Using Protocols in Dairy Comp 305
3/06, assumes w.05.12.14 or later

It is becoming increasingly important for dairies to have an easy method for documenting disease treatments. Maintaining good, consistent records of specific protocols will make administering treatments more consistent, and reduce the likelihood of milk or meat residues.

Dairy Comp 305 has the ability to track specific disease protocols. Protocols are set up in a table and each time the disease is entered, a table is displayed allowing you to select the appropriate treatment. The table also keeps track of the pen number, default remark, last treatment, milk, and meat with holding dates, and treatment cost. Up to 64 protocols can be stored and easily selected during data entry.

<table>
<thead>
<tr>
<th>Summary of steps for setting up protocols</th>
<th>Shortcut</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Create new items</td>
<td>Alter\2 then 4</td>
</tr>
<tr>
<td>2. Map the new items to the protocol table</td>
<td>Alter\7 then 8</td>
</tr>
<tr>
<td>3. Define protocols</td>
<td>Alter\7 then 4</td>
</tr>
<tr>
<td>(starting with one disease such as Mastitis)</td>
<td>Alter 3 then 4</td>
</tr>
<tr>
<td>4. Make the work list commands</td>
<td>Right mouse click, add an item</td>
</tr>
<tr>
<td>5. Add protocol items to cowcard display (optional)</td>
<td></td>
</tr>
</tbody>
</table>

Creating the Items
Items are created for evaluating treatment status. Once the items are created, they can be used on the cowcard, vetlist and included in other reports.

To create a new item, go to ALTER > (2) Items > (4) add an item definition

Each item will ask you to initialize it. Say “YES”.
Abbrev: MKDAT  
Type: 18  
Location: let Dairy Comp choose  
Description: Date to test for milk withhold

Abbrev: BFDAT  
Type: 18  
Location: let Dairy Comp choose  
Description: Date to test for meat withhold

Abbrev: LTDAT  
Type: 18  
Location: let Dairy Comp choose  
Description: Date of last treatment

Abbrev: HPDAT  
Type: 18  
Location: let Dairy Comp choose  
Description: Date moved to hospital pen

Abbrev: RCDAT  
Type: 18  
Location: let Dairy Comp choose  
Description: Date to recheck

Abbrev: PN  
Type: 1  
Location: let Dairy Comp choose  
Description: Previous pen number

Abbrev: DIH  
Type: 49  
Item 1: Today  
Item 2: HPDAT  
Description: Days in Hospital pen

Abbrev: THD  
Type: 1  
Location: let Dairy Comp choose  
Description: Total days in hospital pen this lactation
Mapping the items to the protocol table:
Once the items are made, go to ALTER > (7) Protocol Table > (8) Set up Protocol Items. Map your recently made items to the Protocol Table definitions; MKDAT, BFDAT LTDAT PN HPDAT RECHK. Ignore total treat cost for now.

Each newly made protocol item needs to be “mapped” to the protocol table.

Protocol treatments entered before making the items will not display data for those animals. The items need to be mapped before data will be displayed in the specific item fields.

Define the Protocols
Once again, go to ALTER > (7) Protocol Table > (4) Add a new protocol. Each protocol has a name, an associated event, an optional remark, and optional destination pen. The table can hold up to 64 protocol definitions.

The current drug withholding and treatment information, located in the protocol.lst file is taken from the Milk & Dairy Beef Quality Assurance Program producer manual.

An example protocol table is displayed below:
### Column Definitions:

**Protocol:** is used only as a description to assist data entry.

**Event:** is the actual event that will be stored for the cow.

**Remark:** is the default remark, but can be overwritten at entry if Prompt is “Y”

**Prompt:** if “Y”, it can be overwritten, if “N” it cannot.

**Pen:** group or pen where cow is to be moved. If it is not zero, the cow will be automatically moved to that pen. Typically, pen number is the hospital pen.

**Milk:** the number of days before testing treated cows for milk residue.

**Meat:** the number of days before testing treated cows for shipping.

**Days:** the duration of the treatment protocol.

**Cost:** estimated cost of the treatment

**ReChk:** the number of days before showing up on the list for a recheck, commonly used for Lame protocols

**Active:** If the protocol is not active, then it will not be displayed during entry of the event.

<table>
<thead>
<tr>
<th>Protocol</th>
<th>Event</th>
<th>Remark</th>
<th>Prompt</th>
<th>Pen</th>
<th>Milk</th>
<th>Meat</th>
<th>Days</th>
<th>Cost</th>
<th>ReChk</th>
<th>Active</th>
</tr>
</thead>
<tbody>
<tr>
<td>NAXCEL</td>
<td>PNEU</td>
<td>NAX20C3D</td>
<td>N</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>CEFA-LAK</td>
<td>DRY</td>
<td>CEF-ORB</td>
<td>N</td>
<td>7</td>
<td>8</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>PIRSUE. IM</td>
<td>MAST</td>
<td>PIR5QQ</td>
<td>Y</td>
<td>10</td>
<td>2</td>
<td>9</td>
<td>5</td>
<td>0</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>POLYFLX. IM</td>
<td>PNEU</td>
<td>FLY3.15</td>
<td>Y</td>
<td>99</td>
<td>2</td>
<td>6</td>
<td>3</td>
<td>0</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>PENICILLIN</td>
<td>DA</td>
<td>PEN20C4D</td>
<td>Y</td>
<td>99</td>
<td>4</td>
<td>28</td>
<td>4</td>
<td>0</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>AMOXIMAST. IMM</td>
<td>MAST</td>
<td>AMD5QQ</td>
<td>Y</td>
<td>10</td>
<td>3</td>
<td>12</td>
<td>5</td>
<td>0</td>
<td>Y</td>
<td></td>
</tr>
</tbody>
</table>
Data Entry

Protocols are invoked if there are active protocols in the table for the event being entered. (The \P switch in the event command is no longer necessary.)

Depending on the command, either all the protocols are displayed, or only the protocols for the desired event. Once an event is chosen, REM and pen can be automatically entered. Examples:

- `ENTER EC EDAY PEN REM` Does not display protocols, stores REM and PEN
- `ENTER EC=33 EDAY PEN REM` Only shows protocols for event 33
- `ENTER EC=33 EDAY PEN` Does not store REM

Enable/Disable protocol prompting

Begin by choosing ALTER > (3) Commands > (4) add a command

Tracking Days in Hospital (DIH)
Abbrev: HOSDAYS
Content: HPDAT=EDAY PN PEN
HPDAT=EDAY sets the hospital date to begin calculating current days in hospital (DIH).

Abbrev: TOTHOSD
Content: THD=THD+DIH HPDAT=0 PEN=PN PEN
The TOTHOSD command can be incorporated into the MOVE event and used to move cows out of the treated pen, back to the pen they came from. By using this command, it is possible to “remember” where a cow came from and put her back in that pen automatically.

**Changing the Event Command**

Alter > Commands > (5) Examine/Modify a Command

Select the command MAST or whatever command you use to track mastitis.

Add the command HOSDAYS to the end of the command. HOSDAYS should be added to any event used in your protocol table (ie: LAME, METR). Your command will look something like this:

Abbrev: MAST
Content: EC=20 EDAY REM HOSDAYS

**Creating Work Lists**

Once items have been defined and protocols created, we can develop a list to determine what cows need to be treated or moved from the hospital pen. We can also create lists to tell which cows may or may not be past their date to test for meat withhold (BFDAT).

**Hospital List**

SHOW ID LTDAT MKDAT BFDAT DIH DIM DCC REM FOR PEN=8\VH2
Pen=8 is whatever the hospital pen number is
\VH says “list only events that are active protocols” (ie: they are still being treated)

3:5 tells us this cow is on the 3rd day of a 5 day treatment protocol.

The \VH switch on the end of the command displays the current treatment as defined in the protocol table.
List of cows NOT past the meat residue date

SHOW ID PEN EVT REM EDAY BFDAT FOR BFDAT>TODAY BY PEN BFDAT

Milk and Meat Withdrawal Warnings
If an entry is made in a cow’s record that violates the milk or meat withdrawal dates set up in the latest protocol functions, a warning is displayed. If a cow is moved out of the hospital pen into a MILK pen prior to her MKDAT, Dairy Comp will display a warning. A warning is also displayed if a cow is SOLD prior to her BFDAT.

This function works only if the withdrawal dates are set in the protocol setup procedure. If they are not set up, the program does not warn a withdrawal violation was entered. For the milk withdrawal function to work, ALTER > (4) pen types HOSP and MILK must be defined properly.

Adding Protocol items to the Cowcard Display
Go to any individual cowcard
Right mouse click on any item and choose “Add or change an item”

Extending Treatment Options
There are a number of options for extending a treatment past the standard protocol.
1. At the end of the treatment, enter a new protocol. MKDAT and BFDAT are automatically adjusted, and HPDAT, and PN are unchanged.
2. The original event can be edited, and MKDAT and BFDAT can be adjusted manually.
3. Daily events can be entered. If they have protocols, MKDAT and BFDAT are automatically adjusted, and HPDAT, and PN are unchanged.

Cow cards are very difficult to read, so data are often erased. Drug Watch minimizes the risk of this approach.

Using Protocol information in Dairy Analyzer:
For consultants using Dairy Analyzer, item data will be absorbed as long as both the on-farm cowfile and DCCONAnalyzer cowfile have the items made with the same name and item type.
The protocol table will not be absorbed.

Advanced use of protocol items and events

The \V switch in SHOW (or LIST) displays all the events for each cow. Events can be selected and formatted further by the use of additional switches in combination with \V. See the following examples.

1. Only the last “#” events - \V#
   LIST ID FOR PEN=1 \V4
2. Only select event types - \VS
   LIST ID FOR PEN=1 \VS
3. Only events that are active protocols - \WH

Setup Strings
In Setup > Parameters you can create setup stings to handle common criteria.

To customize a set of criteria, create a SETUP string EVTx, where x is A through F.

   EVTx ## [1..18,31..34,56] [dateitem] [P]
   Only use last ## events (0 means all events)
   Only look at events in Event_Set
   Only use events on/after dateitem
   If P, only show non-expired protocols

SHOW Examples using EVTX Setup String

List every event (from 31 to 39, and event 54) for each heifer.
Setup String is EVTC = 0 31..39,54
   SHOW ID DIM FOR LACT=1 \VC

List last 3 protocol events still active
Setup String is EVTD = 3 1..64 BDAT P
   SHOW ID DIM FOR LACT=1 \VD

List all events following the last breeding
   EVTE = 0 1..64 HDAT
   SHOW ID DIM FOR LACT=1 \VE

Optionally, these can be made into items. The event related item types are:

   66  Event name
   70  Date of event
Use **ALTER** > (2) Items > (4) add an item or (5) examine/modify an item already in the cowfile.
First, select the name, then the event type above. Normally, the next prompt is the event to select. In this case, select 0 (all events). Finally, 201 is the most recent, still active protocol, and 202 is the previous most active protocol.

**Item examples:**

<table>
<thead>
<tr>
<th>Code</th>
<th>Event</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>LPDAT</td>
<td>70, 0, 201</td>
<td>Last active protocol event date</td>
</tr>
<tr>
<td>LPEVT</td>
<td>66, 0, 201</td>
<td>Last active protocol event name</td>
</tr>
<tr>
<td>LPREM</td>
<td>73, 0, 201</td>
<td>Last active protocol remark</td>
</tr>
<tr>
<td>PPDAT</td>
<td>70, 0, 202</td>
<td>Previous active protocol event date</td>
</tr>
<tr>
<td>PPEVT</td>
<td>66, 0, 202</td>
<td>Previous active protocol event name</td>
</tr>
<tr>
<td>PPREM</td>
<td>73, 0, 202</td>
<td>Previous active protocol remark</td>
</tr>
</tbody>
</table>

It is also possible to create items to refer to groups of events.

**Example 1 – Veterinary Remarks:** Use **ALTER** to create/modify an event. (Assume the event is number 54.) Check the Combination box, then select events **OK, RECHEK, PREG, OPEN, ABORT**.

<table>
<thead>
<tr>
<th>Code</th>
<th>Event</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>LVDAT</td>
<td>70,54,-1</td>
<td>Last veterinary event date</td>
</tr>
<tr>
<td>LVEVT</td>
<td>66,54,-1</td>
<td>Last veterinary event name</td>
</tr>
<tr>
<td>LVREM</td>
<td>73,54,-1</td>
<td>Last veterinary remark</td>
</tr>
</tbody>
</table>

**Example 2 – non-parlor hospital treatments:** Use **ALTER** to create/modify an event. (Assume the event is number 55.) Check the Combination box, then select events **KET, LAME, MF, LDA, etc.**

<table>
<thead>
<tr>
<th>Code</th>
<th>Event</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>LHDAT</td>
<td>70,55,201</td>
<td>Last non-mastitis active protocol date</td>
</tr>
<tr>
<td>LHEVT</td>
<td>66,55,201</td>
<td>Last non-mastitis active protocol name</td>
</tr>
<tr>
<td>LHREM</td>
<td>73,55,201</td>
<td>Last non-mastitis active protocol remark</td>
</tr>
</tbody>
</table>

**Examples**

List all cows in pen 9 that need treatments today.

```
SHOW ID DIM FOR PEN=9 %70.0.201>0
```

List all cows in pen 9 that need mastitis (event 20) treatments today.

```
SHOW ID DIM FOR PEN=9 %70.20.201>0
```

List all cows in pen 9 that need non-mastitis (event 55) treatments today.

```
SHOW ID DIM FOR PEN=9 %70.55.201>0
```