

## Request for comments

### RFC-20060103AR – Quarantine of units awaiting vaccination

1<sup>st</sup> draft: A. Reeves, January 3, 2006

2<sup>nd</sup> draft: A. Reeves, January 26, 2006 (Changes the behavior of the core model, so that units holding for vaccination are NOT quarantined)

**Applies to:** Model description v1.0.4

**Type of change:** This change is an addition to the specification, which explicitly reverses the current operation of the model.

**Summary:** The proposed change makes it explicit that units awaiting vaccination are NOT quarantined.

**Justification:** The current specification is perhaps not as explicit as it could be regarding the quarantine of units awaiting vaccination. In the current application, units that are in queue for vaccination are “quarantined”, *i.e.*, they cannot be involved in direct contact. These two changes clarify that units in queue for vaccination should NOT in fact be quarantined.

The specification already explicitly states that units awaiting destruction are quarantined (see section 6.2.2).

**Change:** This change affects section 6.1. New text is highlighted:

#### 6.1. Quarantine

A diseased unit is quarantined on the day immediately following its detection. Units are also quarantined when they are placed on the prioritized waiting list for destruction (see section 6.2.2). Quarantined units cannot be involved in direct contact, but indirect contact and airborne spread may still occur to or from a quarantined unit.

**Change:** This change would add a new paragraph to section 6.3.3. New text is highlighted:

#### 6.3.3 Vaccination priorities

If a unit is marked for vaccination but cannot be vaccinated immediately, it goes onto a prioritized waiting list.

Vaccination priorities are set in fashion similar to destruction priorities (see section 6.2.2). There are two criteria which may be used to set vaccination priorities for units which fall within a vaccination circle. These criteria are production type of the unit and the number of days that a unit has been in the vaccination queue. Within the production type criterion, the production types present in a scenario are further prioritized.

The order in which these two criteria are applied must be specified in each scenario. For example, the number of days a unit has been in the vaccination queue may be the overriding priority, so that units of any production type that have been holding for the longest period of time are vaccinated before any others. The criterion with the highest priority is applied first. In the event that two units are encountered that have the same priority based on the top criterion, the next criterion is applied.

## End of changes

**Attachment:** email communication

----- Original Message -----

Subject: Question: quarantine on units waiting for vaccination/destruction

Date: Thu, 24 Nov 2005 14:54:59 -0500

From: Neil Harvey <neilharvey@gmail.com>

To: McNab, Bruce (OMAF) <Bruce.McNab@omaf.gov.on.ca>, Caroline Dubé <dubecm@inspection.gc.ca>, Barbara.A.Corso@aphis.usda.gov, FZagmutt@aphis.usda.gov, Aaron.P.Reeves@aphis.usda.gov, aehill@lamar.colostate.edu

Hi folks,

I have a model question for you all. This is something that has come up while I've been examining NAT08CDSVrl in Bruce's document.

The model description document says: detected units are quarantined. So a unit that is detected as diseased can have no further direct contacts.

However, I look in the code and I see a rule that a unit that is marked for destruction or marked for vaccination (as a result of ring, trace, etc.) is also quarantined. Is that rule supposed to be part of the model? Or did I just make it up?

Neil

**Attachment:** email communication

----- Original Message -----

Subject: Re: Question: quarantine on units waiting for vaccination/destruction

Date: Wed, 14 Dec 2005 21:31:14 -0500

From: Neil Harvey <neilharvey@gmail.com>

To: Aaron Reeves <Aaron.Reeves@colostate.edu>

References: <aa35ac3c0511241154u60bb379ew2e1d80c6ab0f3b7f@mail.gmail.com> <43A06DE8.70701@colostate.edu>

Hi Aaron,

On 12/14/05, Aaron Reeves <Aaron.Reeves@colostate.edu> wrote:  
> Did you ever receive a response to this question?

I read over the model document again and found that it said that a) all detected units are quarantined, and b) all units waiting to be destroyed are quarantined.

Whether units that are waiting to be vaccinated are quarantined while they wait is ambiguous. This was discussed a bit on a previous call and the consensus seemed to be that units waiting for vaccination wouldn't necessarily be quarantined.

It also came up in Bruce's comparison testing that people want to be able to quarantine traces without destroying them. That's not in the model description at all, so I'll write it up as an RFC sometime soon.

Neil

**Attachment:** email communication

----- Original Message -----

Subject: Re: Question: quarantine on units waiting for vaccination/destruction

Date: Thu, 15 Dec 2005 11:45:29 -0500

From: Neil Harvey <neilharvey@gmail.com>

To: Aaron Reeves <Aaron.Reeves@colostate.edu>

References: <aa35ac3c0511241154u60bb379ew2e1d80c6ab0f3b7f@mail.gmail.com>

<43A06DE8.70701@colostate.edu>

<aa35ac3c0512141831m6d97f4a7h261090d2f708e23b@mail.gmail.com>

<43A19D40.6050801@colostate.edu>

On 12/15/05, Aaron Reeves <Aaron.Reeves@colostate.edu> wrote:

> So to clarify, the model is currently quarantining units that are  
> awaiting vaccination?

Yep, that's right.