming ☐ Vaccination

#### Deworming

Deworming Date\*

29/08/2022

Tentative Diagnosis

Condition

Fasciolosis

Differential Diagnosis

Other GI Parasites

Diagnostic test(s) request ☐ Yes ☒ No

Final Diagnosis

Conditions

Fasciolosis

Medications

+ Add

Sl.No.	Medicine Class	Medicine Name	Dose	Dose Unit	Route	Frequency	Duration	Edit	Delete
1	Anthelmintics	Triclabendazole bolus2		bolus	Oral	OID/One time1			

Items per page: 5 0 of 0 |< < > >|

Brief Advice

Complete Save As Draft

Figure 20: Deworming (individual) case sheet.

### 1.3.4. Vaccination (Individual)

This service is to record information during the vaccination of an individual animal. During the mass vaccination of dogs, vaccination data shall be recorded through the MDV service (See 4.2) and vaccination of herd/flock will be recorded under the Mass Vaccination service (See 4.2)

- Click on the “Vaccination” radio button to record data during the vaccination of a registered patient, fill in the required details and end the process by clicking the “Complete” button.

Patient ID: PID2022010010035

Select Service Type

☐ Clinical
 ☐ Sterilization
 ☐ Deworming
 ☒ Vaccination

**Vaccination**

Brief Observation

Normal RPT

Vaccine Type \*  
DHPPi+L primary

Vaccination Date \*  
29/08/2022

Due Date  
20/09/2022

**Adverse Events Following Immunization(AEFI)**

Reaction ☒ Yes ☐ No

Reaction Name  
Redness at injection site

Complete Save As Draft

Figure 21: Vaccination (individual) case sheet

- If an AEFI is reported and recorded, it will be treated as a new clinical case wherein treatment details will be recorded.

## 2. MASS

This service shall be used when treating (clinical), deworming (including ectoparasitic control) and vaccinating animals in group/mass, at herd/flock level. Domestic animals belonging to an owner are grouped and recorded according to the veterinary service rendered. The term “Deworming” under Mass service includes Ectoparasitic Control as well.

### 2.1. MASS REGISTRATION

- Since the mass service is to be recorded at a household level, registration of the flock/herd owner must be completed first.
- Click of MASS, followed by Mass Registration (Figure 22).

The screenshot displays the 'Mass Registration' form. On the left, a dark sidebar contains a navigation menu with options: Home, Individual, Mass (selected), Search, Mass Registration, Pet Information Management, DPM/MDV, Disease Outbreak, Certificates, Reports, and Past Data Archival. The 'Mass' section is highlighted with a red box, and an arrow points from 'Mass Registration' to the main form area. The main form has a blue header 'Mass Registration' and a section titled 'Owner Detail'. It features two radio buttons: 'Bhutanese' (selected) and 'Non-Bhutanese'. Below these are several input fields: 'CID Number\*' (with a placeholder 'CID Number'), 'Owner Name\*' (with a placeholder 'Owner Name'), 'Present Address' section containing 'Dzongkhag\*' (dropdown with 'Select Dzongkhag'), 'Village' (dropdown with 'Select Village'), 'Gewog\*' (dropdown with 'Select Gewog'), and 'Locality' (text input). Further down are 'Mobile Number\*' (placeholder 'Mobile Number') and 'Email ID' (placeholder 'Email ID'). At the bottom is an 'Animal Ownership Type \*' dropdown and a blue 'Submit' button.

Figure 22: Mass service and owner registration fields

- Enter all the mandatory fields, marked by an asterisk (Figure 22).
- Owner Details shall be recorded here. If the herd/flock’s owner is a Bhutanese, the CID number must be entered, and the full name shall be fetched accordingly from the census registry (Figure 22).
- For non-Bhutanese, passport/ work permit number must be entered followed by the country name (Figure 23).



- For a Bhutanese without a CID card, Per ID (identity number provided by the Department of Civil Registration and Census) must be entered and select Bhutan from the country name list. The owner's name must be entered manually (Figure 23). It must be remembered that the registration procedure in this system doesn't validate the individual's citizenship and it's solely for the purpose of registering an animal for treatment or any other relevant veterinary services.

Figure 23: Registration for non-Bhutanese or Bhutanese without CID

- After filling up all the fields of the herd/flock owner's registration, click on the "Submit" button (Figure 22). A Mass Registration Number (MRN) will be generated by the system and redirected to the page where Animal, Service Type and Medication details can be added for the flock/herd (Figure 24).

Type of Service	Animal Type	View	Delete

Figure 24: MRN generated and redirection to the mass service page

## 2.2. SEARCH (MASS)

- To search for a registered herd/flock owner, click on “Search” under “Mass”. It shall open a page where the system user can search for a registered herd/flock owner by entering MRN or CID in the search field (Figure 25).

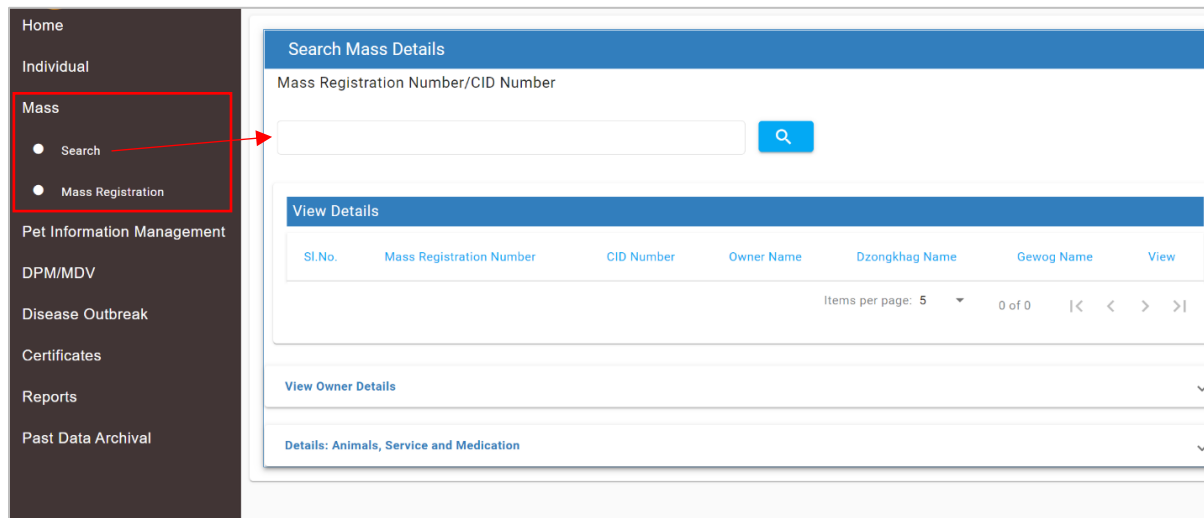


Figure 25: Mass search page

- Upon entering the owner’s CID/MRN, the View Details table will be filled accordingly (Figure 26).
- To view the owner and other mass details if any, click on the view (eye) icon (Figure 26).
- To view the registered herd/flock owner’s detail, click on the unhide (v) icon of the “View Owner Details” page (Figure 26).

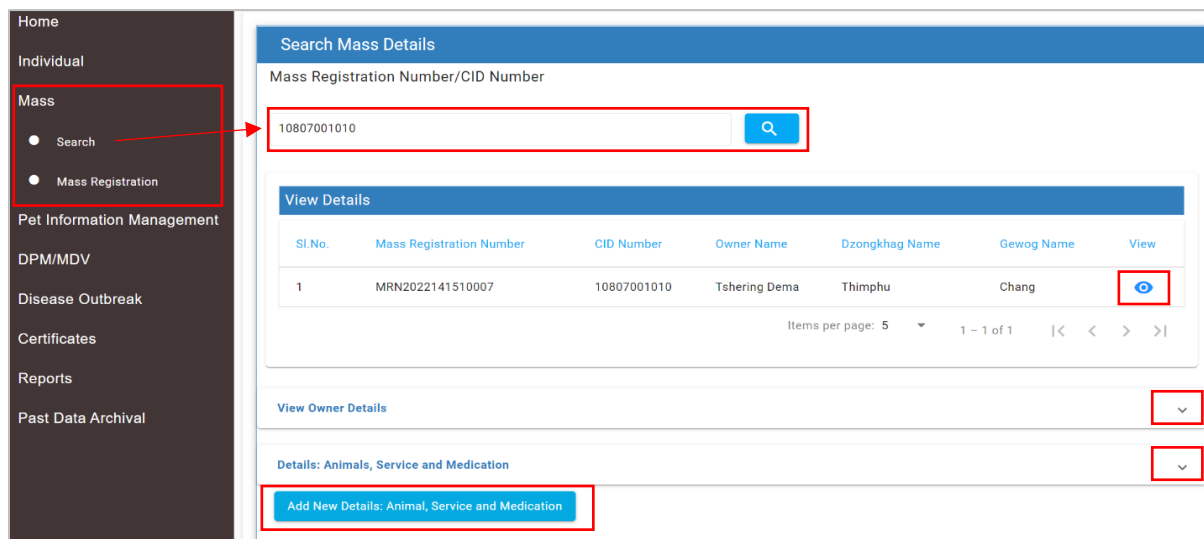


Figure 26: Mass details table

- If a mass service is to be added for the first time, click on the “Add New Details: Animal, Service and Medication” button to enter the mass details (Figure 26).
- If Mass services (clinical, deworming and vaccination) were recorded against the same owner earlier, all these services can be viewed by unhiding the “Details: Animals, Service and Medication” page (Figure 27).

The screenshot displays the MASS system interface. At the top, there is a search bar with the value "10807001416" and a magnifying glass icon. Below this is a "View Details" section containing a table with columns: SI.No., Mass Registration Number, CID Number, Owner Name, Dzongkhag Name, Gewog Name, and View. The table has two rows of data. A red box highlights the "View" column, and a red arrow points from one of the eye icons to the "Details: Animals, Service and Medication" section below. This section is currently collapsed, indicated by a downward arrow. A red box highlights the upward arrow icon in the top right corner of this section. Below the collapsed section is a table titled "Details: Animals, Service and Medication" with columns: SI.No., Date, Service, Species Name, Animal Name, and View. This table contains four rows of service records. A red box highlights the entire "Details: Animals, Service and Medication" section. At the bottom of the interface is a button labeled "Add New Details: Animal, Service and Medication".

SI.No.	Mass Registration Number	CID Number	Owner Name	Dzongkhag Name	Gewog Name	View
1	MRN2022141510005	10807001416	Pelden Wangchuk	Thimphu	Chang	
2	MRN2022040360006	10807001416	Pelden Wangchuk	Gasa	Khatoed	

Items per page: 5    1 - 2 of 2    |< < > >|

**View Owner Details** ▼

**Details: Animals, Service and Medication** ▲

SI.No.	Date	Service	Species Name	Animal Name	View
1	Aug 10, 2022	Deworming	Poultry	Chicken	
2	Aug 31, 2022	Deworming	Bovine	Mithun	
3	Aug 31, 2022	Deworming	Caprine	Goat	
4	Aug 31, 2022	Vaccination	Bovine	Yak	

Items per page: 5    0 of 0    |< < > >|

**Add New Details: Animal, Service and Medication**

Figure 27: Mass detail history

### 2.3. ANIMAL, SERVICE TYPE AND MEDICATION DETAILS (MASS)

Details such as animal, service type and medication can be entered directly following “Mass Registration” if mass service is given for the first time, or through “Search” if the owner has been already registered in the past. In both cases, it system user shall be directed to the mass details page (Figure 24).

- Click on the “Add Animal Details, Service and Medication” button to add mass details. At first, the mass details table will be empty (Figure 24).

- The “Add Animal Details, Service and Medications” page will pop up where details such as date, species, animal type, breed and service type must be entered (Figure 28).
- The “Service” field will appear only upon selection of a Species because service type is dependent on the species type. The “Deworming” and “Vaccination” services will appear for all kinds of species; however, the mass “Clinical” service will only appear if the selected species is Poultry/Ovine/Swine/Bovine/Aquatic (Figure 28).

Home

Individual

**Mass**

- Search
- Mass Registration

Pet Information Management

DPM/MDV

Disease Outbreak

Certificates

Reports

Past Data Archival

Mass Registration Number: MRN2022141510005

**+ Add Animal Details, Service and Medications**

**Add Animal Details, Service and Medications**

Date\* 31/08/2022

Species\* Bovine

Animal Type\* Cattle

Breed\* Crossbreed

Service\*

**+ Save Close**

Figure 28: Page to select a mass service type

- Select a Service to open other dependent pages where other detailed information can be entered (Figure 28).

### 2.3.1. Clinical (Mass)

- Upon selecting “Clinical” as the “Service”, other related fields will be opened where animal and medication details can be recorded (Figure 29).

Add Animal Details, Service and Medications

Date\*

01/08/2022

Species\*

Poultry

Animal Type\*

Breed\*

Local pure

Service\*

Clinical

Number of Animals

Age\*

Male

Male

Female

Female

Mixed

Mixed

Total

Total

+ Add More

Add Medicine

+ Save

Close

Figure 29: Mass clinical service fields (animal and medicines)

### 2.3.1.1. Animal Details (Mass – Clinical)

- The number of birds to be treated can be entered with categorization into different age and sex groups (Figure 30).
- Select the birds' age group and enter their number under respective sex fields (Figure 30).
- Click on the "Add More" button to add the filled values to the data table. Different age and sex combinations can be added to the table by filling the fields as per the need and adding them through the "Add More" button. Since the data table is the same for clinical, deworming

and vaccination services, the vaccination status column header appears for all the services; therefore, it must be ignored (Figure 30).

**Add Animal Details, Service and Medications**

Service\*  
Clinical

Number of Animals

Age\*  
Adult

Male  
1200

Female  
1200

Total  
2400

+ Add More

Age	Female	Male	Mixed	Total	Vaccination Status	Delete
Pullet	2000			2000		
Chick	1222			1222		

Figure 30: No. of animals (clinical)

### 2.3.1.2. Medications (Mass – Clinical)

- After entering the number of birds to be treated, click on the “Add Medicine” button (Figure 29) to enter details of the medicines to be administered to the flock (Figure 31).
- Select the Class and Name of the medicines administered, based on which details such as Composition, Presentation, Stock Unit and Stock Balance of the selected medicine shall be fetched from the G2C Veterinary Medicine database maintained for the respective Animal Health Centres (Figure 31).
- Enter Total Dose, Dose Unit, Route, Frequency and Duration for the medicines administered or to be administered (Figure 31). The medicine’s “Total Dose” field must be filled with the dose value at the herd/flock level. If 1 Kg (1000 grams) of mineral mixture is recommended for 1000 birds, Total Dose for the flock is 1000 grams, therefore, in the “Total Dose” field, enter “1000”.
- If veterinary medicine is being dispensed with a course to be completed, the course duration must be entered in no. of days in the field “Duration (Days)” (Figure 31).

- Click on the “Add” button (Figure 31) to add the entered medicine to the table of medicines (Figure 32) to be administered for the given flock.

Add Medicine

<p>Class*:</p> <div style="border: 1px solid #ccc; padding: 2px; display: flex; justify-content: space-between; align-items: center;"> Minerals <span>▼</span> </div>	<p>Medicine*:</p> <div style="border: 1px solid #ccc; padding: 2px; display: flex; justify-content: space-between; align-items: center;"> Mineral Mixture powder <span>▼</span> </div>
<p>Composition</p> <div style="border: 1px solid #ccc; padding: 2px;">Ca, P, Mn, Nacl, Mg, Zn, I, Co, Cu</div>	<p>Presentation</p> <div style="border: 1px solid #ccc; padding: 2px;">1kg pkt</div>
<p>Stock</p> <div style="border: 1px solid #ccc; padding: 2px;">121</div>	<p>Stock Unit</p> <div style="border: 1px solid #ccc; padding: 2px;">kg</div>
<p>Dose*:</p> <div style="border: 1px solid #ccc; padding: 2px;">100</div>	<p>Dose Unit*:</p> <div style="border: 1px solid #ccc; padding: 2px; display: flex; justify-content: space-between; align-items: center;"> mg <span>▼</span> </div>
<p>Route*</p> <div style="border: 1px solid #ccc; padding: 2px; display: flex; justify-content: space-between; align-items: center;"> Oral <span>▼</span> </div>	<p>Frequency*:</p> <div style="border: 1px solid #ccc; padding: 2px; display: flex; justify-content: space-between; align-items: center;"> BID/Two times <span>▼</span> </div>
<p>Duration (Days)*:</p> <div style="border: 1px solid #ccc; padding: 2px;">14</div>	

+ Add

Close

Figure 31: Medication fields (mass - clinical)

- Multiple types of medicines administered to the flock can be added to the list by clicking on the “Add Medicine” button (Figure 32) which will redirect to the page to enter medication details.
- After entering the flock and medication details, save the data by clicking on the “Save” button (Figure 32).

- Multiple services can be added for the same flock. Data entry against a flock treated, dewormed and vaccinated on a day can be done as shown in Figure 33.

Add Animal Details, Service and Medications

Clinical

Number of Animals

+ Add More

Age\*

Male

Female

Total

Age	Female	Male	Mixed	Total	Vaccination Status	Delete
Pullet	5000			5000		

+ Add Medicine

Medicine Class	Medicine Name	Dose	Dose Unit	Route	Frequency	Duration	Delete
Antimicrobials	Sulphadiazine + Trimethoprim powder	500	gm	Oral	BID/Two times	5	
Minerals	Mineral Mixture powder	300	gm	Oral	BID/Two times	14	

+ Save

Close

Figure 32: Medication table (mass - clinical)

- Other animal types or other services can be added for the same owner by clicking on the “Add Animal Details, Services and Medications” button (Figure 33).
- To complete the process of mass service(s) and submit the final data, click on the “Submit” button (Figure 33). It will be added to the mass detail history table (Figure 27), and it can be searched and viewed.



Mass Registration Number: MRN2022141510005

+ Add Animal Details, Service and Medications

Type of Service	Animal Type	View	Delete
Clinical	Chicken		
Deworming	Chicken		

Submit

Figure 33: Final data submission (mass - clinical)

### 2.3.2. Deworming (Mass)

Upon selecting “Deworming” as the “Service”, other related fields will be opened where animal and medication details can be recorded (Figure 34). Medications for ectoparasitic control in a herd/flock can be added under this service.

Add Animal Details, Service and Medications

Date\*
30/08/2022

Species\*
Bovine

Animal Type\*
Cattle

Breed\*
Crossbreed

Service\*
Deworming

Number of Animals

+ Add More

Age\*
Select Age

Male
Male

Female
Female

Total
Total

Age	Female	Male	Mixed	Total	Vaccination Status	Delete
Adult	22	22		44		
Young	2	2		4		

+ Add Medicine

+ Save
Close

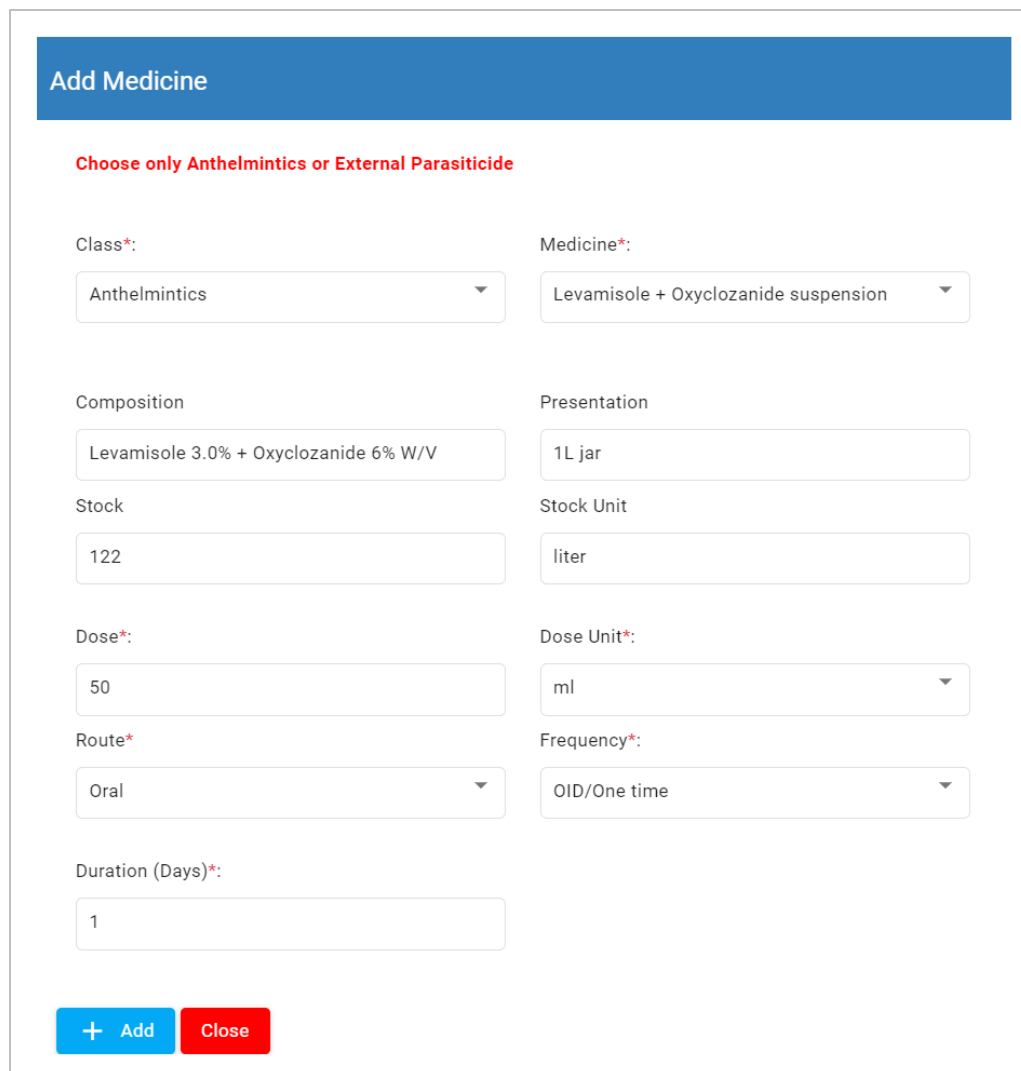
Figure 34: Animal details under mass deworming

### 2.3.2.1. Animal Details (Mass – Deworming)

Addition of details of the group of animals (flock/herd) to be dewormed is exactly as described under the mass clinical section (See 2.3.1.1). Age- and sex-specific number of animals can be grouped and dewormed (Figure 34).

### 2.3.2.2. Medication (Mass – Deworming)

- To add deworming medication details against the flock/herd, click on the “Add Medicine” button (Figure 34). The medication page will be opened to enter the details concerning the anthelmintics or external parasiticide to be used for treatment of the affected herd/flock (35).
- Fill in all the medication details and click on the “Add” button to add to the medication table (Figure 35).



The screenshot shows a web form titled "Add Medicine" with a blue header. Below the header, a red instruction reads "Choose only Anthelmintics or External Parasiticide". The form contains several input fields and dropdown menus arranged in two columns. On the left side, the fields are: "Class\*" (dropdown with "Anthelmintics" selected), "Composition" (text input with "Levamisole 3.0% + Oxcyclozanide 6% W/V"), "Stock" (text input with "122"), "Dose\*" (text input with "50"), "Route\*" (dropdown with "Oral" selected), and "Duration (Days)\*" (text input with "1"). On the right side, the fields are: "Medicine\*" (dropdown with "Levamisole + Oxcyclozanide suspension" selected), "Presentation" (text input with "1L jar"), "Stock Unit" (text input with "liter"), "Dose Unit\*" (dropdown with "ml" selected), and "Frequency\*" (dropdown with "OID/One time" selected). At the bottom left, there are two buttons: a blue "+ Add" button and a red "Close" button.

Figure 35: Medication page (mass - deworming)

- More than one medicine can be added to the same flock/herd by clicking on the “Add Medicine” button (Figure 36). It shall redirect to the medication page (Figure 35).
- After all the medicine details are entered, save the details by clicking on the “Save” button (Figure 36).

### Add Animal Details, Service and Medications

Service\*:

Number of Animals

Age\*

Male

Female

Total

Age	Female	Male	Mixed	Total	Vaccination Status	Delete
Adult	165	212		377		

Medicine Class	Medicine Name	Dose	Dose Unit	Route	Frequency	Duration	Delete
External Parasiticide	Deltamethrin solution	7.5	mg	skin topical	OID/One time	1	

Figure 36: Medication table (mass - deworming)

- To complete the process of mass deworming and submit the final data, click on the "Submit" button (Figure 37). It will be added to the mass detail history table (Figure 27), and it can be searched and viewed.

Mass Registration Number: MRN2022141510005

Type of Service	Animal Type	View	Delete
Deworming	Chicken		

Figure 37: Final data submission (mass - deworming)

### 2.3.3. Vaccination (Mass)

This service is for recording data during mass vaccination of herds/flocks. However, this service is not recommended for data entry during mass dog vaccination, which must be entered in the MDV service (See 4.2).

- Select “Vaccination” from the Service list (Figure 38). Other relevant fields will open for data entry.
- Under the “Number of Animals” section, the “Vaccination Status” field allows the user to enter data concerning animals “Vaccinated” or “Not Vaccinated” (Figure 38). Based on the Vaccination Status options selected, different data entry fields will open up.

**Add Animal Details, Service and Medications**

Date\* 02/09/2022 Species\* Bovine

Animal Type\* Cattle Breed\* Exotic pure

Service\* Vaccination

Number of Animals

Vaccination Status\* Vaccinated Not Vaccinated

Age\* Female

Female Female

Total Total

+ Save Close

+ Add More

Figure 38: Vaccination status selection (mass - vaccination)

#### 2.3.3.1. Detail of animals vaccinated

- Upon selecting “Vaccinated” under the Vaccination Status field, other relevant fields shall appear to enter the age- and sex-specific number of animals vaccinated (Figure 39).

- Enter the herd/flock-specific number of animals vaccinated and click on the “Add More” button to add the data to the table of vaccinated animals.

### Add Animal Details, Service and Medications

Date\*  
02/09/2022

Species\*  
Bovine

Animal Type\*  
Cattle

Breed\*  
Local pure

Service\*  
Vaccination

#### Number of Animals

Vaccination Status\*  
Vaccinated

Age\*  
Young

Male  
3

Female  
3

Total  
6

+ Add More

Age	Female	Male	Mixed	Total	Vaccination Status	Delete
Adult	6	12		18	Vaccinated	

+ Choose Vaccine Type

+ Save
Close

Figure 39: Detail of animals vaccinated

#### 2.3.3.2. Detail of animals not vaccinated

In a herd/flock, if some of the animals are not vaccinated due to various reasons, details shall be captured here. To enter this detail, select “Not Vaccinated” from the “Vaccination Status” dropdown.

### Add Animal Details, Service and Medications

Date\*  
02/09/2022

Species\*  
Bovine

Animal Type\*  
Cattle

Breed\*  
Local pure

Service\*:  
Vaccination

Number of Animals

Vaccination Status\*  
Not Vaccinated

Age\*  
Young

Male  
1

Female  
1

Total  
2

Name/IDs of non-vaccinated animals  
Sermo, Karma

Reasons for not vaccinating  
Underage (20 days old)

+ Add More

Age	Female	Male	Mixed	Total	Vaccination Status	Delete
Adult	6	12		18	Vaccinated	
Young	4	2		6	Vaccinated	
Adult	2			2	Not Vaccinated	

+ Choose Vaccine Type

+ Save
Close





Figure 40: Details of animals not vaccinated

- Upon selecting “Not Vaccinated” under the “Vaccination Status” field, other relevant fields shall appear to enter the age- and sex-specific number of animals not vaccinated and some additional details (Figure 40).
- Enter the age-specific number of animals not vaccinated in a herd/flock (Figure 40).
- Type the name/ID of the animals left unvaccinated and the reason(s) for not vaccinating (Figure 40).


### 2.3.3.3. Adding Vaccine Type


After entering the detail of the animals vaccinated and unvaccinated, the name of the vaccine against which these animals are vaccinated or not vaccinated must be selected.


- Click the “Choose Vaccine Type” button (Figure 41).
- Select the vaccine name from the dropdown, following which the vaccine name shall be added to the vaccine type table.

Age	Female	Male	Mixed	Total	Vaccination Status	Delete
Adult	6	12		18	Vaccinated	
Young	4	2		6	Vaccinated	
Adult	2			2	Not Vaccinated	
Young	1	1		2	Not Vaccinated	

 Choose Vaccine Type

Vaccine Type	Delete
FMD annual	

 Save

Close

Figure 41: Adding vaccine type

- After adding all the details of mass vaccination of a herd/flock, save the details by clicking the “Save” button. It will add the details to the general table of mass service(s).
- To complete the process of mass service(s) and submit the final data, click on the “Submit” button (Figure 42). It will be added to the mass detail history table (Figure 27), and it can be searched and viewed.



Mass Registration Number: MRN2022141510005

+ Add Animal Details, Service and Medications

Type of Service	Animal Type	View	Delete
Vaccination	Cattle		

Submit

Figure 42: Figure 37: Final data submission (mass - vaccination)

### 3. PET INFORMATION MANAGEMENT

This service shall be used when registering a pet animal. For a pet dog to get registered, a microchip must have been implanted and its unique chip number must be recorded during the registration of the pet into the system. The pet's information must be regularly updated.

The four sub-services under the service are Pet Registration, Renewal and Update, Ownership Transfer and Pet Information. To view these sub-services, click on "Pet Information Management" (Figure 43).

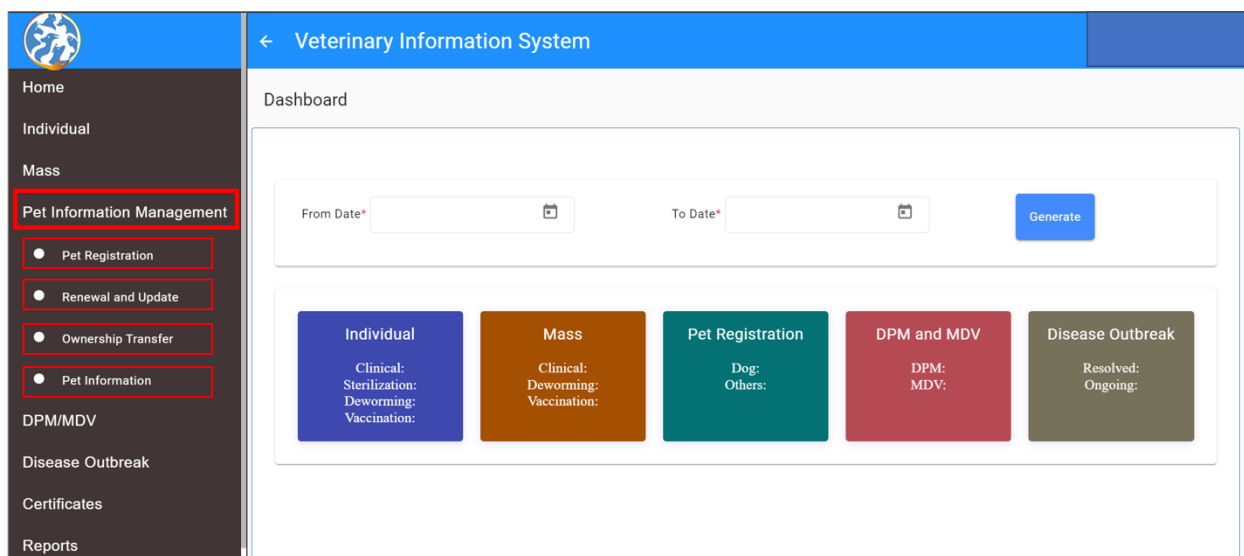


Figure 43: Pet Information Management and sub-services

#### 3.1. PET REGISTRATION

When a pet animal is presented to a clinic for registration, this service must be used. For a PET DOG to get registered into the system, the dog must first be microchipped.

- Click on "Pet Registration" under Pet Information Management (Figure 44).
- Enter all the required details and submit the registration. Without filling in the mandatory fields, the registration cannot be submitted; it will be prompted with error messages (Figure 44).
- If the "Animal Ownership Type" is selected as Royal, the CID field is non-mandatory. However, if the dog master comes with the detail, it can be entered. In some cases, the dog master's CID and name can be entered for reference.
- On entering the CID number, the pet owner's name should be auto-filled – validate in reference to the CID card presented.
- For non-Bhutanese, the passport/ work permit number must be entered followed by the country name.

- For Bhutanese without a CID card, Per ID (identity number provided by the Department of Civil Registration and Census) must be entered and select Bhutan from the country name list. The owner's name must be entered manually. It must be remembered that the registration procedure in this system doesn't validate the individual's citizenship and it's solely for the purpose of registering an animal for treatment or any other relevant veterinary services.

**Veterinary Information System**

### Pet Registration

Registration Date \*  
Select Registration Date

Animal Ownership Type \*  
Select Ownership Type

**Owner Details**

☒ Bhutanese ☐ Non-Bhutanese

CID Number \*  
CID Number

Owner Name \*  
Owner Name

**Present Address**

Dzongkhag \*  
Select Dzongkhag

Gewog \*  
Select Gewog

Village  
Enter Locality

Mobile Number \*  
Mobile Number

Email ID  
Email ID

**Pet Details**

Species \*  
Select Species

Breed \*  
Select Breed

Pet Name \*  
Enter Pet Name

Colour \*  
Enter Colour

Distinguishing Mark \*  
Distinguishing mark

Age  
Year Month Day

Sex \*  
☐ Male ☐ Female

Neuter Status \*  
Select Neuter Status

Revenue Receipt Number  
Revenue Receipt Number

Pet Renewal Date \*  
Pet Renewal Date

Upload Pet's Photo  
Choose File No file chosen

**Submit**

Figure 44: General pet registration page

- In the age field, from the three sub-fields, one must be filled. Remember that the age fields are not for date of birth, it's for the age count in year/month/day. For example: for a pup of 9 months, enter "9" under the month field and leave the other two empty (Figure 44).
- If the "Neuter Status" is selected "No", select the "Breeder Status" (if the pet is being kept for breeding purposes or not).
- The Pet renewal date shall be auto filled based on the registration date.
- A clear photo of the pet must be uploaded during the registration process.

**Pet Details**

Species \*  
Canine

Breed \*  
Select Breed

Pet Name \*  
Enter Pet Name

Colour \*  
Enter Colour

Age  
Year Month Day

Microchip Number \*  
Microchip Number

Distinguishing Mark \*  
Distinguishing mark

Sex\*  
☐ Male ☐ Female

Neuter Status \*  
Select Neuter Status

Revenue Receipt Number  
Revenue Receipt Number

Pet Renewal Date\*  
Pet Renewal Date

Upload Pet's Photo  
Choose File No file chosen

Upload Barcode Image\*  
Choose File No file chosen

Submit

Figure 45: Additional registration fields for canine species

- If "Canine" is selected from the "Species" dropdown, two additional fields will appear: Microchip Number and Upload Barcode Image fields.
- The microchip number (15 digits) of a pet dog must be entered very carefully. For validation of the microchip number in future, a picture of the barcode of the impregnated microchip must be uploaded.

The image shows a web application interface for Pet Information Management. On the left is a dark sidebar with a menu. The 'Pet Registration' option is highlighted with a blue bar and a white arrow pointing to the main form. Below it are options for 'Renewal and Update', 'Ownership Transfer', 'Pet Information', 'DPM/MDV', 'Disease Outbreak', 'Certificates', 'Reports', and 'Past Data Archival'. The main form is titled 'Pet Registration' and contains several sections: 'Registration Date' (calendar icon), 'Animal Ownership Type' (dropdown), 'Owner Details' (radio buttons for 'Bhutanese' and 'Non-Bhutanese'), 'CID Number' (text input), 'Owner Name' (text input), 'Present Address' (dropdown for 'Dzongkhag', text input for 'Village', dropdown for 'Gewog', text input for 'Locality'), 'Mobile Number' (text input), 'Email ID' (text input), 'Pet Details' (dropdown for 'Species', dropdown for 'Breed', text input for 'Pet Name', text input for 'Microchip Number', text input for 'Colour', date inputs for 'Age' (Year, Month, Day), dropdown for 'Neuter Status', text input for 'Distinguishing Mark', dropdown for 'Sex' (Male, Female), text input for 'Revenue Receipt Number', text input for 'Pet Renewal Date', 'Upload Pet's Photo' (Choose File, No file chosen), and 'Upload Barcode Image' (Choose File, No file chosen). A red box highlights the 'Submit' button at the bottom of the form. Below the form is a large teal dialog box titled 'Acknowledgement' with the text 'Pet Registration Number is: PRN2022010010001' and an 'OK' button. A red arrow points from the 'Submit' button to the dialog box.

Figure 46: Pet registration submission and generation of PRN

- After entering all the mandatory fields, click on the “Submit” button to save and submit the registration (Figure 46).
- On submission, the Pet Registration Number (PRN) of the pet will be generated by the system based on the present address of the pet owner (Figure 46).
- All the details recorded in the system must be transferred to the pet registration booklet which must be handed over to the rightful pet owner for future reference.

### 3.2. RENEWAL AND UPDATE

To renew the registration or update pet information, this service shall be used. In this service, “Renewal” refers to the annual renewal of the pet’s registration and “Update” refers to the timely update of information about the registered pet animal.


- Click on the “Renewal and Update” submenu (Figure 47).
- Enter the pet animal’s Microchip Number or Pet Registration Number to fetch the registration details (Figure 47).
- Renew or update information as required.



The screenshot displays the 'Pet Registration Renewal and Update' service interface within the 'Veterinary Information System'. The sidebar on the left shows the navigation menu with 'Renewal and Update' highlighted. The main content area features a search bar labeled 'Search\*' with a placeholder 'Pet Registration Number/Microchip Number' and a search icon. Below the search bar, there are fields for 'Update Pet's Photo\*' (with a 'Choose File' button), 'Pet Registration Number' (with a placeholder 'Pet registration Number'), 'Registration Date' (with a calendar icon), 'Animal Ownership Type\*' (with a placeholder 'Animal Ownership Type'), and 'Owner Details' (with fields for 'Nationality' and 'CID Number').

Figure 47: Pet registration renewal and information update service

- Pet information update is necessary during the death or loss of the pet animal, change in the present address of the owner; however, if required, some other details about the pet can be updated as well. The updatable fields (Figure 48) are:
  - Pet’s Photo
  - Present Address – Dzongkhag, Gewog, Village, Locality, Mobile Number and Email ID
  - Pet Details – Colour, Distinguishing Mark, Age, Neuter Status and Status (Live/Dead/Missing).

Search\*

982126088542729 

Update Pet's Photo\*  No file chosen

Pet Registration Number  
PRN20221415925161

Animal Ownership Type\*  
Public

Registration Date  
03/09/2022

### Owner Details

Nationality  
Bhutanese

CID Number  
10302000298

Owner Name  
Rinchen Jamtsho

### Present Address

Dzongkhag  
Thimphu

Gewog\*  
Thim Throm

Village  
Thim Throm

Locality\*  
Lungtenphu

Mobile Number\*  
77631275

Email ID  
Email ID

### Pet Details

Pet Name  
Tiger

Microchip Number  
982126088542729

Species  
Canine

Breed  
German Shepherd Dog/Alsatian

Colour  
Black brown

Distinguishing Mark  
No

Age  
Year Month Day  
4 1

Sex  
Male

Neuter Status  
No

Status\* ☒ Alive ☐ Dead ☐ Missing

Next Renewal Date  
03/09/2023

Revenue Receipt Number  
Revenue Receipt Number

Figure 48: Pet information updatable fields

- For renewing the registration,
  - Select the live/dead/missing status of the pet animal
  - Enter the Next Renewal Date

**Pet Details**

Pet Name

Species

Breed

Colour

Distinguishing Mark

Age

Year  Month  Day

Sex

Status\* ☒ Alive ☐ Dead ☐ Missing

Next Renewal Date

Revenue Receipt Number

**Update**

Figure 49: Pet registration renewal fields to update

- After entering the information update details or renewal details, click on the “Update” button to update the information.

### 3.3. OWNERSHIP TRANSFER

This service must be used to update pet details after a change in the pet’s owner.

- Click on the “Pet Ownership Transfer” submenu (Figure 50).
- Enter the pet animal’s Microchip Number or Pet Registration Number to fetch the registration details (Figure 50).
- Update the information to transfer the registration to the new owner.
- Other than the Initial Registration Date, Pet Registration Number, Microchip Number, Species and Breed, all other fields are editable in the ownership transfer service (Figure 51).
- After entering all the details, click “Transfer” (Figure 51) to transfer the registration to the new pet owner.



**Veterinary Information System** Dr Pelden Wangchuk  
NCAH Thimphu

**Pet Ownership Transfer**

Search\*

Pet Registration Number/Microchip Number

Pet Registration Number

Registration Number

Animal Ownership Type \*

Select Animal Ownership Type

Registration Date

Registration Date

**Owner Details**

☐ Bhutanese ☐ Non-Bhutanese

CID Number\*

CID

Owner Name

Owner Name

Figure 50: Pet ownership transfer service

Pet Registration Number

PRN20221415925161

Animal Ownership Type \*

Public

Registration Date

03/09/2022

**Owner Details**

☒ Bhutanese ☐ Non-Bhutanese

CID Number\*

10302000298

Owner Name

Rinchen Jamtsho

Present Address

Dzongkhag\*

Thimphu

Gewog\*

Thim Throm

Village

Thim Throm

Locality

Lungtenphu

Mobile Number\*

77631275

Email ID

Email ID

**Pet Details**

Pet Name

Tiger

Microchip Number

982126058542729

Species

Canine

Breed

German Shepherd Dog/Alsatian

Colour

Black brown

Distinguishing Mark

No

Age

Year: 2022, Month: 4, Day: 1

Sex

Male

Neuter Status

No

Breeder Status

☐ Yes ☒ No

Revenue Receipt Number

Revenue Receipt Number

Next Renewal Date

03/09/2023

**Transfer**

Figure 51: Editable fields during ownership transfer

### 3.4. PET INFORMATION

This service is to view the information about the registered pet. All the updated information about the pet can be viewed here, including the vaccination and deworming details updated from other services under this system.

Vaccination details are updated from the Individual Vaccination (See 1.3.4), Dog Population Management (See 4.1) and Mass Dog Vaccination (See 4.2) services, whereas the pet's deworming details are updated from the Individual Deworming service (See 1.3.3).

- Click on the “Pet Information” submenu (Figure 52).
- Enter the Pet Registration Number or Microchip Number and click on the search button (Figure 52) to fetch the pet registration details.


The screenshot shows the 'Veterinary Information System' interface. On the left, a sidebar menu includes 'Home', 'Pet Information Management' (with sub-items: 'Pet Registration', 'Renewal and Update', 'Ownership Transfer', and 'Pet Information' which is highlighted with a red box and an arrow), 'DPM/MDV', and 'Data Archival'. The main content area is titled 'Pet Information' and contains a search section with a 'Search\*' label, a text input field for 'Pet Registration Number/Microchip Number', and a blue search button. Below the search section are form fields for 'Registration Number\*' (with a sub-field 'Registration Number'), 'Date of Registration\*' (with a sub-field 'Registration Date' and a calendar icon), and 'Animal Ownership Type' (with a sub-field 'Animal Ownership Type').


Figure 52: Pet information service

- View the information about the registered pet animal. To view the vaccination and deworming history, click on the Deworming and Vaccination view (v) icon. The last date of deworming and all the vaccination details can be viewed there (Figure 53).
- To print the pet information, click on the “Print” button. It shall open the page (Figure 53) to print. It rather redirects to the Pet Health Certificate page to print (See 6.1).

Search\*

982126055542729





Registration Number\*

PRN20221415925161

Animal Ownership Type

Public

Date of Registration\*

03/09/2022

Owner Details

Nationality\*

Bhutanese

CID Number\*

10302000298

Owner Name\*

Rinchen Jamtsho

Present Address

Dzongkhag

Thimphu

Gewog

Thim Throm

Village

Thim Throm

Locality

Lungtanphu

Mobile Number\*

77621275

Email ID\*

Email ID

Pet Details

Pet Name\*

Tiger

Microchip Number\*

982126055542729

Species\*

Canine

Breed\*

German Shepherd Dog/Alsatian

Colour\*

Black brown

Distinguishing mark\*

No

Age\*

Year

2022

Month

4

Day

1

Sex\*

Male

Neuter Status\*

No

Breeder Status\*

☐ Yes ☒ No

Status\*

☒ Alive ☐ Dead ☐ Missing

Revenue Receipt Number\*

Revenue Receipt Number

Date of Renewal \*

03/09/2023

Deworming

Vaccination

Print

Figure 53: Pet information page

## 4. DPM/MDV

DPM stands for Dog Population Management, where all the information of a dog (pet or stray) undergoing sterilization during a mass sterilization campaign shall be recorded, and MDV stands for Mass Dog Vaccination, where all the information of a dog (pet or stray) receiving anti-rabies vaccine during a mass vaccination campaign shall be recorded.

During a Mass Dog Sterilization or Vaccination campaign, a program ID shall be allocated by the system admin, or a default program for a Dzongkhag shall be created and tagged during user registration. The standard format of the program name will be Dzongkhag Name, hyphen and DPM. For example, the program name for DPM in Bumthang will be Bumthang-DPM.

### 4.1. DPM (DOG POPULATION MANAGEMENT)

This service shall be used during mass sterilization campaigns where many dogs are sterilized within a short span of time, therefore, medication details are not captured in the interest of time. Therefore, when an individual dog (pet or stray) is presented to a clinic for sterilization service, data recording must be done using the Individual Sterilization service (See 1.3.2) and not this DPM service.

- Click on the DPM submenu (Figure 54)
- Verify the Program Name.

The screenshot displays the 'Veterinary Information System' interface. On the left is a sidebar menu with the following items: Home, Individual, Mass, Pet Information Management, DPM/MDV, DPM (highlighted with a red arrow), MDV, Disease Outbreak, Certificates, Reports, and Past Data Archival. The main content area is titled 'Dog Population Management' and contains a form with the following fields:

- Program Name\* (dropdown menu with 'Select Program' option)
- Date\* (calendar icon)
- Animal Type\* (dropdown menu with 'Animal Type' option)
- Ownership Status\* (dropdown menu with 'Select' option)
- Body Weight (Kg)\* (text input field with 'Weight(Kg)' placeholder)
- Health Score: 1 (very thin) to 5 (obese)\* (dropdown menu with 'Select' option)
- Skin Condition\* (dropdown menu with 'Select Skin Condition' option)
- Transmissible Venereal Tumour\* (dropdown menu with 'Select' option)
- Other Health Conditions (text input field with 'Other conditions' placeholder)
- ARV Vaccination\* (dropdown menu with 'Select' option)
- Post Operative Complication (dropdown menu with 'Post Operative Complication' option)
- Fate of the Dog\* (dropdown menu with 'Select Fate of the Dog' option)
- Surgeon's Name\* (text input field with 'Name' placeholder)

A blue 'Submit' button is located at the bottom of the form.

Figure 54: DPM service page

- Enter the date of sterilization and select the animal type and ownership status of the dog being neutered.

Upon selecting the “Ownership Status” of the dog, different field groups for data entry will be opened.

#### 4.1.1. Owned Dog (DPM)

If a non-registered owned dog is presented to the clinic during a mass dog sterilization campaign, the dog must first get microchipped and registered into the system (See 3.1).

- Upon selecting “Owned” as the “Ownership Status” of the dog, relevant fields will appear for data entry (Figure 55).
- Enter the Pet Registration Number or Microchip Number to fetch the dog’s registration details. All the details recorded during the pet registration process will be auto filled (Figure 55).

The screenshot displays the 'Veterinary Information System' interface. On the left is a navigation menu with options: Home, Individual, Mass, Pet Information Management, DPM/MDV, DPM (selected), MDV, Disease Outbreak, Certificates, Reports, and Past Data Archival. The main content area is titled 'Dog Population Management'. It contains several input fields: 'Program Name\*' (with a dropdown showing 'Invalid Program Name'), 'Date\*' (with a date picker set to '10/09/2022'), and 'Animal Type\*' (with a dropdown set to 'Dog'). Below these are two red-bordered boxes. The first box contains the 'Ownership Status\*' dropdown, which is set to 'Owned'. The second box contains a 'Search' section with a text input for 'Pet Registration Number/Microchip Number' and a blue search button. Below the search section is a dark green header for 'Owner Details', followed by fields for 'CID Number' (with a sub-field 'CID'), 'Name of the Owner' (with a sub-field 'Name of owner'), and 'Present Address'.

Figure 55: DPM service for owned dog

- From the prefilled information, age and body colour of the pet dog can be edited (Figure 55).
- Fill up all the mandatory fields: Location of Clinic, Body Weight, Health Score, Skin Condition, TVT status, ARV status (during the sterilization campaign), Fate of the Dog and Surgeon’s name (Figure 55).
- After filling all the mandatory fields, click on the “Submit” button to save and submit the entry (Figure 55).

Pet Details			
Registration Number		Microchip Number	
<input type="text" value="PRN20221415925161"/>		<input type="text" value="982126058542729"/>	
Name of the Pet		Age *	
<input type="text" value="Tiger"/>		Year <input type="text" value="2022"/> Month <input type="text" value="4"/> Day <input type="text" value="1"/>	
Breed	Sex		
<input type="text" value="German Shepherd Dog/Alsatian"/>	<input type="text" value="Male"/>		
Body Color*	Location of the Clinic*		
<input type="text" value="Black brown"/>	<input type="text" value="Location of the Clinic"/>		
	Location of the Clinic is required		
Body Weight (Kg)*			
<input type="text" value="Weight(Kg)"/>			
	Body Weight is required		
Health Score: 1(very thin) to 5(obese) *	Skin Condition *		
<input type="text"/>	<input type="text"/>		
	Health score is required		
Transmissible Venereal Tumour *	Other Health Conditions		
<input type="text"/>	<input type="text" value="Other conditions"/>		
	Transmissible Venereal Tumour is required		
ARV Vaccination*	Post Operative Complication		
<input type="text"/>	<input type="text"/>		
	ARV Vaccination is required		
Fate of the Dog*	Surgeon's Name*		
<input type="text"/>	<input type="text" value="Name"/>		
	Fate of the dog is required		
	Surgeon's name is required		
<input type="button" value="Submit"/>			

Figure 56: Mandatory fields for owned dog sterilization

#### 4.1.2. Unowned Dog (DPM)

- Upon selecting “Unowned” as the “Ownership Status” of the dog, relevant fields will appear for data entry (Figure 57).
- A unique tag number must be allocated to the unowned dog. This Tag Number field also functions as a search field, therefore, if an already-used tag number is entered here, another dog’s details will be fetched and auto filled. In this case, the prefilled fields must not be overwritten, and it’s recommended for this page to be refreshed and another unique tag number must be used.

<b>Program Name*</b> <input type="text" value="Invalid Program Name"/>	
<b>Date*</b> <input type="text" value="10/09/2022"/>	<b>Animal Type *</b> <input type="text" value="Dog"/>
<b>Ownership Status*</b> <input type="text" value="Unowned"/>	<b>Catching Method*</b> <input type="text"/>
<b>Tag Number (Enter/Search)*</b> <input type="text" value="Tag number"/>	
<b>Location of the Animal (for free-roaming dog)</b>	
<b>Latitude*</b> <input type="text" value="Latitude"/>	<b>Longitude*</b> <input type="text" value="Longitude"/>
<b>Present Address</b>	
<b>Dzongkhag*</b> <input type="text"/>	<b>Gewog*</b> <input type="text"/>
<b>Village</b> <input type="text"/>	<b>Locality</b> <input type="text" value="Locality"/>
<b>Dog Details (for free-roaming dog)</b>	
<b>Age *</b> <div> <input type="text" value="Year"/> <input type="text" value="Month"/> <input type="text" value="Day"/> </div>	<b>Breed*</b> <input type="text"/>
<b>Sex*</b> <input type="text" value="Select"/>	
<b>Body Color*</b> <input type="text" value="Body Color"/>	<b>Location of the Clinic*</b> <input type="text" value="Location of the Clinic"/>
<b>Body Weight (Kg)*</b> <input type="text" value="Weight(Kg)"/>	
<b>Health Score: 1(very thin) to 5(obese) *</b> <input type="text" value="Select"/>	<b>Skin Condition *</b> <input type="text" value="Select Skin Condition"/>
<b>Transmissible Venereal Tumour *</b> <input type="text" value="Select"/>	<b>Other Health Conditions</b> <input type="text" value="Other conditions"/>
<b>ARV Vaccination*</b> <input type="text" value="Select"/>	<b>Post Operative Complication</b> <input type="text" value="Post Operative Complication"/>
<b>Fate of the Dog*</b> <input type="text" value="Select Fate of the Dog"/>	<b>Surgeon's Name*</b> <input type="text" value="Name"/>
Upload Photo <input type="button" value="Choose File"/> No file chosen	
<input type="button" value="Submit"/>	

Figure 57: Unowned dog sterilization page

- For the geo-coordinates field, enter the latitude and longitude of the clinic's location if the real-time location of the dog cannot be obtained (Figure 57).
- After entering all the mandatory fields, click on the "Submit" button to save and submit the entry (Figure 57).

#### 4.1.2.1. Tag Number Allocation

For an unowned dog, a temporary identification number called Tag Number is allocated during mass dog sterilization campaigns. This enables monitoring of the dog's condition and information updates between the catch and release timeframe. The Tag Number field for unowned dog sterilization data recording also has a search and fetch functionality, therefore, if an already-used tag number is entered, it would fetch the details of an already-sterilized unowned dog. Therefore, to avoid this interference, it's very important to allocate a unique tag number for every unowned dog caught and neutered during mass dog sterilization campaigns.

Since VIS is a national animal health database, data concerning veterinary clinical services shall be recorded throughout the country. Likewise, mass dog sterilization campaigns will be conducted in every Dzongkhag regularly for efficient dog population management. Therefore, the uniqueness in the Tag Number for an unowned dog must be maintained throughout the country.

The recommended format of tag number is 2 significant letters from the Dzongkhag's name followed by 2 last digits from the running year and serial number starting from 1. When a mass dog sterilization campaign in a Dzongkhag operates through more than one clinic or if multiple dog-catching teams are deployed, clinic/catching team-wise tag numbers must be allocated to avoid duplication of tag numbers within the same Dzongkhag.

For a mass dog sterilization campaign in 2023, the following dzongkhag-specific tag numbering format can be used:

S.N.	Dzongkhag	Tag Number	S.N.	Dzongkhag	Tag Number
1	Bumthang	BU23-1....	11	Samdrup Jongkhar	SJ23-1....
2	Chhukha	CH23-1....	12	Samtse	SM23-1....
3	Gasa	GA23-1....	13	Sarpang	SP23-1....
4	Dagana	DA23-1....	14	Thimphu	TH23-1....
5	Haa	HA23-1....	15	Trashigang	TG23-1....
6	Lhuentse	LH23-1....	16	Trashiyangtse	TY23-1....
7	Monggar	MO23-1....	17	Trongsa	TO23-1....
8	Paro	PA23-1....	18	Tsirang	TS23-1....
9	Pema Gatshel	PG23-1....	19	Wangdue Phodrang	WP23-1....
10	Punakha	PU23-1....	20	Zhemgang	ZG23-1....



### 4.1.3. DPM Information Update

The process of data recording during the sterilization of a dog is not a single process. Sometimes, some information update is required.

The process of DPM information update is similar to DPM data entry (See 4.1.1 and 4.1.2).

- Click on the DPM sub-menu under the DPM/MDV service (Figure 54).
- Verify the program name, and enter the date, animal type and ownership status (Figure 58).
- For a neutered, owned dog, enter the PRN or Microchip number to fetch the details (Figure 55).
- For a neutered, unowned dog, enter the tag number and fetch the information entered earlier (Figure 58).
- Update the information as required and submit to update the information (Figure 58).

Following are some instances where DPM information update might be required:

- If a dog is kept in the recovery shelter of a clinic and recorded in the system accordingly, later when the dog is released, the fate of the dog needs to be updated from Recovery to Released (Figure 59).
- The fate of a dog kept in a recovery shelter must be updated to “Adoption”, if the neutered dog is being taken for adoption (Figure 59).
- If a neutered dog is presented with some complications following the surgery, the “Post Operative Complication” must be updated accordingly (Figure 58).
- Besides, all the auto-filled fields are editable, however, it is not recommended to edit the tag number field. If the tag number field is updated with a new tag number, it will be counted as a new DPM entry because the system captures every unique tag number as a new entry.

#### 4.1.3.1. Abandoning a Microchipped and Registered Pet Dog

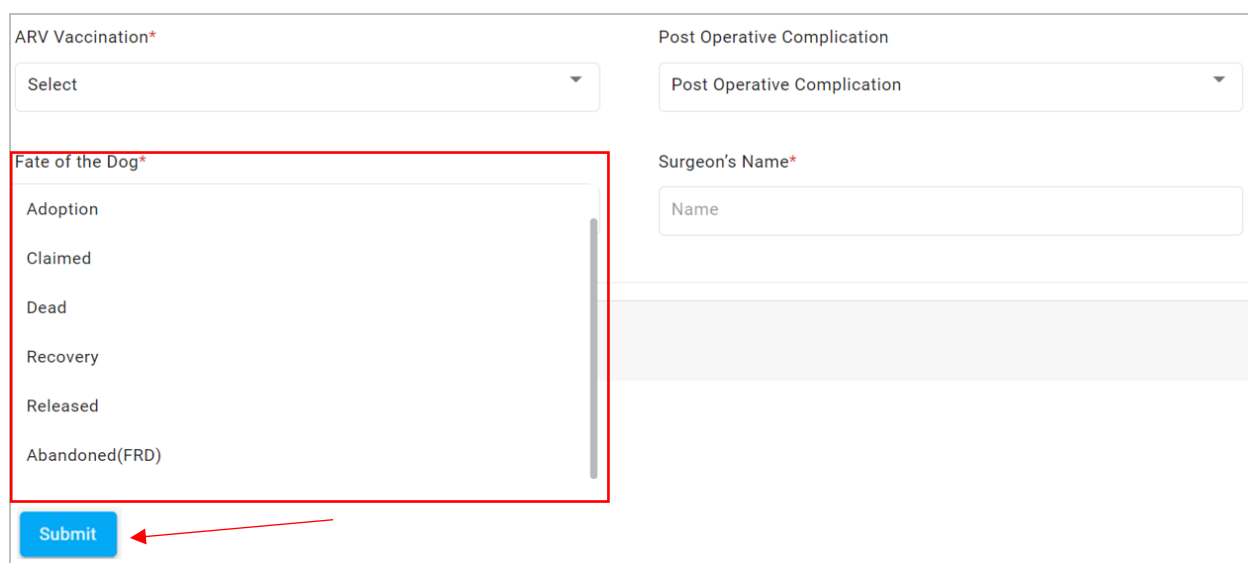
One of the most important DPM information update functions come into play when an owned registered pet dog is presented to a clinic with a request from the owner to abandon it for various reasons.

Once a pet dog is microchipped and registered into the VIS, the recorded data remains permanently in the system, and it shall never get deleted. For such dogs, their fate can be updated to “Abandoned” under the DPM section. Therefore, the pet dog presented for abandonment by the owner must be neutered first.

- Follow the steps described under 4.1.3.
- Under the “Fate of Dog”, select “Abandoned (FRD)” and submit to update the information (Figure 59).

Program Name*		Invalid Program Name	
Date*	11/09/2022	Animal Type *	Dog
Ownership Status*	Unowned	Catching Method*	Bait
Tag Number (Enter/Search)*	NOAH-1		
Location of the Animal (for free-roaming dog)			
Latitude*	1112	Longitude*	2221
Present Address			
Dzongkhag*	Thimphu	Gewog*	Chang
Village	Debal	Locality	Near the bridge
Dog Details (for free-roaming dog)			
Age *	Year: 0, Month: 7, Day: 0	Breed*	Local
Sex*	Female		
Body Color*	Black	Location of the Clinic*	NOAH
Body Weight (Kg)*	3.5		
Health Score: 1(very thin) to 5(obese) *	3	Skin Condition *	Moderate
Transmissible Venereal Tumour *	No	Other Health Conditions	Nil
Pregnancy Status	No		
ARV Vaccination*	No	Post Operative Complication	Post Operative Complication
Fate of the Dog*	Recovery	Surgeon's Name*	Dr Sonam P
Upload Photo <input type="button" value="Choose File"/> No file chosen			
<input type="button" value="Submit"/>			

Figure 58: DPM information update page



ARV Vaccination\*

Select

Fate of the Dog\*

Adoption

Claimed

Dead

Recovery

Released

Abandoned(FRD)

Submit

Post Operative Complication

Post Operative Complication

Surgeon's Name\*

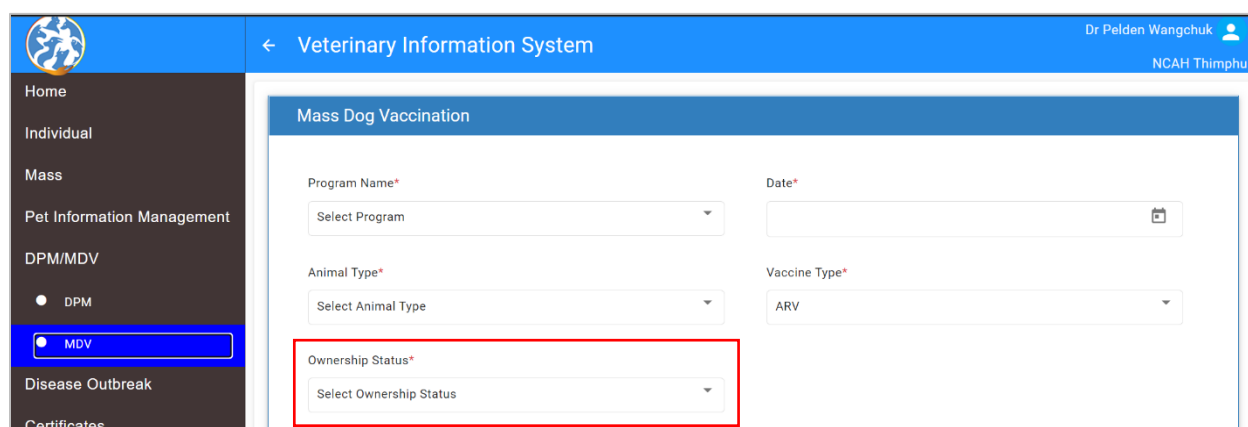
Name

Figure 59: Updating the fate of the dog

## 4.2. MDV (MASS DOG VACCINATION)

This service shall be used during mass vaccination campaigns where many dogs are vaccinated within a short span of time. Therefore, when an individual dog (pet or stray) is presented to a clinic to avail vaccination service, data recording must be done using the Individual Vaccination service (See 1.3.2) and not this MDV service. MDV is a one process service, therefore, unlike DPM, there is no update function in the MDV service.

- Click on MDV submenu under the DPM/MDV service (Figure 60).
- Verify the program name.
- Enter the date of vaccination and select animal type, vaccine type and ownership status (Figure 60).
- Based on the “Ownership Status” selected, different group of data entry fields shall appear.



Veterinary Information System

Dr Pelden Wangchuk

NCAH Thimphu

Home

Individual

Mass

Pet Information Management

DPM/MDV

• DPM

• MDV

Disease Outbreak

Certificates

Mass Dog Vaccination

Program Name\*

Select Program

Date\*

Animal Type\*

Select Animal Type

Vaccine Type\*

ARV


Ownership Status\*

Select Ownership Status

Figure 60: MDV service page

#### 4.2.1. Owned Dog (MDV)

- Select “Owned” from the “Ownership Status” field (Figure 61).
- Enter the PRN or Microchip Number of the registered dog. The pet dog’s information recorded during registration shall be fetched and auto-filled (Figure 61).
- “Age” is the only editable field. Therefore, update the “Age” of the dog and click on the “Submit” button to save and submit the MDV entry (Figure 61).

Program Name*	Date*
Invalid Program Name	11/09/2022
Animal Type*	Vaccine Type*
Dog	ARV
Ownership Status*	Search
Owned	982091070423506 

Owner Details

CID Number

11902001438

Name of the Owner

Tshering Penjor

Present Address

Dzongkhag :\*

Wangdue Phodrang

Gewog :\*

Bjenag

Village

Wachey

Locality

Tekizampa

Contact Number

17782223

Pet Details

Registration Number

PRN20221920625210

Microchip Number

982091070423506

Name of the Pet

Lily

Sex

Female

Age

Year: 0

Month: 4

Day: 0

Breed

Spitz - Cross

Neuter Status

Yes

Submit

Figure 61: MDV of an owned dog

### 4.2.2. Unowned Dog (MDV)

- Select “Unowned” from the “Ownership Status” field (Figure 62).
- Fill up all the mandatory fields (Figure 62).
- Click on the “Submit” button to save and submit the entry (Figure 62).

Program Name*	Date*		
Invalid Program Name	11/09/2022		
Animal Type*	Vaccine Type*		
Dog	ARV		
Ownership Status*			
Unowned			
Catching Method*			
Location of the Dog (for free-roaming dog)			
Latitude*	Longitude*		
Latitude	Longitude		
Present Address			
Dzongkhag*	Gewog*		
Village	Locality		
	Locality		
Dog Details (for free-roaming dog)			
Sex*	Age		
Select Sex	Year	Month	Day
Breed*	Body Colour*		
	Body Colour		
Submit			

Figure 62: MDV of an unowned dog

## 5. DISEASE OUTBREAK

Information sharing during outbreak of notifiable animal diseases is a multi-step process (Figure 63):

1. When a notifiable disease outbreak is suspected, the concerned field office shall share the information with the National Centre for Animal Health as a flash report.
2. NCAH shall verify the information and notify the concerned field office to conduct follow-up investigation.
3. The concerned field office conducts detailed investigation of the reported outbreak and submit the follow-up report to NCAH. At least one follow-up report must be submitted to end the outbreak reporting process.
4. NCAH verifies the outbreak details and shares the validated information with the relevant stakeholders through email.

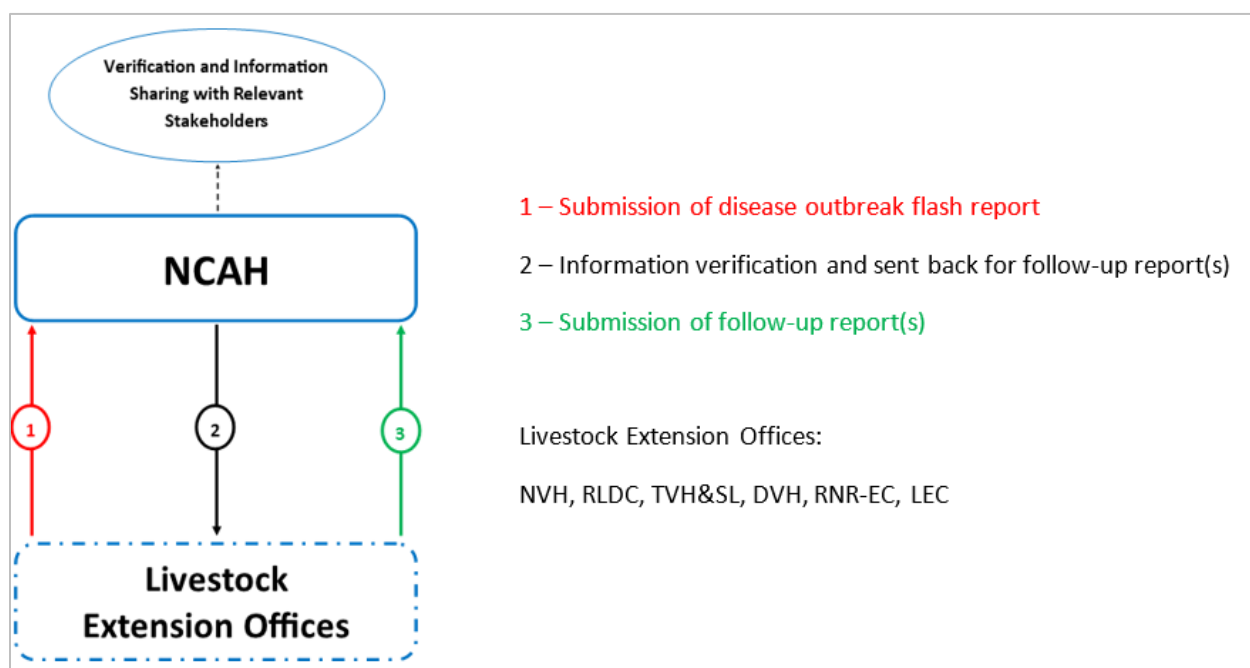


Figure 63: Disease outbreak information flow chart

- Click on the “Disease Outbreak” service from the menu to open Flash Report and Ongoing/Resolved submenus (Figure 64).

## 5.1. FLASH REPORT

### 5.1.1. Livestock Extension Offices (Reporting)

This service must be used when reporting an outbreak of a notifiable disease for the first time. To initiate the process of follow-up investigations and reporting, sharing of flash report is mandatory.

- Click on “Flash Report” submenu under the Disease Outbreak service (Figure 64).
- Click on the “Create New Flash Report” button (Figure 64). It opens the electronic form for flash report data entry (Figure 65).

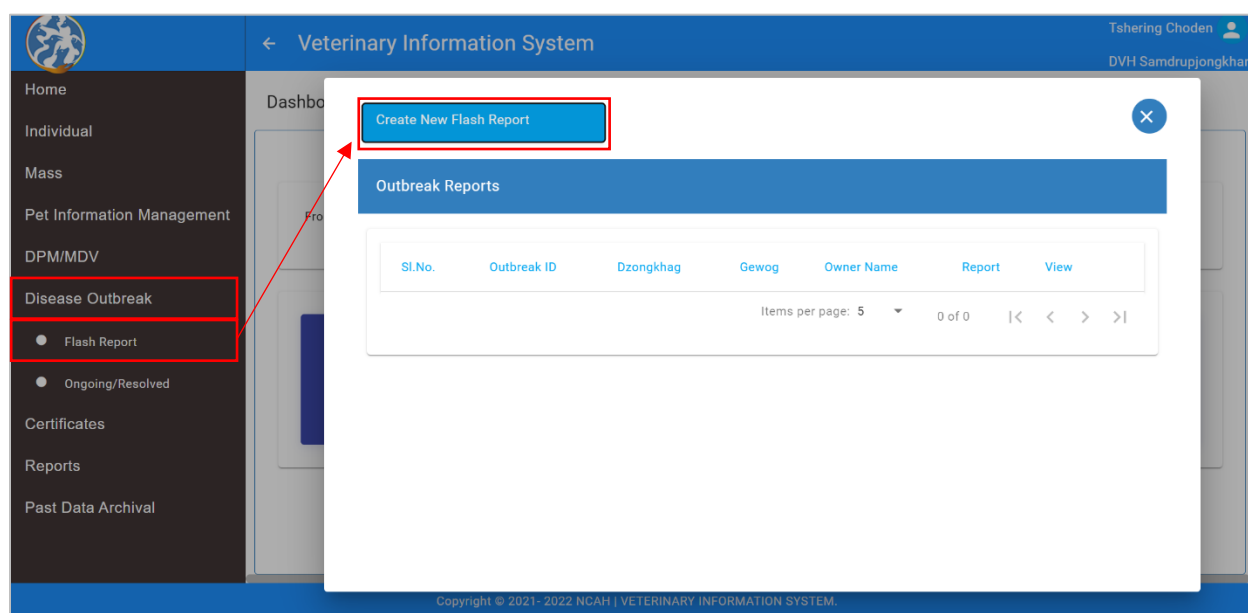


Figure 64: Flash report service page

- Since it's a flash report, name of the suspected disease can be selected from the list of “Disease Suspected” (Figure 65).
- If the outbreak is reported in one household, enter the name of the household's head in the “Name of the Owner/Community”. If more than one household are affected, type “Community” in the same field (Figure 65).
- As required, enter the present address details, location of the outbreak (geo-coordinates), index and reporting dates, case history, case details (live and dead), epidemiological and contact details (Figure 65).
- All the mandatory fields to be filled are marked with red asterisk (Figure 65).

Disease Suspected\*  
Select Disease Suspected

Name of the Owner/ Community\*  
Name of owner/ Community

Present Address  
Dzongkhag\*  
Select Dzongkhag

Gewog\*  
Select Gewog

Village  
Select Village

Locality  
Locality

Geo-Coordinates  
Latitude\*  
Latitude

Longitude\*  
Longitude

Index Case Date\*  
Select Index Case Date

Date of Report to LED/RNR-ED/DVH (by Owner/Community)  
Select Date of Report by Farmer

Date of Report by DVH to RLDD/NGAH\*  
Select Date of Report by DVH

Brief History and Observation (signs and symptoms)\*

Case Details ( Live Case/Dead).  
+ Add Details

Sl.No.	Species	Animal Type	Breed	Age	Male	Female	Mixed	Total	Status	Edit	Delete
Items per page: 5 0 of 0 < > >											

Death Total:  
0

Cases Total:  
0

Epidemiology and Other Details  

No. of Household(s) affected\*  
Household Affected

Date of Last Vaccination  
Select Date of Last Vaccination

Susceptible Animal Details  
+ Add

Sl.No.	Species	Animal Type	Number of Animals	Edit	Delete
Items per page: 5 0 of 0 < > >					

Outbreak Source and Control Measures.  

Probable Source of Outbreak

Prevention and Control Measures

Contact Details (Contact Person in the Village)  

Name  
Name of Contact person

Mobile Number  
Mobile Number

Figure 65: Disease outbreak flash report form



**Animal Details**

Species\*  Animal Type\*

Breed\*  Status (Live Case/Dead)\*

Age\*  Male\*

Female\*

Total\*

**Case Details ( Live Case/Dead).**

Sl.No.	Species	Animal Type	Breed	Age	Male	Female	Mixed	Total	Status	Edit	Delete
1	Bovine	Cattle	Crossbreed	Adult	4	1	0	5	Live Case		
2	Bovine	Cattle	Crossbreed	Young	2	2	0	4	Live Case		

Items per page: 5 1 - 2 of 2

Figure 66: Adding live cases

**Animal Details**

Species\*  Animal Type\*

Breed\*  Status (Live Case/Dead)\*

Age\*  Male\*

Female\*

Total\*

**Case Details ( Live Case/Dead).**

Sl.No.	Species	Animal Type	Breed	Age	Male	Female	Mixed	Total	Status	Edit	Delete
1	Bovine	Cattle	Crossbreed	Adult	4	1	0	5	Live Case		
2	Bovine	Cattle	Crossbreed	Young	2	2	0	4	Live Case		
3	Bovine	Cattle	Crossbreed	Adult	1	1	0	2	Dead		

Figure 67: Adding death cases

### 5.1.1.1. Case Details

- Upon clicking the “Add Details” button, a page will pop-up to enter case details (Figure 66 and 67).
- Select the affected Species, Animal Type and Breed from the mapped list (Figure 67).

#### Adding Live Cases

- To add live case details, choose “Live Case” from the “Status (Live case/ Dead)” field (Figure 66).
- Enter age- and sex-specific number of live cases (Figure 66).
- Click on the “Add” button to save and add the recorded live case details to the case details’ table (Figure 66).
- To add another age group of live cases, click on the “Add Details” button and repeat the process (Figure 66).

#### Adding Dead Cases

- To add dead case details, choose “Dead” from the “Status (Live case/ Dead)” field (Figure 67).
- Enter age- and sex-specific number of dead cases (Figure 67).
- Click on the “Add” button to save and add the recorded dead case details to the case details’ table (Figure 67).
- To add another age group of dead cases, click on the “Add Details” button and repeat the process (Figure 67).

Case Details ( Live Case/Dead).

[+ Add Details](#)

Sl.No.	Species	Animal Type	Breed	Age	Male	Female	Mixed	Total	Status	Edit	Delete
1	Bovine	Cattle	Crossbreed	Adult	4	1	0	5	Live Case	<a href="#">Edit</a>	<a href="#">Delete</a>
2	Bovine	Cattle	Crossbreed	Young	2	2	0	4	Live Case	<a href="#">Edit</a>	<a href="#">Delete</a>
3	Bovine	Cattle	Crossbreed	Adult	1	1	0	2	Dead	<a href="#">Edit</a>	<a href="#">Delete</a>
4	Bovine	Cattle	Crossbreed	Young	1	2	0	3	Dead	<a href="#">Edit</a>	<a href="#">Delete</a>

Items per page: 5 1 – 4 of 4 < > >|

Death Total:

5

Cases Total :

9

Figure 68: Live and dead cases total

- Verify the total numbers of animals affected: live and dead (Figure 68)

### 5.1.1.2. Susceptible Animal Details

- To add number of susceptible animals in the area, click on the “Add” button under “Susceptible Animal Details” section of the disease outbreak flash report form. A page will pop-up for the entry of susceptible animals’ detail (Figure 69).
- Select susceptible species, animal type and enter the total number (Figure 69).
- Click on the “Add” button to save and add the recorded details to the table of susceptible animal details (Figure 69).
- To add another susceptible species or animal type, click on the “Add” button under the “Susceptible Animal Details” section and repeat the process (Figure 69).

**Susceptible Animal Details**

Species\*  
Caprine

Animal Type\*  
Goat

Number of Animals\*  
32

+ Add

Add Close

Sl.No.	Species	Animal Type	Number of Animals	Edit	Delete
1	Bovine	Cattle	52		

Items per page: 5 0 of 0

Figure 69: Adding no. of susceptible animals

### 5.1.1.3. Submission of the Flash Report

- After filling up the flash report data entry fields, click on the “Submit” button to save and submit the flash report to NCAH for verification and further dissemination of information (Figure 63 and 70).
- Upon successful submission of the flash report, an outbreak identification number (OID) shall be generated by the system and displayed as an acknowledgement message. This OID shall serve as a reference number for this particular outbreak and all the follow-up investigation and data recording will be tagged with this unique ID.

Sl.No.	Species	Animal Type	Number of Animals	Edit	Delete
1	Bovine	Cattle	52		
2	Caprine	Goat	32		

Items per page: 5 0 of 0 |< < > >|

**Outbreak Source and Control Measures.**

Probable Source of Outbreak

Unknown

Prevention and Control Measures

Antibiotic therapy for the live cases and animals at risk.

**Contact Details (Contact Person in the Village)**

Name: Mangmi Mobile Number: 17888888

**Submit**

**Acknowledgement**

Outbreak ID is: **OID2022111110012**

**OK**

Figure 70: Flash report submission

- After submission of the flash report and generation of a unique outbreak ID (OID), the report will appear at NCAH's Disease Outbreak interface for verification and further action (Figure 71).

### 5.1.2. NCAH (Verification)

- To view the flash report submitted from field offices, login using a user credentials created with a role of "NCAH".
- Click on the "Flash Report" submenu under the "Disease Outbreak" service (Figure 71).
- All the submitted flash reports shall be listed in the "Outbreak Reports" table (Figure 71).

- Click on the pen icon to validate the information submitted (Figure 71). It will open the flash report form filled by the submitting field office (Figure 72).

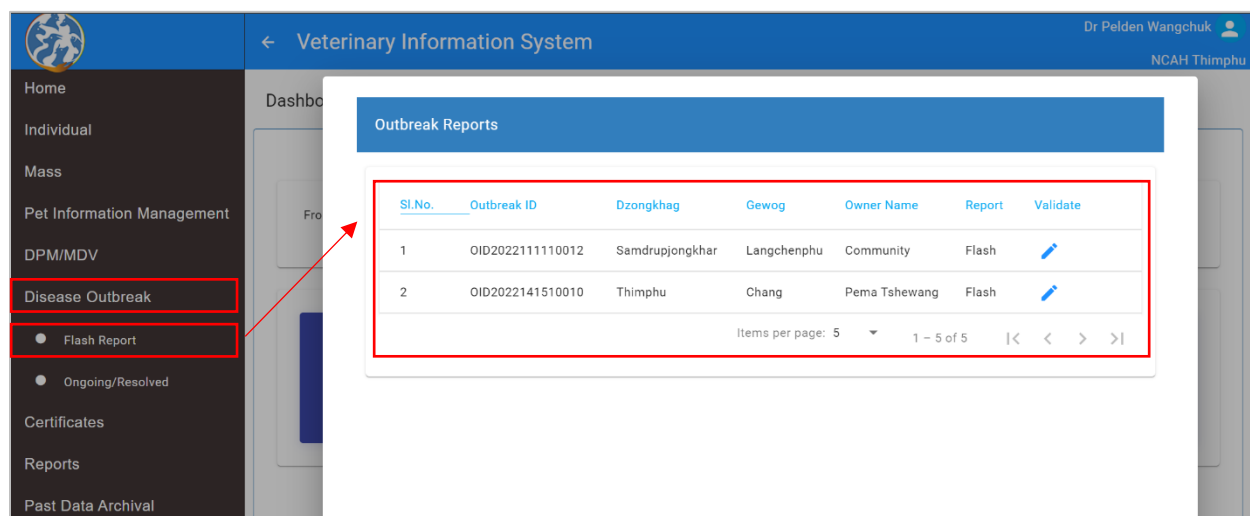


Figure 71: Disease outbreak flash report interface at NCAH

- All the fields of the flash report are editable at NCAH's interface and if required, in consultation with the concerned field office, additional information can be recorded or submitted information can be edited if mistakenly entered at field level (Figure 72).
- After the verification process, the flash report will be sent back to the concerned field office for follow-up by clicking of the "Follow-up" button (Figure 72), following which household-specific information must be submitted in the following follow-up report(s). At least one follow-up is mandatory to complete the cycle of reporting of a disease outbreak in the field.
- The flash report verified and sent for follow-up from NCAH shall appear at field office user's interface under the "Ongoing/Resolved" submenu of the "Disease Outbreak" service.
- If required, the verified flash report may be shared with relevant stakeholders via email by clicking on the "Send Email" button. The list of email recipients will be added by the system's admin.

<b>Disease Suspected *</b> Actinobacilloles		<b>Name of the Owner/ Community</b> Community	
<b>Dzongkhag*</b> Samdrupjongkhar		<b>Gewog *</b> Langchenphu	
<b>Village *</b> Namchezor(Bajhrang)		<b>Locality</b> 	
<b>Geo-coordinates</b> <b>Latitude</b> 111		<b>Longitude</b> 222	
<b>Index Case Date:</b> 09/09/2022		<b>Date of Report to LEC/RNR-EC/D/VH (by Owner/Community)</b> 09/09/2022	
<b>Date of Report by DVH to RLDC/NCAH</b> 09/09/2022		<b>Brief History and Observation (signs and symptoms)</b> Bleeding from nose and rectum	

**Case Details ( Live Case/Death).**

[+ Add Cases](#)

Sl.No.	Species	Animal Type	Breed	Age	Male	Female	Mixed	Total	Status	Delete
1	Bovine	Cattle	Crossbreed	Adult	4	1	0	5	Live Case	
2	Bovine	Cattle	Crossbreed	Young	2	2	0	4	Live Case	
3	Bovine	Cattle	Crossbreed	Adult	1	1	0	2	Dead	
4	Bovine	Cattle	Crossbreed	Young	1	2	0	3	Dead	

Items per page: 5 0 of 0 |< < > >|

**Epidemiology and Other Details**

**No. of Household(s) affected**  
2

**Date of Last Vaccination**

**Susceptible Animals Detail**

[+ Add](#)

Sl.No.	Species	Animal Type	Susceptible Animals	Delete
1	Bovine	Cattle	52	
2	Caprine	Goat	32	

Items per page: 5 0 of 0 |< < > >|

**Outbreak Source and Control Measures.**

**Probable Source of Outbreak:**  
Unknown

**Prevention and Control Measures in brief**  
Antibiotic therapy for the live cases and animals at risk.

**Contact Details(Contact Person in the Village)**

**Name**  
Mangmi

**Mobile Number**  
1788888

**Report By**  
Tahering Choden

[Follow-Up](#) [Send Mail](#)

Figure 72: Filled flash report form at NCAH's interface

## 5.2. ONGOING/ RESOLVED

This service must be used for reporting (field offices) or validating (NCAH) follow-up reports of notifiable disease outbreaks in the country. In this service, owner-specific information about the disease outbreak is required to be entered.

### 5.2.1. Livestock Extension Offices (Reporting)

Once the flash report sent from a field office is validated and sent back to the concerned field office for follow-up (at least one), the report with the status “On-going” will appear at the concerned field office user’s page (Figure 73).

- To view the validate report and enter follow-up information, click on the “Ongoing/Resolved” sub-menu of the “Disease Outbreak” Service (Figure 73). List of past outbreaks will be shown in the outbreak reports table.
- To follow-up on the ongoing outbreak, click on the Edit/View icon (pen) against the outbreak of your interest (Figure 73). It will open the page of past details (Figure 74) for the given OID.

The screenshot shows the 'Veterinary Information System' interface. On the left, a sidebar menu has 'Ongoing/Resolved' selected under the 'Disease Outbreak' section. The main content area displays a table titled 'Outbreak Reports'.

Sl.No	Outbreak ID	Dzongkhag	Gewog	Owner Name	Status	Edit/View
1	OID202211190032	Samdrupjongkhar	Dewathang	Community	Ongoing	
2	OID2022020070031	Chukha	Bjagchho	rrrrrrr	Ongoing	
3	OID2022010010030	Bumthang	Chhoekhor	Community	Ongoing	
4	OID2022020070029	Chukha	Bjagchho	sonma	Ongoing	
5	OID2022020060028	Chukha	Samphelling	khanus	Resolved	

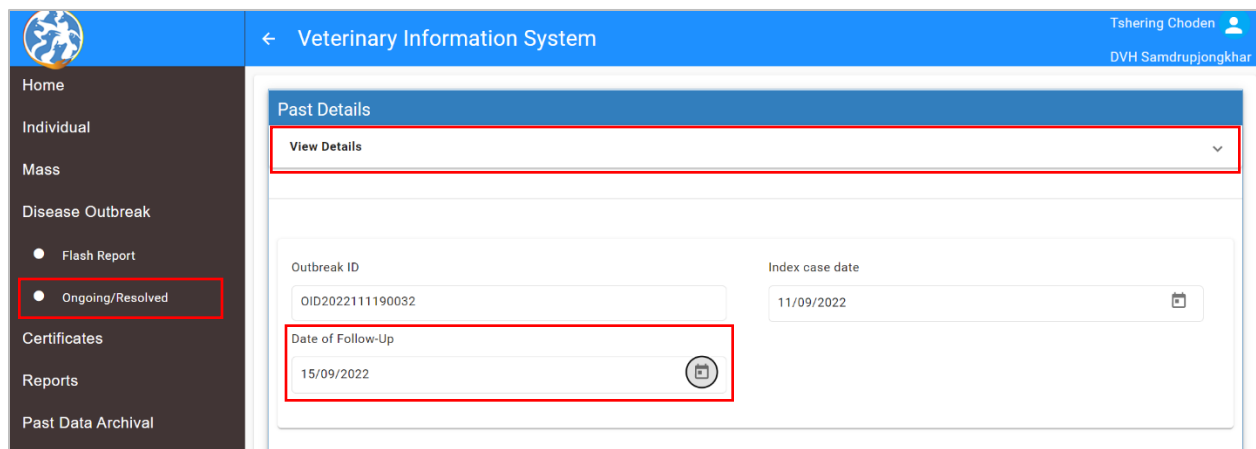
At the bottom of the table, it says 'Items per page: 5' and '1 - 5 of 19'.

Figure 73: Ongoing/Resolved outbreaks page at field office's interface

- Click on the “View Details” unhide (v) icon to view the details entered during previous reporting(s) (Figure 74).
- Enter the “Date of follow-up” (Figure 74).

#### 5.2.1.1. Owner-specific Details

Under this section, owner-specific information must be entered. Three pages to filled under this section are: A. owner details, B. case details and C. outbreak response.



**Veterinary Information System**

Tshering Choden  
DVH Samdrupjongkhar

Home  
Individual  
Mass  
Disease Outbreak  
● Flash Report  
● **Ongoing/Resolved**  
Certificates  
Reports  
Past Data Archival

**Past Details**

**View Details**

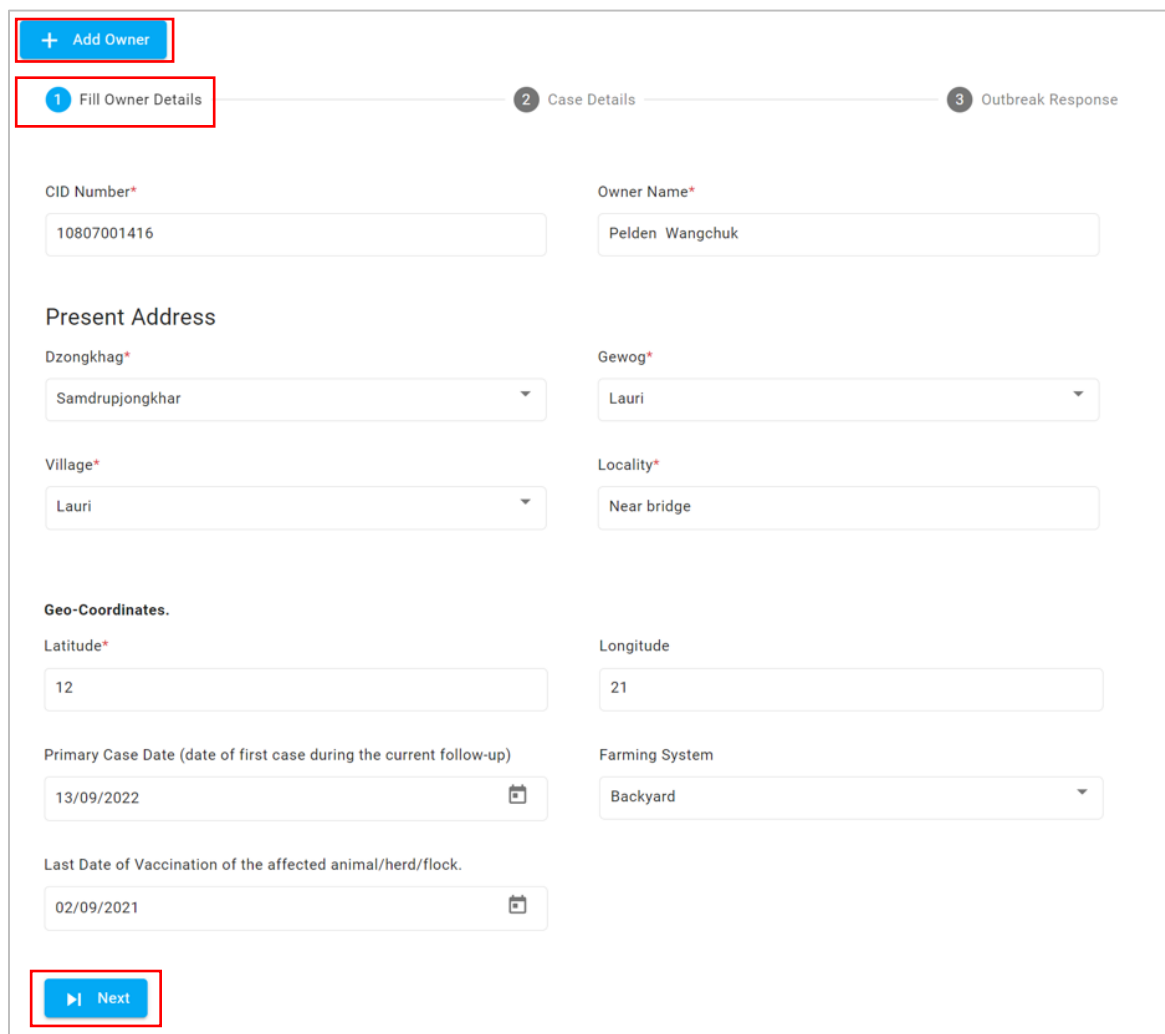
Outbreak ID: OID2022111190032

Index case date: 11/09/2022

Date of Follow-Up: 15/09/2022

Figure 74: Ongoing outbreak's page for follow-up

## A. Fill Owner Details



**+ Add Owner**

**1 Fill Owner Details**      **2 Case Details**      **3 Outbreak Response**

**CID Number\***  
10807001416

**Owner Name\***  
Pelden Wangchuk

**Present Address**

**Dzongkhag\***  
Samdrupjongkhar

**Gewog\***  
Lauri

**Village\***  
Lauri

**Locality\***  
Near bridge

**Geo-Coordinates.**

**Latitude\***  
12

**Longitude**  
21

**Primary Case Date (date of first case during the current follow-up)**  
13/09/2022

**Farming System**  
Backyard

**Last Date of Vaccination of the affected animal/herd/flock.**  
02/09/2021

**Next**

Figure 75: Owner details page (field office)



- The “Add Owner” button (Figure 75) is for the purpose of adding another owner after entering all the details against one owner.
- Enter the CID and present address of the animal(s) owner affected and location) geocoordinates of the household/herd (Figure 75).
- Enter the primary case date (date of first case detected during the current investigation, farming system and the herd’s last date of vaccination (Figure 75).
- Click on the “Next” button to enter the case details against the same affected owner (Figure 75).

## B. Case Details

**+ Add Owner**

1 Fill Owner Details **2 Case Details** 3 Outbreak Response

Follow Up Case Details (Case/Death).

**+ Add**

Sl.No.	CID Number	Species	Animal Type	Breed	Age	Male	Female	Mixed	Total	Status	Delete
1	10807001416	Bovine	Cattle	Crossbreed	Adult	3	6	0	9	Live Case	

Items per page: 5 0 of 0 |< < > >|

**Next**

### Follow Up Case

Species\*

Animal Type\*

Breed\*

Status (Dead/Alive)\*

Age\*

Male\*

Female\*

Total\*

**Add** **Close**

Figure 76: Owner-specific case details page

- Click on the “+Add” button to add case details of the affected animal(s) of an owner. It will open the page to enter follow-up details (Figure 76).
- Select the affected species, animal type and breed (Figure 76).
- Select live or dead from the status field, based on which age- and sex-specific data can be entered (Figure 76).
- If another species, animal type or breed of animal affected and data needs to be entered separately, click on the “+Add” button, open the follow-up details page and enter the required details.
- After adding live case details, if details are to be entered regarding no. of animal died in the same household, click on the “+Add” button, open the follow-up details page and enter the required details.
- Upon entering all the case details, click on the “Next” button to open the “Outbreak Response” page where details concerning measures implemented can be entered (Figure 76).

### C. Outbreak Response

This page is for entering details concerning different disease outbreak measures implemented such as no. of animals treated, vaccinated, culled/slaughtered and examined in response to the outbreak.

- Click on “+Add” button to open the page to enter disease outbreak response details (Figure 77)
- Select the response type and enter the animal details (Figure 77).
- Do not forget that the details of animal captured is owner specific. Therefore, if animals vaccinated or examined belongs to a household with no live/dead cases, zero (0) can be entered in the case details field.
- After entering the details for a selected response type, click on the “Add” button to save the data and add to the outbreak response table (Figure 77).
- If another response measure, species, animal type, or breed needs to be added, click on the “+Add” button to open the response measures’ page, enter the required details and add to the table (Figure 77).
- Upon entering all the details (owner, case and response) of the affected household(s), click on the “Save” button to save the entered data (Figure 77).
- Information entered against individual animal owner affected during the outbreak will be listed in the “Owner Details” table (Figure 78). Recorded owner-specific details can be viewed by clicking on the “View/Edit” icon against the owner.

+ Add Owner

Fill Owner Details
Case Details
3 Outbreak Response

Add Number of Animals Culled/Slaughtered, Examined,Treated and Vaccinated in response to the disease outbreak.

+ Add

Sl.No.	CID Number	Fate	Species	Animal Type	Breed	Number of Animals	Delete
1	10807001416	Examined	Bovine	Cattle	Crossbreed	3	
2	10807001416	Vaccinated	Bovine	Cattle	Crossbreed	23	

Items per page: 5    0 of 0    |< < > >|

Back
Save

Number of Animals Culled/Slaughtered, Examined, Treated and Vaccinated in response to the disease outbreak

Vaccinated

Species\*  

Bovine

Animal Type\*  

Cattle

Breed\*  

Crossbreed

Vaccine Type\*  

FMD annual

Number of Animals\*  

23

Add
Close

Figure 77: Outbreak response page

#### 5.2.1.2. Common Details

Clinical signs, lesions, diagnosis, susceptible animals, outbreak source and other control measures implemented are the data entry fields not specific to an individual affected owner. Therefore, these fields are common for an outbreak.

- Enter all the common fields and click on the “Submit” button to save and submit the follow-up report to NCAH for validation (Figure 78). This report will show at NCAH’s level as “on-going” (Figure 79).

View Owner Details

Sl.No.	CID Number	Owner Name	Dzongkhag Name	Gewog Name	Village Name	Latitude	Longitude	Primary Date	Farming System	Last Vaccination Date	Delete	View/Edit
1	10807001416	Pelden WangchukSamdrupjongkhar	Lauri	Lauri	12	21	Sep 13, 2022	Backyard	Sep 2, 2021			

Items per page: 5 0 of 0 |< < > >|

View Details

Clinical signs, lesions and Diagnosis.

Clinical Signs

Salivation

Lesions

Erosion

Tentative Diagnosis \*

Foot and mouth disease virus

Differential Diagnosis

Stomatitis

Laboratory Test

☐ Yes ☒ No

Final Diagnosis\*

Foot and mouth disease virus

Basis Of Diagnosis

Clinical Signs

Epidemiology and Other Details

Susceptible Animals

+ Add

Sl.No.	Species	Animal Type	Susceptible Animals	Edit	Delete
1	Bovine	Cattle	134		

Items per page: 5 0 of 0 |< < > >|

Probable source of the outbreak

Unknown

Other Control Measures

As per NFMDPCP 2020

Submit

Figure 78: Common information of a disease outbreak

### 5.2.2. NCAH (Verification)

The follow-up reports submitted by the concerned field office will appear under “Ongoing/Resolved” submenu of “Disease Outbreak” service at NCAH level (Figure 79).

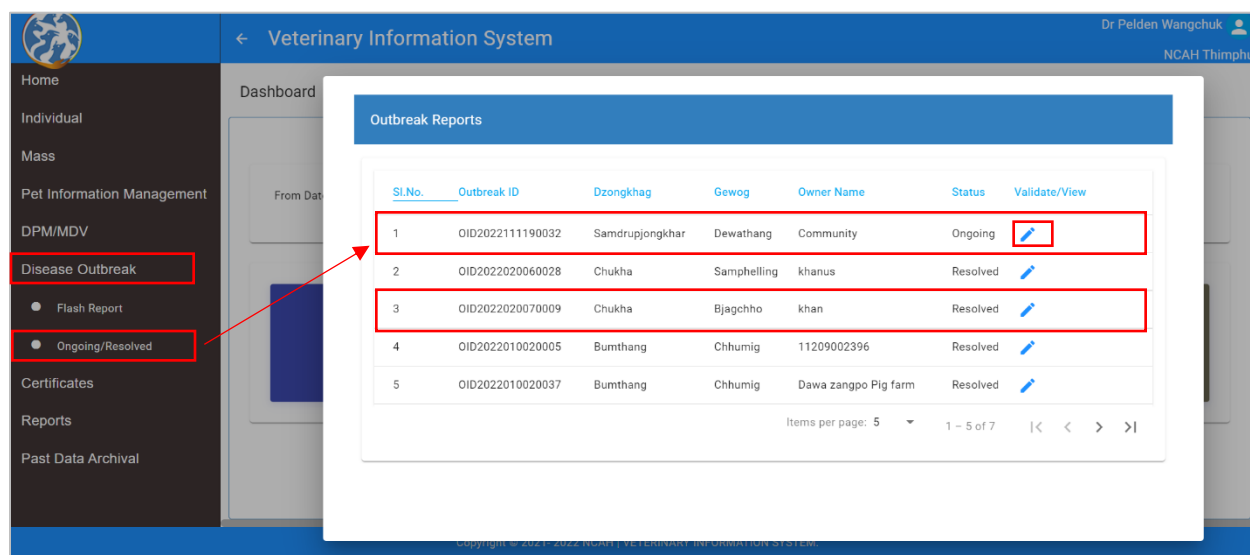


Figure 79: Ongoing/resolved disease outbreaks list (NCAH)

- To validate the submitted follow-up report, click on the “Validate/View” icon of the outbreak of interest (Figure 79).
- All the fields of the follow-up reports, shown as “Ongoing” outbreaks, are editable at NCAH’s interface and if required, in consultation with the concerned field office, additional information can be recorded or submitted information can be edited if mistakenly entered at field level (Figure 80).
- Owner specific information can be viewed and edited by clicking on the “View/Edit” icon (Figure 80).
- All the details entered can be edited by clicking on the “Edit” icon or deleted by clicking on the “Delete” button (Figure 80).
- If the outbreak is still ongoing and investigation underway, follow-up reports are expected. In this case, click on the “Follow-up” button to send back to the reporting field office for further follow-up (Figure 80).
- If the disease outbreak has ended and no further follow-up report is expected, the disease outbreak must be resolved by clicking on the “Resolved” button (Figure 80). The “Ongoing” status of a disease outbreak will get updated and show as “Resolved” at the field office user’s interface.
- After information validation, the report will be shared via email with the concerned officials by clicking on the “Send Mail” button (Figure 80).

Individual  
Mass  
Pet Information Management  
DPM/MDV  
Disease Outbreak  

- Flash Report
- Ongoing/Resolved

### Follow-Up Report

Outbreak ID  
010202211190032

Index Case Date  
11/09/2022

Date of Follow-Up  
13/09/2022

#### View Owner Details

Sl.No.	CID Number	Owner Name	Dzongkhag Name	Gewog Name	Village Name	Latitude	Longitude	Primary Date	Farming System	Last Vaccination Date	Delete	View/Edit
1	10807001416	Pelden WangchukSamdrupjongkhar	Lauri	Lauri	12	21	Sep 13, 2022	Backyard	Sep 2, 2021			

#### View Details

Follow Up Case Details ( Live Case/Dead).

[+ Add](#)

Sl.No.	CID Number	Species	Animal Type	Breed	Age	Male	Female	Mixed	Total	Status	Edit	Delete
1	10807001416	Bovine	Cattle	Crossbreed	Adult	3	6	0	9	Live Case		

Items per page: 5 0 of 0 |< >|

Add Number of Animals Culled/Slaughtered, Examined,Treated and Vaccinated in response to the disease outbreak.

[+ Add](#)

Sl.No.	CID Number	Fate	Species	Animal Type	Breed	Number Of Animals	Edit	Delete
1	10807001416	Examined	Bovine	Cattle	Crossbreed	3		
2	10807001416	Vaccinated	Bovine	Cattle	Crossbreed	23		

Items per page: 5 0 of 0 |< >|

Add Number of Animals Culled/Slaughtered, Examined,Treated and Vaccinated in response to the disease outbreak.

[+ Add](#)

Sl.No.	CID Number	Fate	Species	Animal Type	Breed	Number Of Animals	Edit	Delete
1	10807001416	Examined	Bovine	Cattle	Crossbreed	3		
2	10807001416	Vaccinated	Bovine	Cattle	Crossbreed	23		

#### Clinical Signs, Lesions and Diagnosis.

Clinical Signs

Salivation

Lesions

Erosion

Tentative Diagnosis \*

Foot and mouth disease virus

Differential Diagnosis

Stomatitis

Laboratory Test ☐ Yes ☒ No

Final Diagnosis \*

Foot and mouth disease virus

Basis Of Diagnosis

Clinical Signs

#### Epidemiology and Other Details

##### Susceptible Animals

[+ Add](#)

Sl.No. ↑	Species	Animal Type	Susceptible Animals	Edit	Delete
1	Bovine	Cattle	134		

Items per page: 5 0 of 0 |< >|

Probable source of the outbreak

Unknown

Other Control Measures

As per NFMDPCP 2020

[Follow-Up](#)
[Send Mail](#)
[Resolved](#)

Figure 80: Follow-up report validation page (NCAH)

## 6. CERTIFICATES

Certificates for some of the services under this system can be generated and printed for issue to the requesting clients.

There are 3 certificates and a statement that can be generated in this system (Figure 81):

1. Pet Health Certificate
2. Vaccination Certificate (Individual)
3. Vaccination Certificate (Mass)
4. Breeder Statement

To view these, click on the “Certificate” service from the menu bar (Figure 81).

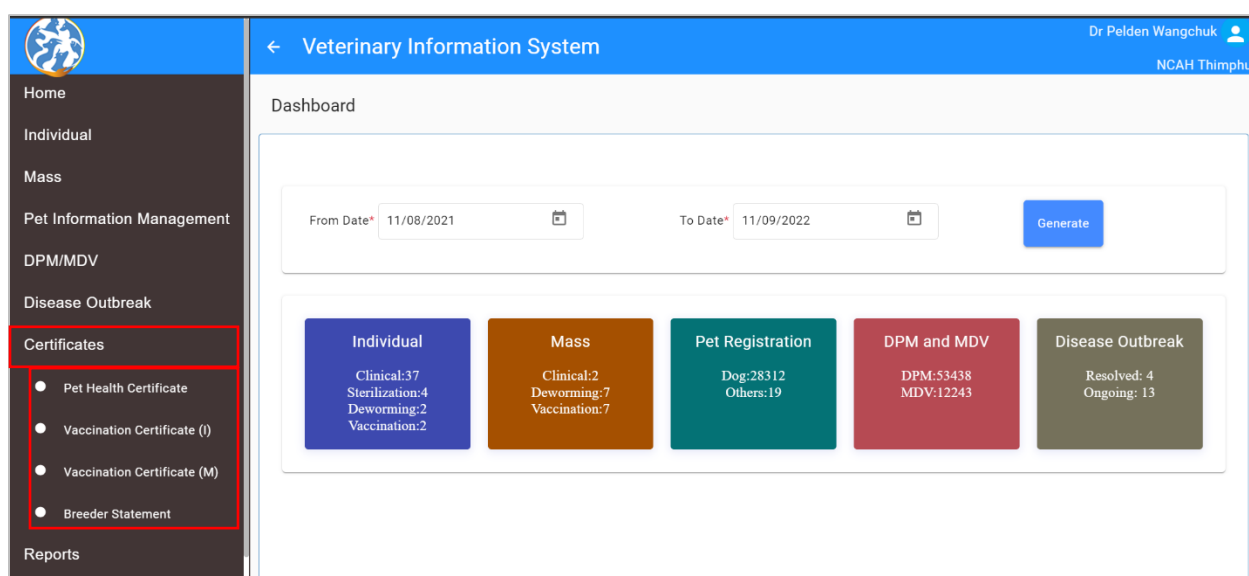


Figure 81: Certificates generation service

### 6.1. PET HEALTH CERTIFICATE

This certificate contains information about the pet’s owner, pet animal and their vaccination and deworming history. Before the issue of this certificate, the pet animal must be thoroughly examined to validate the certification statement. The pet owner must be advised to take the pet registration booklet along with the issued pet health certificate.

- Click on “Pet Health Certificate” submenu under the “Certificates” service (Figure 82).
- Enter the Pet Registration Number or Microchip Number of the pet (Figure 82).
- Verify the auto-filled information about the pet and click on the “Print” button to print the certificate (Figure 82).
- Sign and seal in the space provided and issue the certificate (Figure 82).

- The Pet Health Certificate can also be printed directly from the “Pet Information” page (See 3.4, Figure 53) by clicking on the “Print” button there.

**Veterinary Information System**

Pet Registration Number/Microchip Number

**Print**

**PET HEALTH CERTIFICATE**

Pet Registration No.:  
Microchip No.:  
Date of Registration:

**Owner Details**

Nationality: CID No.:  
Passport/Work Permit No.: Country:  
Owner Name: Dzongkhag:  
Gewog: Village:  
Locality: Mobile Number:

**Pet Details**

Pet Name: Species:  
Breed: Age(Year/Month/Day): //  
Sex:

**Vaccination and Deworming**

Date of Vaccination	Type of Vaccines
Deworming Date:	

This is to certify that the above pet animal is vaccinated and free from ectoparasites and any kind of contagious or infectious diseases. The pet does not come from a kennel or area closed off because of any disease spread. During the examination, no signs of pregnancy, infectious lesions on the skin, or nervous system disturbances were observed. It is further certified that the above description of the pet is correct.

The pet registration booklet is also attached herewith for reference. The pet described above is fit to travel.

(Seal and signature)

Figure 82: Generation of Pet Health Certificate

## 6.2. VACCINATION CERTIFICATE (INDIVIDUAL)

If an individual animal's vaccination certificate is required, it can be generated here. However, to enable generation of this certificate, the animal must be vaccinated, and data recorded under the individual vaccination service (See 1.3.4), for which patient registration is mandatory (See 1.1) and thus have a unique patient ID.

- Click on the “Vaccination Certificate (I)” submenu under the “Certificates” service (Figure 83).
- Enter the Patient ID of the animal (Figure 83).
- Verify the auto-filled information about the animal and click on the “Print” button to print the certificate (Figure 83).



- The “Date of Issue” and “Validate” fields must be manually entered (Figure 83).
- Sign and seal in the space provided and issue the certificate (Figure 83).

**Veterinary Information System**

Patient ID

**VACCINATION CERTIFICATE (INDIVIDUAL)**

Date of Issue: dd-----yyyy

**Owner Details**

Nationality:  Country:  CID Number:   
 Passport/Work Permit No.:  Name:  Dzongkhag:   
 Gewog:  Village:  Locality:

**Animal Details**

Pet Reg. No.:  Patient ID:  Animal Name:   
 Species:  Animal Type:  Breed:   
 Age (Y-M-D)://  Sex:

**Vaccination Details**

Date of Vaccination	Type of Vaccines
"This is to certify that the above-mentioned animal has been vaccinated as shown in the above table."	

Validity: Till dd-----yyyy

(Seal and Signature)

Figure 83: Generation of Individual Vaccination Certificate

### 6.3. VACCINATION CERTIFICATE (MASS)

The vaccination for a herd/flock can be generated under this service. However, to enable generation of mass vaccination certificate, the herd/flock must be vaccinated, and data recorded under the mass vaccination service (See 2.3.3), for which owner registration is mandatory (See 1.1) and thus have a unique Mass Registration Number (MRN).

- Click on the “Vaccination Certificate (M)” submenu under the “Certificates” service (Figure 84).
- Enter the MRN of the herd/flock (Figure 84).
- Select “Species” and the date range for the certificate generation (Figure 84).

- Verify the auto-filled information about the herd/ flock and click on the “Print” button to print the certificate (Figure 84).
- The “Date of Issue” and “Validate” fields must be manually entered (Figure 84).
- Sign and seal in the space provided and issue the certificate (Figure 84).

**Veterinary Information System** Dr Pelden Wangchuk  
NCAH Thimphu

Mass Registration Number  Species \*

From Date\*  To Date\*

**VACCINATION CERTIFICATE (MASS)**

Date of Issue: dd----yyyy

**Owner Details**

Nationality: Country: CID Number:  
Passport/Work Permit No.: Name: Dzongkhag:  
Gewog: Village: Locality:

**Vaccine and Animal Details**

Mass Reg No.:

Vaccine and Animal Details							No. of Animals Vaccinated		
Date of Vaccination	Vaccine Type	Species	Animal Type	Breed	Age	Male	Female	Mixed	Total

"This is to certify that the above-mentioned animal has been vaccinated as shown in the above table."

Validity: Till dd----yyyy

(Seal and Signature)

Figure 84: Generation of vaccination certificate for a herd/flock

#### 6.4. BREEDER STATEMENT

During registration of a pet animal, upon selecting “No” for “Neuter Status”, a field named “Breeder Status” opens where if “Yes” is selected, it means that the pet is has been registered in the VIS to be kept for breeding purposes (See 3.1 and Figure 44).

To generate a statement that the pet is registered in the VIS as a breeder, this service must be availed. However, it must be remembered that this statement is not a certificate for breeding, which must be obtained from the relevant authority following fulfillment of certain criteria set for pet breeding and its facility establishment.

- Click on the “Breeder Statement” submenu under the “Certificates” service (Figure 85).
- Enter the PRN or Microchip Number of the pet animal (Figure 85).

- Verify the auto-filled information, including the “Breeder Status” field, about the pet and click on the “Print” button to print the certificate (Figure 85).
- Sign and seal in the space provided and issue the certificate (Figure 85).

The screenshot shows the Veterinary Information System (VIS) interface. The sidebar on the left contains navigation options: Home, Individual, Mass, Pet Information Management, DPM/MDV, Disease Outbreak, Certificates (with sub-options: Pet Health Certificate, Vaccination Certificate (I), Vaccination Certificate (M), and Breeder Statement), Reports, and Past Data Archival. The main area displays the Pet Breeding Registration Statement form. At the top, there is a search bar for "Pet Registration Number/Microchip Number" with a search icon. Below this is a "Print" button. The form itself is titled "PET BREEDING REGISTRATION STATEMENT" and includes a statement: "This is to state that the pet animal, details as described below, has been registered as a breeder in the Veterinary Information System." The form contains several sections: "Breeder Status" with fields for "Pet Registration No.:", "Microchip No.:", and "Date of Registration:"; "Owner Details" with fields for "Nationality:", "CID Number:", "Passport/Work Permit No.:", "Country:", "Name of Owner:", "Dzongkhag:", "Gewog:", "Village:", "Locality:", and "Mobile No."; and "Pet Details" with fields for "Pet Name:", "Species:", "Breed:", "Age(Year/Month/Day): //", and "Sex:". At the bottom right, there is a box labeled "(Seal and signature)".

Figure 85: Generation of Breeder Statement

## 7. REPORTS

Report generation in the system is limited to the technical hierarchy of the user's centre. A national level user has can access the reports of all the extension centres in country; however, a regional user can generate reports of the extension centres located under their own region, a Dzongkhag level user can access the reports for the centres located within the Dzongkhag, and the Gewog (including Central Agencies) level user can access the reports of their own centre.

To generate a report, click on the "Reports" service from the menu bar. All the sub-menus of different type of reports will be displayed (Figure 86).

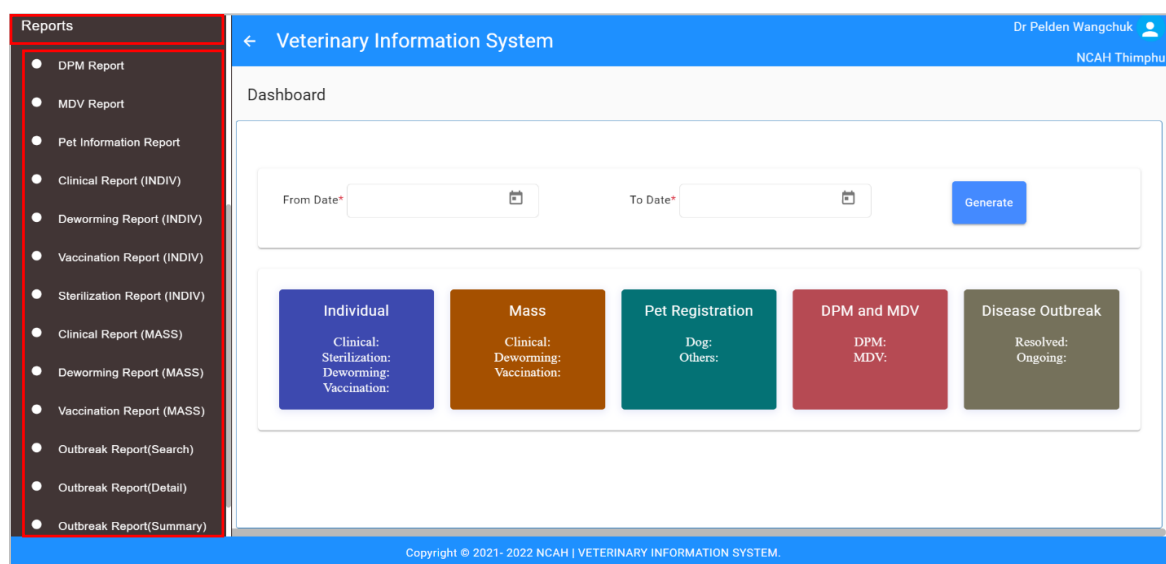


Figure 86: Types of Reports in the VIS

Following are the available reports that can be generated in the system:

- DPM Report – for data entered in 4.1.
- MDV Report – for data entered in 4.1 and 4.2.
- Pet Information Report – for data entered in 3.
- Clinical Report (INDIV) – for data entered in 1.3.1.
- Deworming Report (INDIV) – for data entered in 1.3.3.
- Vaccination Report (INDIV) – for data entered in 1.3.4.
- Sterilization Report (INDIV) – for data entered in 1.3.2.
- Clinical Report (MASS) – for data entered in 2.3.1.
- Deworming Report (MASS) – for data entered in 2.3.2.
- Vaccination Report (MASS) – for data entered in 2.3.3.
- Outbreak Report (Search) – for data entered in 5.
- Outbreak Report (Detail) – for data entered in 5.
- Outbreak Report (Summary) – for data entered in 5.

Generally, to generate any kind of report from the VIS, upon clicking the report sub-menu of interest, a report generation page will pop up, wherein the user can apply filters to narrow down the search. For the generation of any kind of reports, “Date” fields must be filled (mandatory). After selection of the date range and application of required filters, the report will be generated in the form of a report table which can be exported/downloaded in excel or csv file format.

### 7.1. DPM REPORT

- Click on the “DPM Report” sub-menu under the “Reports” service (Figure 87).
- Select the date range by entering a date in the “From Date” and “To Date” fields (Figure 87).
- Apply filters, if required, to narrow down the search and get rid of unwanted data (Figure 87).
- If no filters are applied, the default filters of “All” will be applied. In this case, based on the user’s Centre’s hierarchy, report table will be generated for the selected date range.
- To produce the report table based on the selected dates and filters, click on the “Generate” button (Figure 87).

The screenshot displays the 'DPM Report' generation page within the 'Veterinary Information System'. The interface includes a sidebar on the left with navigation options: Individual, Mass, Pet Information Management, DPM/MDV, Disease Outbreak, Certificates, Reports, and a sub-menu for Reports. The 'DPM Report' option is highlighted. The main form area contains several filter fields: 'From Date\*' and 'To Date\*' (both with calendar icons), 'Program Name' (All), 'Ownership Status' (All), 'Dzongkhag' (All), 'Gewog' (All), 'Breed' (All), 'Sex' (All), 'Health Score: 1(very thin) to 5(obese)' (All), 'Skin Condition' (All), 'Transmissible Venereal Tumour' (All), 'Pregnancy Status' (All), 'ARV Vaccination' (All), 'Post Operative Complication' (All), and 'Fate of the Dog' (All). A blue 'Generate' button is located at the bottom of the form. Red arrows indicate the 'DPM Report' menu item and the 'Generate' button.

Figure 87: DPM report generation page

SI No.	Program Name	Sterilization Date	Animal Type	Ownership Status	CID No.	Owner Name	Catch Method	Tag No.	Dzongkhag Name	Gewog Name	Village Name	Locality	Latitude	Longitude	Mobile Number
1	TH-C(0-499) Thimphu- NVH	15-09-2022	Dog	Owned	11509005377	Kunzang S Jigme			Thimphu	Thim Throm		Babesa	0	0	1712515
2	TH-C(0-499) Thimphu- NVH	14-09-2022	Dog	Owned	10811001825	Penjor	TH-C3471		Thimphu	Thim Throm		Chubachu	0	0	1738019
3	TH-C(0-499) Thimphu- NVH	15-09-2022	Dog	Owned	10501001343	Sangay Rinchen			Thimphu	Thim Throm		Yhss Area	0	0	1739615
4	PA-C(1-1000) DVH	02-09-2022	Dog	Owned	11803000420	Hari Lal Sinchur			Thimphu	Thim Throm		Olakha	0	0	1791453
5	PA-C(1-1000) DVH	02-09-2022	Dog	Owned	11803000420	Hari Lal Sinchur			Thimphu	Thim Throm		Olakha	0	0	1790672

Figure 88: DPM report table generated

- Based on the dates and filters applied, the report table shall be generated (Figure 88).
- To download the generated report table, click on excel and csv icon (Figure 88). The report will be downloaded in the chosen format.

## 7.2. MDV REPORT

See 7.1 (DPM Report) for the steps to generate a report.

Figure 89: MDV report generation page

### 7.3. PET INFORMATION REPORT

See 7.1 (DPM Report) for the steps to generate a report.

**Pet Information Report**

From Date\*

To Date\*

Nationality

Country

Species

Breed

Dzongkhag

Gewog

Neuter Status

Sex

Status (Alive/Dead)

**Generate**

Figure 90: Pet information report generation page

### 7.4. CLINICAL REPORT (INDIV)

See 7.1 (DPM Report) for the steps to generate a report.

**Individual Clinical Report**

From Date\*

To Date\*

Nationality

Animal Ownership Type

Dzongkhag

Gewog

Species

Animal Type

Breed

Sex

Diagnostic test(s) request

Final diagnosis (System)

Medicine Class

Final diagnosis (Condition)

Medicine Name

**Generate**

Figure 91: Report generation for individual clinical service

## 7.5. DEWORMING REPORT (INDIV)

See 7.1 (DPM Report) for the steps to generate a report.

**Individual Deworming Report**

From Date\*

To Date\*

Nationality

Dzongkhag

Species

Breed

Diagnostic test(s) request

Medicine Class

Animal Ownership Type

Gewog

Animal Type

Sex

Final diagnosis (condition)

Medicine Name

**Generate**

Figure 92: Report generation for individual deworming service

## 7.6. VACCINATION REPORT (INDIV)

See 7.1 (DPM Report) for the steps to generate a report.

**Individual Vaccination Report**

From Date\*

To Date\*

Nationality

Dzongkhag

Species

Breed

Vaccine Type

AEFI Reaction

Animal Ownership Type

Gewog

Animal Type

Sex

Reaction Name

**Generate**

Figure 93: Report generation for individual vaccination service



## 7.7. STERILIZATION REPORT (INDIV)

See 7.1 (DPM Report) for the steps to generate a report.

**Pet Information Management**

- DPM/MDV
- Disease Outbreak
- Certificates
- Reports
  - DPM Report
  - MDV Report
  - Pet Information Report
  - Clinical Report (INDIV)
  - Deworming Report (INDIV)
  - Vaccination Report (INDIV)
  - Sterilization Report (INDIV)**
  - Clinical Report (MASS)
  - Deworming Report (MASS)
  - Vaccination Report (MASS)

**Individual Sterilization Report**

From Date\*

To Date\*

Nationality

Animal Ownership Type

Dzongkhag

Gewog

Species

Animal Type

Breed

Sex

Medicine Class

Medicine Name

**Generate**

Figure 94: Report generation for individual sterilization service

## 7.8. CLINICAL REPORT (MASS)

See 7.1 (DPM Report) for the steps to generate a report.

**Pet Information Management**

- DPM/MDV
- Disease Outbreak
- Certificates
- Reports
  - DPM Report
  - MDV Report
  - Pet Information Report
  - Clinical Report (INDIV)
  - Deworming Report (INDIV)
  - Vaccination Report (INDIV)
  - Sterilization Report (INDIV)
  - Clinical Report (MASS)**
  - Deworming Report (MASS)
  - Vaccination Report (MASS)

**Mass Clinical Report**

From Date\*

To Date\*

Nationality

Animal Ownership Type

Dzongkhag

Gewog

Species

Animal Type

Breed

Medicine Name

Medicine Class

**Generate**

Figure 95: Report generation for mass clinical service

## 7.9. DEWORMING REPORT (MASS)

See 7.1 (DPM Report) for the steps to generate a report.

**Reports**

- DPM Report
- MDV Report
- Pet Information Report
- Clinical Report (INDIV)
- Deworming Report (INDIV)
- Vaccination Report (INDIV)
- Sterilization Report (INDIV)
- Clinical Report (MASS)
- **Deworming Report (MASS)**
- Vaccination Report (MASS)
- Outbreak Report(Search)
- Outbreak Report(Detail)
- Outbreak Report(Summary)

**Mass Deworming Report**

From Date\*

To Date\*

Nationality

Dzongkhag

Species

Breed

Medicine Name

Animal Ownership Type

Gewog

Animal Type

Medicine Class

**Generate**

Figure 96: Report generation for mass deworming service

## 7.10. VACCINATION REPORT (MASS)

See 7.1 (DPM Report) for the steps to generate a report.

**Reports**

- DPM Report
- MDV Report
- Pet Information Report
- Clinical Report (INDIV)
- Deworming Report (INDIV)
- Vaccination Report (INDIV)
- Sterilization Report (INDIV)
- Clinical Report (MASS)
- Deworming Report (MASS)
- **Vaccination Report (MASS)**
- Outbreak Report(Search)
- Outbreak Report(Detail)
- Outbreak Report(Summary)

**Mass Vaccination Report**

From Date\*

To Date\*

Nationality

Dzongkhag

Species\*

Breed\*

Vaccine Type\*

Animal Ownership Type\*

Gewog

Animal Type\*

Vaccination Status

**Generate**

Figure 97: Report generation for mass vaccination service

## 7.11. OUTBREAK REPORTS

Unlike other reports, there are three different ways of generating a same report for animal disease outbreak, however, each option has the ability generate varying details of a disease outbreak. It has happened due to the disease outbreak service's multifaceted data entry pages in the system.

### 7.11.1. Outbreak Reports (Search)

This option of disease outbreak report generation allows a user to fetch disease outbreak information tables (owner, animal and epidemiological) for a particular disease outbreak by searching through a disease outbreak ID (OID).

To search and view details for an outbreak,

- Click on the Outbreak Report (Search) sub-menu under Reports (Figure 98).
- Enter the outbreak's OID in the space provided (Figure 98). An OID of an outbreak can be viewed/ retrieved from the detail (7.11.2) and summary (7.11.3) report table of disease outbreaks.

The screenshot displays the 'Veterinary Information System' interface. On the left is a sidebar menu with options: MDV Report, Pet Information Report, Clinical Report (INDIV), Deworming Report (INDIV), Vaccination Report (INDIV), Sterilization Report (INDIV), Clinical Report (MASS), Deworming Report (MASS), Vaccination Report (MASS), **Outbreak Report(Search)**, Outbreak Report(Detail), and Outbreak Report(Summary). The 'Outbreak Report(Search)' option is highlighted in blue. The main content area has a blue header with a back arrow and the text 'Veterinary Information System'. Below this is a section titled 'Search Disease Outbreak Details' containing a text input field for 'Outbreak ID(OID)' and a search button. A red box highlights the search input field, and a red arrow points from the sidebar menu to it. Below the search section is a 'View Outbreak Details' section containing a table with columns: Sl.No., Outbreak ID, Disease Name, follow-up Date, follow-up No., and View. The table is currently empty. Below the table is a 'View Owner Details' section with a dropdown arrow. The top right corner of the interface shows the user's name 'Dr Pelden Wangchuk' and the organization 'NCAH Thim'. The bottom right corner shows 'Items per page: 5' and '0 of 0'.

Figure 98: Search outbreak by OID

- Upon entering a valid OID, synopsis of the outbreak will be shown in the “View Outbreak Details” table (Figure 99).
- Click on the view icon on the right end of the table (outbreak details) to open other tables (Figure 99). The “View Owner Details” table will be opened.
- Click on the view icon on the right end of the table (owner details) to open other tables. It will open the remaining tables: detail information (tabular) about case, response measures and susceptible animals (Figure 99).

- It must be remembered that this feature of disease outbreak report generation can be used only to view information about an outbreak, but not to export into an analysis-friendly format, for which other report generation features should be used.

**Search Disease Outbreak Details**

Outbreak ID(OID)

O1020220060028

**View Outbreak Details**

Sl.No.	Outbreak ID	Disease Name	Follow-up Date	Follow-up No.	View
1	O1020220060028	Actinomyces	15-09-2022	1	View

**View Owner Details**

Sl.No.	Cid Number	Owner Name	Dzongkhag Name	Gewog Name	Village Name	Latitude	Longitude	Primary Date	Farming System	Last Vaccination Date	View
1	10807001416	Pelden Wangchuk	Chukha	Blagcho	Mapia	12	12	14-09-2022	Agro-pastoral		View

**View Details**

Follow Up Case Details ( Live Case/Dead):

Sl.No.	Species Name	Animal Type	Breed Name	Age	Male	Female	Mixed	Total	Status
1	Bovine	Yak	Exotic pure	Adult	2	12	0	14	Live Case
2	Bovine	Yak	Exotic pure	Young	2	2	0	4	Dead

Animal Cullied/Slaughtered, Examined,Treated and Vaccinated in response to the disease outbreak.

Sl.No.	Response	Species Name	Animal Type	Breed Name	Number Of Animals
1	Examined	Bovine	Cattle	Crossbreed	12
2	Treated	Bovine	Cattle	Crossbreed	12
3	Vaccinated	Bovine	Yak	Exotic pure	121

Susceptible Animals

Sl.No.	Species Name	Animal Type	Susceptible Animals
1	Bovine	Yak	1231

Figure 99: Outbreak details fetched upon entering the OID

### 7.11.2. Outbreak Report (Detail)

To generate a detailed animal disease outbreaks report, this option of outbreak report generation should be used. It enables a user to generate disease outbreak information based on time, space and outbreak status.

**Disease Outbreak Report**

From Date\* 01/08/2022 To Date\* 16/09/2022

Dzongkhag All Gewog All

Status (Ongoing/Resolved) All

**Generate**

**Disease Outbreak Report**

Sl.No.	OID Number	Index Case Date	Status (ongoing/resolved)	Resolved Date	Follow-up No.	Follow-up Date	Primary Case Date	CID No.	Owner Name	Dzongkhag	Gewog	Village	Locality	Latitude	Longitude
1	O1D2022020060028	15-09-2022	Resolved	15-09-2022	1	15-09-2022	14-09-2022	10807001416	Pelden Wangchuk	Chukha	Blagchho	Same as village	12	12	
2	O1D2022020060028	15-09-2022	Resolved	15-09-2022	1	15-09-2022	14-09-2022	10807001416	Pelden Wangchuk	Chukha	Blagchho	Same as village	12	12	

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Figure 100: Detailed disease outbreaks report generation

- Click on the “Outbreak Report (Detail)” sub-menu under “Reports” service (Figure 100).
- Apply filters as required. Date range (from and to) fields are the mandatory (Figure 100).
- Generate the report table based on the filters and export in excel or csv file (Figure 100).

### 7.11.3. Outbreak Report (Summary)

This option of disease outbreak report generation can be used if a summary of outbreaks within a selected time and space is required. It is similar to 7.11.2, however, it provides a consolidated information about disease outbreaks.

- Click on the “Outbreak Report (Summary)” sub-menu of the “Report” service (Figure 101).
- Apply filters as required. Date range (from and to) fields are the mandatory (Figure 101).
- Generate the report table based on the filters and export in excel or csv file (Figure 101).

Si No.	O/D Number	Disease name (final diagnosis)	Dzongkhag Name	gewog Name	Index Case Date	No. of households	No. of live cases	No. of deaths	No. of susceptible animals	No. of animals examined	No. of animals treated	No. of animals culled	No. of animals vaccinated	Outbreak status
1	O/D2022020060028	Actinomycosis	Chukha	Bjagchho	15-09-2022	1	14	4	1231	12	12	0	121	Resolved
2	O/D2022020070009	Duck virus hepatitis	Chukha, Dagana	Bjagchho, Gesarling	18-08-2022	1	0	112	66	44	0	2	0	Resolved
3	O/D2022020070015	African horse	Bumthang	Chhumi	11-09-	1	66	0	33	0	33	0	0	Ongoing

Figure 101: Disease outbreak summary report generation

## 8. SYSTEM ADMINISTRATION

The National Centre for Animal Health shall look after the management of the system and ensure proper functioning of the system, and the centre shall function as the system administrator. Two main roles of the system admin are:

- Master Management
- User Management

To access the system admin page, login using the admin user's credential. It will redirect to a page where master management and user management services can be viewed in the menu bar (Figure 102).

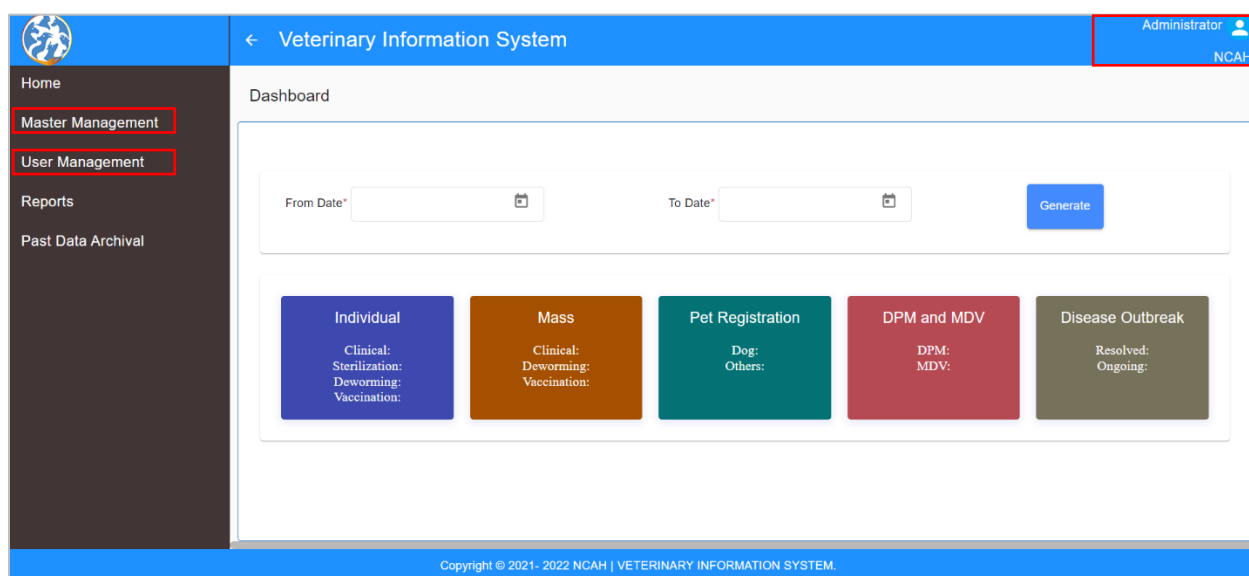


Figure 102: System admin's page

### 8.1. MASTER MANAGEMENT

This service allows the system administrator to add new or make changes to the existing list of items which appear as dropdowns (independent or mapped) in different fields under different services of the system.

To view the fields/parameters that can be updated by the system administrator, click on the "Master Management" service in the menu bar (Figure 102). A page will pop up showing the list of master files (Figure 103). The master fields could be independent or mapped. The list of independent fields can be added directly, whereas for adding to the list of mapped fields, the parent field must be added first. Except for the child fields, shown in Table 1, all other fields in Figure 103 are independent.

Master List

System	Condition
Deworming Diagnostic Test	Clinical Diagnostic Test
Clinical Procedures	Route
Frequency	Vaccine Type
AEFI	Animal Ownership Type
Notifiable Diseases	Pet Breed
Animal skin conditions	Catching Method
Sample Type	Type of Lab Test (Notifiable)
Farming System	Medicine Class
Animal Type	Program
Laboratory	Medicines
Breed (General)	Dose Unit
Designation	Centre
Basis of Diagnosis	Lab Test Result
Deworming Condition	Gewog
<div style="border: 2px solid red; display: inline-block; padding: 5px 20px;">Village</div>	

Figure 103: Master fields (independent and mapped (red))

Table 1: Mapped fields under master management.

Child field	Parent field
Condition	System
Pet Breed	Species
Medicines	Medicine Class
Gewog	Dzongkhag
Village	Gewog

To add or update a list of master field,

- Click on the master field name of interest. A page will pop up where a name from the list can be edited or deleted (Figure 104).

To add to the list of names under an independent field,

- Click on the “+ Add” button (Figure 104).
- In the space provided, enter the name to be added (Figure 104).
- Click on the “Add” button to save and add the name to the existing list (Figure 104).

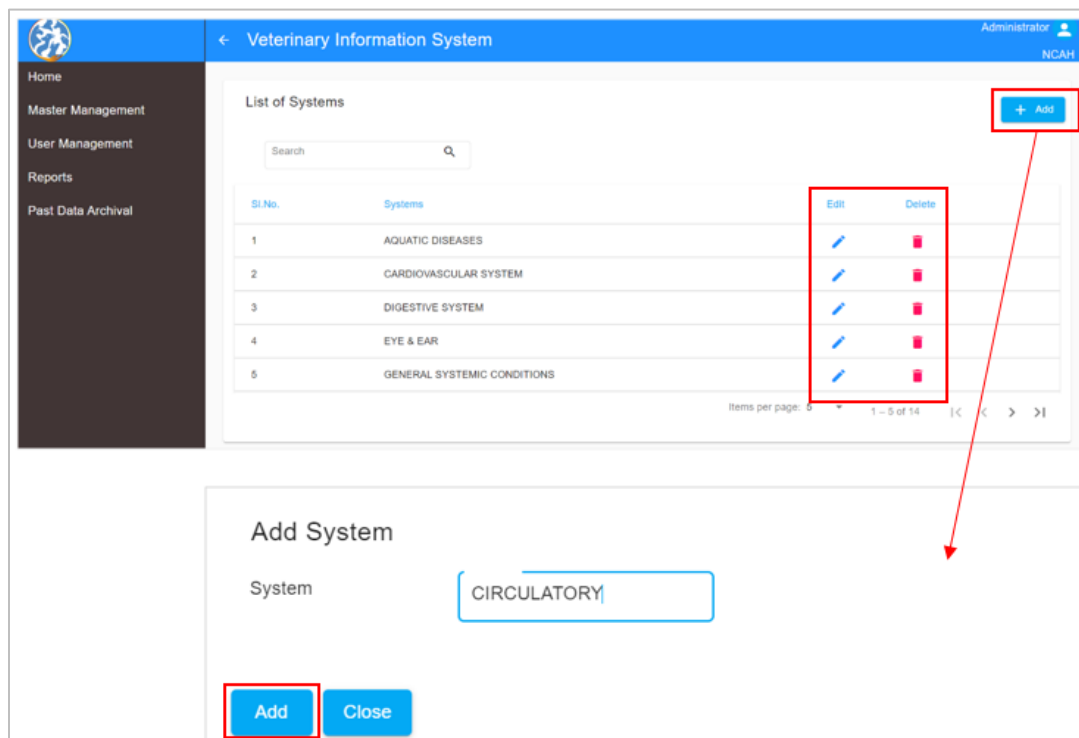


Figure 104: Adding an independent field

To add to the list of names under a child field mapped to a parent field,

- Click on the “+ Add” button (Figure 105).
- In the space provided, enter the name to be added (Figure 105).
- Select the name from the parent field to which the child item is to be mapped with (Figure 105).
- Click on the “Add” button to save and add the name to the existing list (Figure 105)
- In Figure 105, “Condition” is the child field mapped to System, the parent field. Therefore, to add a new condition, name of the system must be chosen, to which the new condition name will be mapped with.



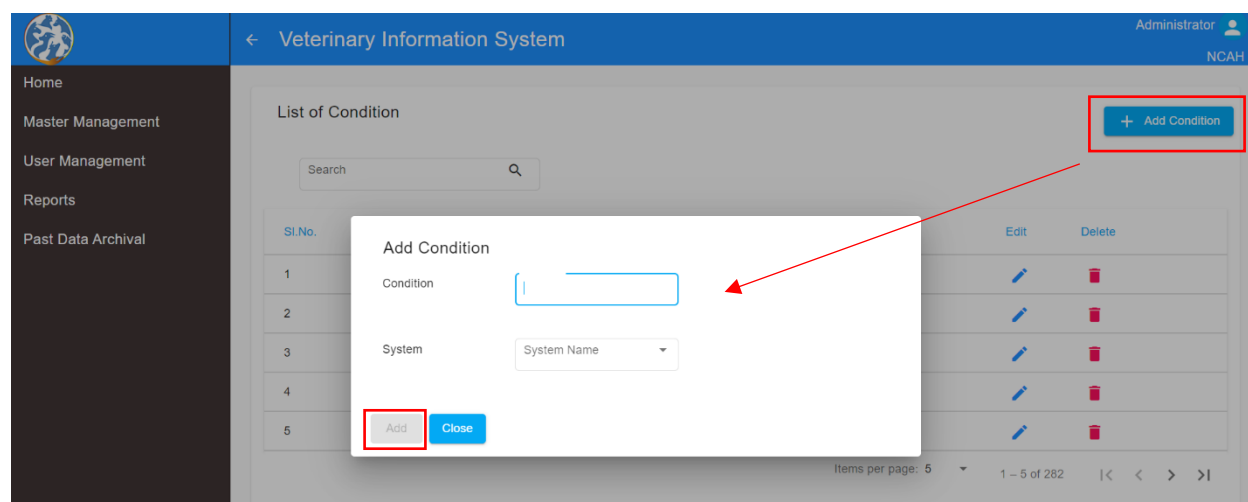


Figure 105: Adding a new child field mapped to a parent field

## 8.2. USER MANAGEMENT

This service allows the system admin to register a new user or update information about the already registered users. For registration to access the system as a data manager or a guest user, NCAH must be contacted and provided with the required user registration information as shown in Figure 106.

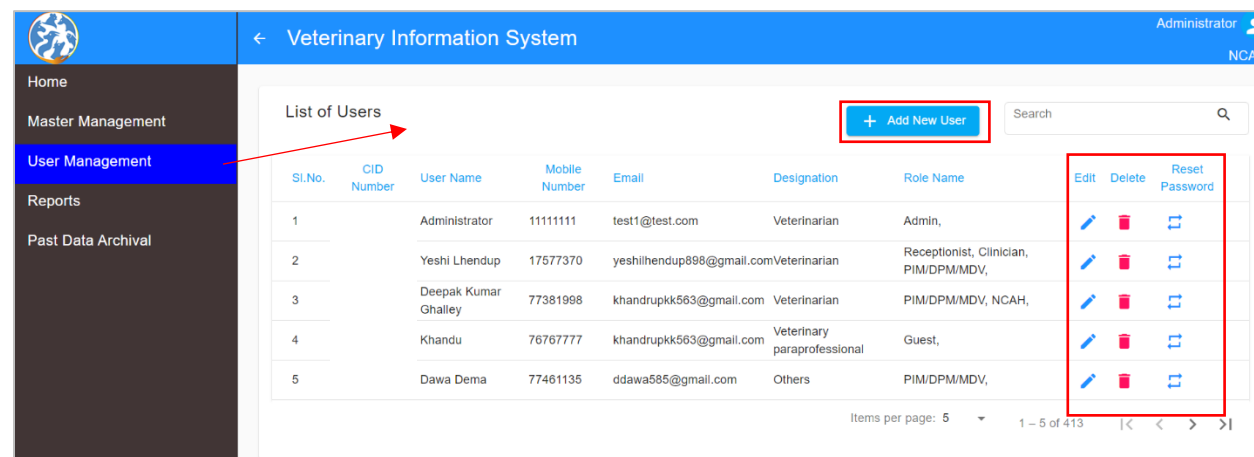


Figure 106: User management page

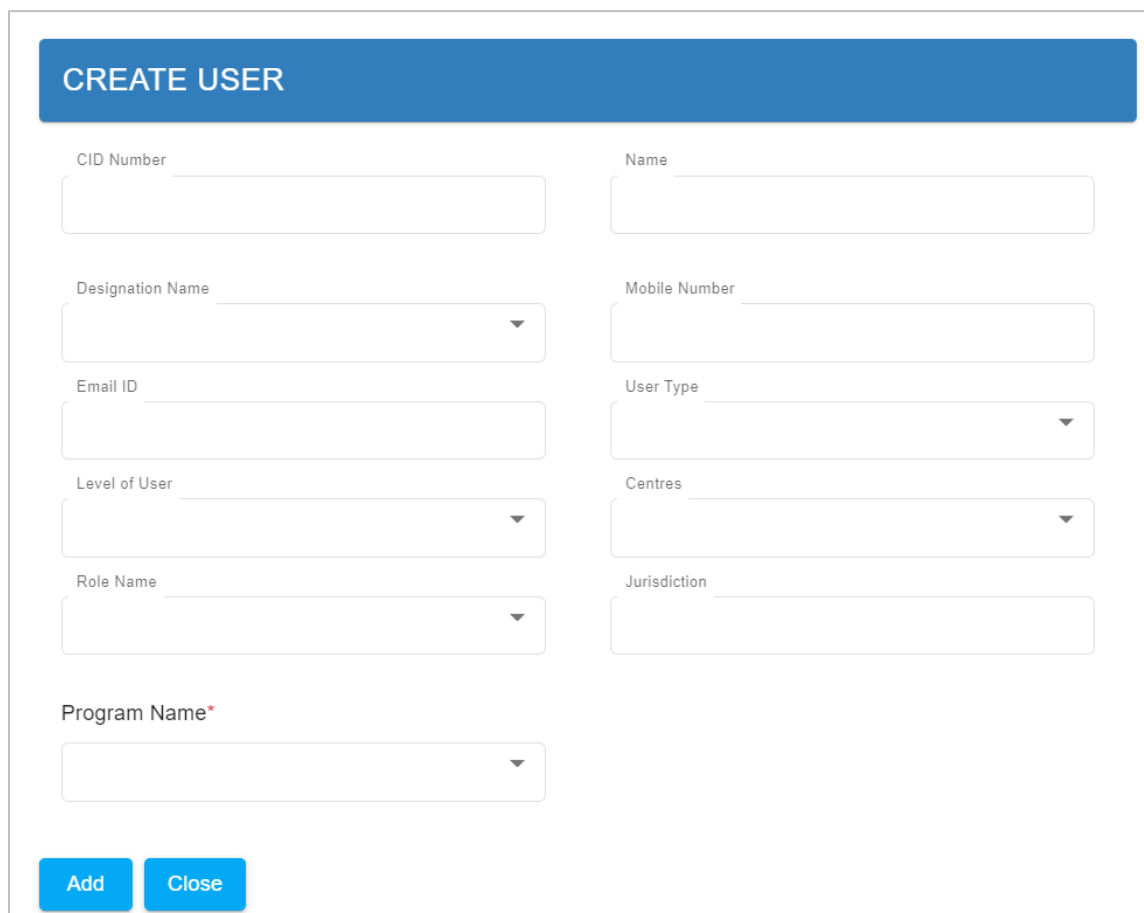
To view the list of registered users, update user's information or to add a new user,

- Click on the "User Management" service from the menu bar (Figure 106).
- To update information of a registered user, click on the edit (pen) icon, edit and update.
- To delete a user, click on the delete (bin) icon and remove the user from the system.

- Upon receiving a request from a registered user to reset the password, click on the icon to reset password (Figure 106). The default password is the user's CID, and the user must change the password upon first login following a password reset.

To register a new user,

- Click on the "+ Add New User" button (Figure 106). It will open the "Create User" page (107).



**CREATE USER**

CID Number

Name

Designation Name

Mobile Number

Email ID

User Type

Level of User

Centres

Role Name

Jurisdiction

Program Name\*

**Add** **Close**

Figure 107: New user registration page

- All the information fields are mandatory and must be filled carefully.
- Enter the CID of the user, following which the user's full name will be fetched and auto filled in the name field.
- Select the proper designation of the user.
- Enter the user's mobile number and email ID.
- Select a user type:
  - Data manager – concerned with entering technical data. For example, Veterinarians and Veterinary paraprofessionals in the field.

- Guest user – concerned with data monitoring and assessment. For example, Veterinarians and Veterinary paraprofessionals in the management position.
- Admin – concerned with system administration activity.
- Select a level of user:
  - National – for users from NCAH and NVH
  - Regional – for users from RLDC and TVH & SL
  - Dzongkhag – for users from DVH
  - Gewog – for users from LEC, RNR-EC and Central Agencies
- Depending on the level of user chosen, select the name of the Centre.
- Select a Role Name; a role-specific services will be displayed for different users (Table 2).

*Table 2: Role name and services accessible*

Role Name	Services
Admin	User and Master Management
Receptionist	Registration Services
Clinician	All services except Pet Information Management and DPM/MDV
NCAH	All services with an additional role concerning disease outbreak information validation.
PIM/DPM/MDV	Pet Information Management and DPM/MDV
Guest	Pet Information and Reports

- Select a Jurisdiction depending on the location of the Centre
- Program Name field will be enabled only upon selecting PIM/DPM/MDV as the role name. The system admin shall add a program name from the master management and tag to the concerned user during user registration.
- After filling up all the fields, click on the “Add” button to save and submit the user registration process.
- The registered user shall be notified through an email from [vis@moaf.gov.bt](mailto:vis@moaf.gov.bt)

## 9. PAST DATA ARCHIVAL

This service of the system serves as an archival of files concerning veterinary clinical cases (including deworming, sterilization and vaccination) data since 2016 – recorded in the earlier version of the VIS. It also stores past data about the outbreak of notifiable animal diseases in the country since 1996.

To access the past data about veterinary clinical cases or notifiable disease outbreaks.

- Click on the “Past Data Archival” service from the menu bar (Figure). It will open the folders of past data repository.
- Click on the view icon against the document name of interest (Figure).

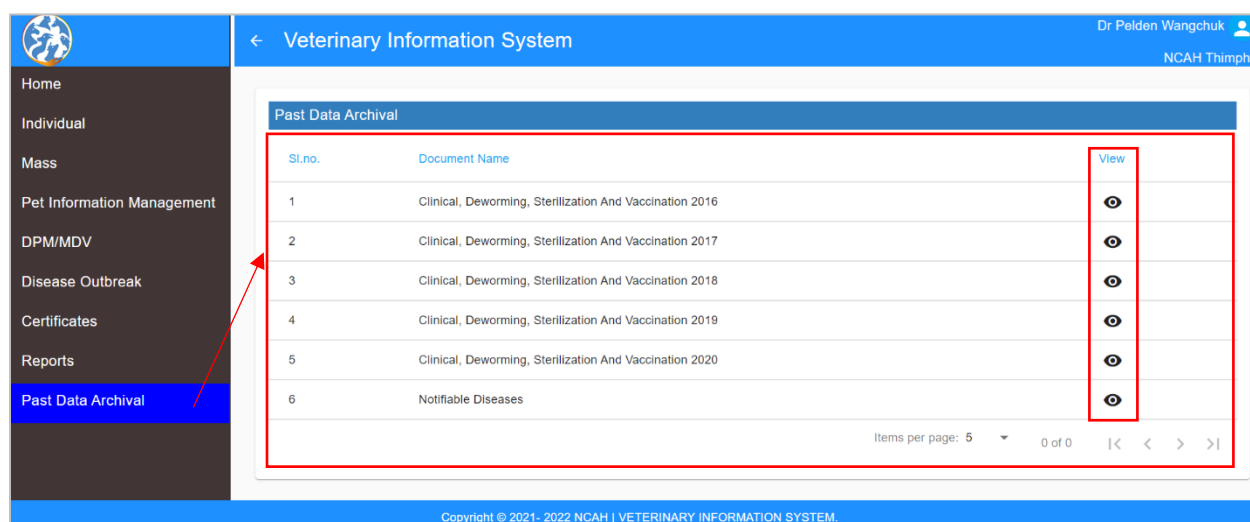


Figure 108: Past veterinary clinical and disease outbreak data archived



