Clinical Reminders

VA-Hepatitis B Immunizations

Install Guide

August 2018

Product Development
Office of Information Technology
Department of Veterans Affairs
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Introduction

VHA recommends hepatitis B immunization (unless contraindicated) for previously unvaccinated adults who are at increased risk of contracting hepatitis B virus (HBV) infection and for any other adult who is seeking protection from HBV infection.

A set of 2 reminders is included in this update.

VA-HEPATITIS B SEROLOGY/IMMUNIZATION: This reminder allows for ordering/recording serology prior to immunization or initiating immunization without serology.

VA-HEPATITIS B IMMUNIZATION: This reminder becomes applicable if serology is already done or the vaccine series is initiated without serology. It evaluates the need for immunization or for additional doses of immunization.

The reminders apply to persons who were NOT previously immunized and who fall into one of the high-risk categories – either high risk for HBV infection or high risk for complications of HBV infection. See the NCP Guidance Statement for a complete list of these high-risk groups.

UPDATE_2_0_47 contains 1 Reminder Exchange entry:

UPDATE_2_0_47 VA-HEPATITIS B IMMUNIZATIONS

The exchange file contains the following components:

**TIU TEMPLATE FIELD**
- BLANK TEXT FIELD FOR DIALOGS
- IM VIS HBV URL
- IM VIS HAV URL
- IM VIS HAV/HBV DT
- IM COMMENT COMPLICATONS
- IM HAV/HBV ADJ LOT# EXP DATE
- IM HAV/HBV MANUF
- IM INJECTION RIGHT/LEFT
- IM VIS HBV ADJ URL
- IM VIS HBV DT
- IM HBV ADJ LOT# EXP DATE
- IM HBV ADJ MANUF
- IM HBV LOT# EXP DATE
- IM HBV MANUF

**HEALTH FACTORS**
- VA-REMINDER UPDATES
- VA-UPDATE_2_0_47
- HEPATITIS C
- HEPATITIS B VACCINATION NOT INDICATED
HEPATITIS B SEROLOGY NOT INDICATED
IMMUNIZATION
HEPATITIS B VACCINATION DEFER TEMPORARY
REFUSED HEPATITIS B VACCINE
REFUSED HEPATITIS B SEROLOGY
OUTSIDE SEROLOGY
OUTSIDE HEPATITIS B SURFACE AB POSITIVE
OUTSIDE HEPATITIS B SURFACE AB NEGATIVE
OUTSIDE HEPATITIS B SURFACE AG POSITIVE
OUTSIDE HEPATITIS B SURFACE AG NEGATIVE
OUTSIDE HEPATITIS B CORE AB POSITIVE
OUTSIDE HEPATITIS B CORE AB NEGATIVE
REMINDER FACTORS
LIFE EXPECTANCY < 6 MONTHS
INCORRECT DIAGNOSES
INCORRECT DIABETES DIAGNOSIS
OUTSIDE HEPATITIS A SEROPOSITIVE

REMINDER SPONSOR
VA National Center for Health Promotion and Disease Prevention (NCP)
Mental Health Services
National Center for Health Promotion and Disease Prevention (NCP)
National Clinical Reminder Committee
Office of Patient Care Services
Office of Public Health and Environmental Hazards

REMINDER TAXONOMY
VA-TERMINAL CANCER PATIENTS
VA-DIABETES
VA-CIRRHOSIS
VA-CHRONIC LIVER DISEASE (NON-HBV/HCV)
VA-GASTRIC VARICES
VA-HEPATIC FIBROSIS
VA-HEPATITIS B RISK DRUG USE
VA-HEPATITIS B RISK SEXUAL TRANSMISSION
VA-END STAGE RENAL DISEASE
VA-ESOPHAGEAL VARICES
VA-HIV INFECTION
VA-HEPATITIS C INFECTION
VA-IMMUNIZATION INJECTION 90471

REMINDER TERM
VA-REMINDER UPDATE_2_0_47
VA-HEPATITIS B IMMUNIZATION NOT INDICATED
VA-HEPATITIS B SEROLOGY NOT INDICATED
VA-HEPATITIS B IMMUNIZATION REFUSED/DEFERRED
VA-HEPATITIS B SEROLOGY REFUSED/DEFERRED
VA-HEPATITIS B IMMUNIZATION ADJUVANT
VA-HEPATITIS B IMMUNIZATION 3/4 DOSE SERIES
VA-OUTSIDE HEPATITIS B SURFACE AB POSITIVE
VA-OUTSIDE HEPATITIS B SURFACE AB NEGATIVE
VA-OUTSIDE HEPATITIS B SURFACE AG POSITIVE
VA-OUTSIDE HEPATITIS B SURFACE AG NEGATIVE
VA-OUTSIDE HEPATITIS B CORE AB POSITIVE
VA-OUTSIDE HEPATITIS B CORE AB NEGATIVE
VA-HEPATITIS B SURFACE ANTIBODY
VA-HEPATITIS B SURFACE ANTIGEN
VA-HEPATITIS B CORE ANTIBODY (IGG/TOTAL)
VA-LIFE EXPECTANCY < 6 MONTHS
VA-DIABETES DX INCORRECT
VA-DIABETES DX
VA-HEPATITIS B RISK
VA-HEPATITIS A VACCINATION INDICATED
VA-HEPATITIS A IMMUNE/SEROPOS
VA-HEPATITIS A SEROLOGY IGG/TOTAL
VA-BL HBV SEROLOGY SECTION SUPPRESS
VA-HBV ADMINISTRATION SUPPRESSION

REMINDER DEFINITION
VA-HEPATITIS B SEROLOGY/IMMUNIZATION
VA-BL HBV SEROLOGY SECTION SUPPRESS
VA-HEPATITIS B IMMUNIZATION

REMINDER DIALOG
VA-HEPATITIS B SEROLOGY/IMMUNIZATION
VA-HEPATITIS B IMMUNIZATION

HEALTH SUMMARY TYPE
OB HAV HBV SEROLOGY OUTSIDE
OB HAV HBV SEROLOGY

HEALTH SUMMARY OBJECTS
HAV HBV SEROLOGY OUTSIDE (TIU)
HAV HBV SEROLOGY

TIU DOCUMENT DEFINITION
HAV HBV SEROLOGY OUTSIDE
HAV HBV SEROLOGY
Pre-install

Pre-install

1. Review the health factors that are being sent out with these reminders and if you have local health factors that represent the same concept precisely, you may want to rename your local health factors prior to installing the new national ones so duplicates are not created.

   Health factors: The following health factors are exported with these reminders. If you have local health factors that represent the same concept precisely, you may want to rename your local health factors prior to installing the new national ones. Otherwise, map your local entries to the appropriate reminder terms post install.
   - HEPATITIS B VACCINATION NOT INDICATED
   - HEPATITIS B SEROLOGY NOT INDICATED
   - HEPATITIS B VACCINATION DEFER TEMPORARY
   - REFUSED HEPATITIS B VACCINE
   - REFUSED HEPATITIS B SEROLOGY
   - OUTSIDE HEPATITIS B SEROPOSITIVE
   - OUTSIDE HEPATITIS B SURFACE AB POSITIVE – surface antibody positive
   - OUTSIDE HEPATITIS B SURFACE AB NEGATIVE – surface antibody negative
   - OUTSIDE HEPATITIS B SURFACE AG POSITIVE – surface antiGEN positive
   - OUTSIDE HEPATITIS B SURFACE AG NEGATIVE – surface antiGEN negative
   - OUTSIDE HEPATITIS B CORE AB POSITIVE – core antibody positive
   - OUTSIDE HEPATITIS B CORE AB NEGATIVE – core antibody negative

2. Check the reminder terms that are included and do a term inquiry on all of those that are existing on your system so you can remap any that are accidentally overwritten during the install.

   VA-LIFE EXPECTANCY < 6 MONTHS
   VA-DIABETES DX INCORRECT
   VA-DIABETES DX

3. If you have installed a Hepatitis B/Anti-CD20 drug order check and reminders, you will have some local reminder terms that are very similar to these new national ones for all the various serologies. You may want to do a reminder term inquiry on those so that you can use them for the mapping of your local lab tests to the new national reminder terms that have the same meaning but are now being sent out as national terms.

   Reminder Terms for sites that installed Hepatitis B/Anti-CD20
   - RT HEPATITIS B CORE ANTIBODY
   - RT HEPATITIS B SURFACE ANTIBODY
RT HEPATITIS B SURFACE ANTIGEN
RT OUTSIDE HEPATITIS B CORE AB NEGATIVE
RT OUTSIDE HEPATITIS B CORE AB POSITIVE
RT OUTSIDE HEPATITIS B SURFACE AG POSITIVE

National terms that imply same thing as above

4. Identify your local lab test names for HEPATITIS B SURFACE ANTIBODY and HEPATITIS B CORE ANTIBODY, you will be prompted several times during the install for these lab test names. Please get help with this from someone very familiar with these tests. These tests are very easily confused and incorrect mapping causes the reminders to fail. Please pay attention to the Hepatitis B Core antibody IgM lab test – this test does NOT belong in some of the terms for HBcAb and will cause the reminder to prompt for vaccine in some patients who do not need it if you mistakenly include it where it does not belong.

Install Details

This update is being distributed as a web host file. The address for the host file is:

http://vista.med.va.gov/reminders/UPDATE_2_0_47.PRD

The file will be installed using Reminder Exchange, programmer access is not required.
Installation:

This update can be loaded with users on the system. Installation will take less than 20 minutes.

Install Example

To Load the Web Host File. Navigate to Reminder exchange in Vista

At the Select Action: prompt, enter LWH for Load Web Host File

At the Input the url for the .prd file: prompt, type the following web address:

http://vista.med.va.gov/reminders/UPDATE_2_0_47

You should see a message at the top of your screen that the file successfully loaded.
Search and locate an entry titled UPDATE_2_0_47 VA-HEPATITIS B IMMUNIZATIONS in reminder exchange

<table>
<thead>
<tr>
<th>+Item</th>
<th>Entry</th>
<th>Source</th>
<th>Date Packed</th>
</tr>
</thead>
<tbody>
<tr>
<td>371</td>
<td>UPDATE_2_0_47 VA-HEPATITIS B IMMUNIZATIONS</td>
<td>GRIFFITH@SALT LAKE CI</td>
<td>04/04/2018@11:48</td>
</tr>
<tr>
<td>372</td>
<td>UPDATE_2_0_47 VA-HEPATITIS B IMMUNIZATIONS</td>
<td>MONTGOMERY@SALT LAKE CI</td>
<td>05/29/2018@13:42</td>
</tr>
<tr>
<td>373</td>
<td>UPDATE_2_0_47 VA-HEPATITIS B IMMUNIZATIONS</td>
<td>MONTGOMERY@SALT LAKE CI</td>
<td>08/15/2018@13:48</td>
</tr>
<tr>
<td>374</td>
<td>UPDATE_2_0_48 MISC UPDATE 6 BEHAVIOR AND OVERDOSE REPORT</td>
<td>GRIFFITH@SALT LAKE CI</td>
<td>08/09/2018@13:39</td>
</tr>
<tr>
<td>375</td>
<td>UPDATE_2_0_49 VA-SUICIDE IMMUNIZATION</td>
<td>GRIFFITH@SALT LAKE CI</td>
<td>06/21/2018@13:42</td>
</tr>
<tr>
<td>376</td>
<td>UPDATE_2_0_5 MISC UPDATE 1</td>
<td>GRIFFITH@SALT LAKE CI</td>
<td>05/03/2018@09:42</td>
</tr>
</tbody>
</table>

At the **Select Action** prompt, enter **IFE** for Install Exchange File Entry
Enter the number that corresponds with your entry titled UPDATE_2_0_47 VA-HEPATITIS B IMMUNIZATIONS *(in this example it is entry 373, it will vary by site)*. Ensure the file date is 8/15/2018@13:48:11
At the **Select Action** prompt, type **IA** for Install all Components and hit enter.
You will install ALL new components.
You will **SKIP** any reminder taxonomies or reminder terms that already exist and you are prompted to **Overwrite**

If you see this prompt, enter your local lab test for HEPATITIS B SURFACE ANTIBODY REMINDER TERM entry **VA-HEPATITIS B SURFACE ANTIBODY** is NEW, what do you want to do?

- Select one of the following:
  - C Create a new entry by copying to a new name
  - I Install
  - Q Quit the install
  - S Skip, do not install this entry

Enter response: **I// nstall**

Finding LT.HEPATITIS B SURFACE ANTIBODY does not exist, what do you want to do?

- Select one of the following:
  - D Delete
  - P Replace with an existing entry
  - Q Quit the install

Enter response: **p Replace with an existing entry**

Select LABORATORY TEST NAME: **LT.HEPATITIS B – ENTER YOUR LOCAL LAB TEST NAME**
If you see this prompt, enter your local lab test for HEPATITIS B CORE ANTIBODY REMINDER TERM entry VA-HEPATITIS B CORE ANTIBODY (IGG/TOTAL) is NEW, what do you want to do?

   Select one of the following:
     C   Create a new entry by copying to a new name
     I   Install
     Q   Quit the install
     S   Skip, do not install this entry

Enter response: I// Install

Finding LT.HEPATITIS B CORE ANTIBODY does not exist, what do you want to do?

   Select one of the following:
     D   Delete
     P   Replace with an existing entry
     Q   Quit the install

Enter response: P  Replace with an existing entry

Select LABORATORY TEST NAME: HEPATITIS B CORE – ENTER YOUR LOCAL LAB TEST NAME - do not use the IgM test.

You will be prompted to install the first dialog component, VA-HEPATITIS B SEROLOGY/IMMUNIZATION

At the Select Action prompt, type IA to install the dialog – VA-HEPATITIS B SEROLOGY/IMMUNIZATION

Select Action: Next Screen// IA  Install All

All dialog components for VA-HEPATITIS B SEROLOGY/IMMUNIZATION are new. Install reminder dialog and all components with no further changes: Y// Y

You may see this prompt at the end of the install:

Reminder Dialog VA-HEPATITIS B SEROLOGY/IMMUNIZATION is not linked to a reminder

Select Reminder to Link: VA-BL HBV SEROLOGY SECTION SUPPRESS// ENTER HERE
When the dialog has completed installation, you will then be returned to this screen. At the Select Action prompt, type Q.

**You will be prompted to install the second dialog component, VA-HEPATITIS B IMMUNIZATION**

At the Select Action prompt, type IA to install the dialog – VA-HEPATITIS B IMMUNIZATION

Select Action: Next Screen/IA   Install All

Install reminder dialog and all components with no further changes: Y// Y

You may see this prompt at the end of the install:

Reminder Dialog VA-HEPATITIS B IMMUNIZATION is not linked to a reminder.
Select Reminder to Link: VA-HEPATITIS B IMMUNIZATION/\[ENTER HERE\]

When the dialog has completed installation, you will then be returned to this screen. At the 

**Select Action** prompt, type **Q**.

**You will then see the following prompts:**

HEALTH SUMMARY TYPE entry OB HAV HBV SEROLOGY OUTSIDE is NEW, what do you want to do?
Select one of the following:

C Create a new entry by copying to a new name
I Install
Q Quit the install
S Skip, do not install this entry

Enter response: I\[Install

HEALTH SUMMARY TYPE entry OB HAV HBV SEROLOGY is NEW, what do you want to do?
Select one of the following:

C Create a new entry by copying to a new name
I Install
Q Quit the install
S Skip, do not install this entry

Enter response: I\[Install

Selection item L.HEPATITIS B CORE ANTIBODY does not exist, what do you want to do?
Select one of the following:

D Delete
P Replace with an existing entry
Q Quit the install

Enter response: p Replace with an existing entry

Select LABORATORY TEST NAME: HEPATITIS B CORE ANTIBODY (Total) – YOUR LOCAL LAB TEST NAME HERE

Selection item L.HEPATITIS B SURFACE ANTIBODY does not exist, what do you want to do?
Select one of the following:
D         Delete
P         Replace with an existing entry
Q         Quit the install

Enter response: P Replace with an existing entry

Select LABORATORY TEST NAME: HEPATITIS B CORE ANITBODY – YOUR LOCAL LAB TEST NAME HERE

HEALTH SUMMARY OBJECTS entry HAV HBV SEROLOGY OUTSIDE (TIU) is NEW, what do you want to do?
Select one of the following:
C         Create a new entry by copying to a new name
I         Install
Q         Quit the install
S         Skip, do not install this entry

Enter response: I Install

HEALTH SUMMARY OBJECTS entry HAV HBV SEROLOGY is NEW, what do you want to do?
Select one of the following:
C         Create a new entry by copying to a new name
I         Install
Q         Quit the install
S         Skip, do not install this entry

Enter response: I Install

TIU DOCUMENT DEFINITION entry HAV HBV SEROLOGY OUTSIDE is NEW, what do you want to do?
Select one of the following:
C         Create a new entry by copying to a new name
I         Install
Q         Quit the install
S         Skip, do not install this entry

Enter response: I Install

TIU DOCUMENT DEFINITION entry HAV HBV SEROLOGY is NEW, what do you want to do?
Select one of the following:
C         Create a new entry by copying to a new name
I         Install
Q         Quit the install
S         Skip, do not install this entry

Enter response: I Install
At the Select Action prompt, type Q to quit.

Install Completed

Post Installation

5. Map all the reminder terms for lab tests for hepatitis B. Please get help with this from someone very familiar with these tests. These tests are very easily confused and incorrect mapping causes the reminders to fail.

   VA-HEPATITIS B SURFACE ANTIBODY
   VA-HEPATITIS B SURFACE ANTIGEN
   VA-HEPATITIS B CORE ANTIBODY (IGG/TOTAL)

6. Any local health factors for outside lab tests can be mapped only if they represent actual positive and negative results. E.g. A health factor of ‘OUTSIDE HEP B SURFACE ANTIBODY’ cannot be mapped to the either of the terms for surface antibody since it is not clear if the results is positive or negative.

   VA-OUTSIDE HEPATITIS B SURFACE AB POSITIVE
   VA-OUTSIDE HEPATITIS B SURFACE AB NEGATIVE
   VA-OUTSIDE HEPATITIS B SURFACE AG POSITIVE
   VA-OUTSIDE HEPATITIS B SURFACE AG NEGATIVE
   VA-OUTSIDE HEPATITIS B CORE AB POSITIVE
   VA-OUTSIDE HEPATITIS B CORE AB NEGATIVE
7. Check the lab tests in the health summaries. These lab tests should be included: HBcAb, HBsAg, HBsAb, HAV Ab IgG or total.

<table>
<thead>
<tr>
<th>Abb</th>
<th>Ord</th>
<th>Component Name</th>
<th>Max Occ</th>
<th>Time</th>
<th>Hos Loc</th>
<th>ICD Text</th>
<th>Pro Mod</th>
<th>CPT Selection</th>
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<td>SCL1</td>
<td>5</td>
<td>HAV/HBV Serology</td>
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<td>SURFACE ANTIBODY</td>
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<td>HEPATITIS B S</td>
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<td></td>
<td></td>
<td>SURFACE ANTIGEN</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>HEPATITIS A A</td>
</tr>
</tbody>
</table>

8. If you have one, place your local HAV immunization reminder in the reminder term VA-HEPATITIS A VACCINATION INDICATED. To do this, add the computed finding VA-REMINDER DEFINITION as a mapped finding in this term. Set the computed finding parameter to your local Hepatitis A Immunization reminder name (the exact name), then set the condition to I V="DUE NOW".

   Finding Item: VA-REMINDER DEFINITION (FI(1)=CF(35))
   Finding Type: REMINDER COMPUTED FINDING
   Condition: I V="DUE NOW"
   Computed Finding Parameter: <Insert local Hep A reminder here>

9. Map the 2 reminder terms for hepatitis A serology. VA-HEPATITIS A IMMUNE/SEROPOS – enter lab tests for HAV antibody and include a condition to find only those that are positive. Eg. I V="REACTIVE" ![V("POS)

   VA-HEPATITIS A SEROLOGY IGG/TOTAL

10. Add quick orders/order menus to the reminder dialogs for serology and immunization

    a. An order for a Hepatitis B panel should contain all 3 serologic tests, include HBsAb, HBcAb total, HBsAg in an order set or quick order to get all 3 tests done

       Dialog element - VA-HBV 01 SEROLOGIC PANEL

    b. The immunization order should allow a choice of immunizations – ideally you should attach a menu here that allows ordering single dose of HBV standard, single dose of HAV/HBV combination, 3 dose series of HBV standard, 3 dose series of HAV/HBV combination and also orders for HBV conjugate vaccine if it is available or in use at your facility.

       Dialog Element - VA-HBV 01 IMMUNIZATION

Example of a menu for HAV and HBV vaccines
**NOTE**: If you require further technical assistance or if there are any questions or problems during the installation, please notify your local IT support to log a national help desk ticket or contact the VA Service Desk and have them submit a national ticket to:

**Category**: Enterprise Applications  
**Subcategory**: Applications  
**Enterprise Application**: VistA - Clinical Reminders