1. PURPOSE

The purpose of this guidance is to advise public health staff on the process of acquiring immune globulin and vaccine from the Oregon Immunization Program (OIP) during an outbreak, acute event, or in situations where the needed prophylaxis is not otherwise available to the Local Health Department (LHD). This document is not intended to replace the guidance on general prophylaxis of contacts outlined in the Investigative Guidelines for those conditions that require post exposure prophylaxis of contacts. Immune globulin products available through OIP include IG (for hepatitis A and measles prophylaxis) and HBIG (for hepatitis B prophylaxis).

2. CONTACTING THE ACUTE AND COMMUNICABLE DISEASE

When contacts are identified that may need immune globulin or vaccine that is not currently accessible by LHDs, the LHD should contact the Acute and Communicable Disease Prevention (ACDP) Program on-call epidemiologist at 971.673.1111. The on-call epidemiologist and the LHD will review the contact history and determine whether immune globulin or vaccine is indicated for each contact. After this determination, the on-call epidemiologist will contact OIP with the relevant information. OIP will then coordinate obtaining the indicated immune globulin or vaccine with the LHD (detailed below). OIP cannot release immune globulin, or vaccine until ACDP has approved the request. The LHD must provide OIP with the quantity of product requested and delivery instructions. All other OIP rules and regulations regarding vaccine management and accountability apply.

3. PROPHYLAXIS RECOMMENDATIONS

3.1 Hepatitis A

Prophylaxis is indicated for all household and sexual contacts with no evidence of pre-existing immunity to the hepatitis A virus (HAV). In addition, persons who have shared illicit drugs with confirmed HAV cases and those with significant opportunity for fecal-oral exposure to the case should receive prophylaxis. When one or more cases are found in employees or children attending a child care center or cases are found in two or more households of daycare attendees,
Acquiring state-supplied prophylaxis

Prophylaxis is recommended for all previously unvaccinated staff members and daycare attendees.

Vaccine is recommended for prophylaxis in healthy contacts aged 12 months to 40 years. IG is recommended for: persons over the age of 40 or under 12 months of age; immunocompromised persons; persons with chronic liver disease; and persons for whom vaccine is contraindicated. See §5.4 of the hepatitis A investigative guidelines for further information at:

3.2 Hepatitis B

Hepatitis B immune globulin (HBIG) is recommended for new sexual contacts having sexual intercourse during the past two weeks with an HBsAg-positive case (Table 1). Additionally, HBIG is recommended for persons with exposure to potentially infectious body fluids by percutaneous or permucosal means (e.g., needle sharing, blood splashes) during the past 7 days (Table 1). See §4.4.3 of the acute hepatitis B guidelines for further information (http://public.health.oregon.gov/DiseasesConditions/CommunicableDisease/ReportingCommunicableDisease/ReportingGuidelines/Documents/hepb-acute.pdf).
Table 1. Recommended Post-exposure prophylaxis for Non-occupational Exposure to hepatitis B Virus.¹

<table>
<thead>
<tr>
<th>Exposure</th>
<th>Unvaccinated person</th>
<th>Previously vaccinated person</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percutaneous (e.g., bite or needlestick) or mucosal exposure to HBsAg-positive blood or body fluids</td>
<td>Administer hepatitis B vaccine series and hepatitis B immune globulin (HBIG)</td>
<td>Administer hepatitis B vaccine booster dose</td>
</tr>
<tr>
<td>Sex or needle-sharing contact of an HBsAg-positive person</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Victim of sexual assault/abuse by a perpetrator who is HBsAg-positive</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perinatal exposure to HBsAg-positive mother</td>
<td>Initiate hepatitis B vaccine series and hepatitis B immune globulin (HBIG) within 12 hours of birth</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Percutaneous (e.g., bite or needlestick) or mucosal exposure to potentially infectious blood or body fluids from a source with unknown HBsAg status</td>
<td>Administer hepatitis B vaccine series</td>
<td>No treatment</td>
</tr>
<tr>
<td>Sex or needle-sharing contact of a person with unknown HBsAg status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Victim of sexual assault/abuse by a perpetrator with unknown HBsAg status</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
In the healthcare setting, healthy patients may be colonized; transmission to others may occur via the hands of healthcare workers or contaminated environmental surfaces, medical devices, or equipment (Table 2).

Table 2. Recommended Post-Exposure Prophylaxis for Occupational Exposure to hepatitis B virus.²

<table>
<thead>
<tr>
<th>Vaccination and antibody response status of exposed workers</th>
<th>Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unvaccinated</td>
<td></td>
</tr>
<tr>
<td>Source HBsAg positive</td>
<td>Source HBsAg negative</td>
</tr>
<tr>
<td>Source unknown or not available for testing</td>
<td></td>
</tr>
<tr>
<td>Hepatitis B immune globulin (HBIG) x 1 and initiate HB vaccine series</td>
<td>Initiate HB vaccine series</td>
</tr>
<tr>
<td>Initiate HB vaccine series</td>
<td>Initiate HB vaccine series</td>
</tr>
<tr>
<td>Previously Vaccinated</td>
<td></td>
</tr>
<tr>
<td>Known responder</td>
<td>No treatment</td>
</tr>
<tr>
<td>Known nonresponder or refuser.</td>
<td>HBIG x 1 and initiate revaccination or HBIG x 2</td>
</tr>
<tr>
<td>Response unknown</td>
<td>Test exposed person for anti-HBs If adequate, no treatment is necessary If inadequate, administer HBIG x 1 and single vaccine dose</td>
</tr>
</tbody>
</table>

3.3 Measles

Although there is limited data on the effectiveness of MMR vaccine and IG for post exposure prophylaxis following exposure to measles, both should be considered for exposed, susceptible contacts. MMR vaccine should be administered within 72 hours of exposure. For contacts with contraindications to the MMR vaccine or who are considered high risk of severe infection (pregnant women, children <1 year old, compromised immune system, etc.), IG can be used to prevent or attenuate infection. IG must be administered ASAP, but no more than six days after exposure. IG should never be used as an outbreak control measure. Please see §5.4 of the Measles investigative guidelines for further information

3.4 Vaccine for vaccine preventable diseases (VPDs)
In vaccine preventable disease (VPD) outbreak situations, the LHD may consider special vaccination clinics (e.g., pertussis in a school, measles, meningococcal disease). In these cases, a conference call will be set up with the Urgent Epidemiologic Response Team (UERT), LHD, and the OIP Provider Services Team (PST) or Section Manager; to discuss availability of vaccine and other issues.

3.5 Immune globulin for other diseases
Immune globulin for diseases other than those listed above (including varicella, tetanus, rabies, and botulism) are not available through OIP, but can be purchased from private vendors. ACDP on-call staff is available for consultation to discuss whether the immune globulin is indicated and to facilitate procurement, as needed. Please refer to the disease specific guidelines for more information.

4. INFORMATION NECESSARY FOR OBTAINING PROPHYLACTIC IG OR VACCINE
If prophylaxis is indicated, the following information should be gathered by the LHD and provided to the ACDP on-call epidemiologist.

4.1 IG for hepatitis A
- Number of contacts needing IG
- Weight and age of each contact eligible for IG
- IG is supplied in 2-mL and 10-mL vials
- IG dosage recommendation: 0.10 mL/kg; IM
- Insurance status of each contact.
  - LHDs should bill insurance for IG if the contact has insurance

4.2 HBIG for hepatitis B
- Number of contacts needing HBIG
- Weight and age of each contact eligible for HBIG
- Exact dosing for each contact eligible for HBIG
  - HBIG is supplied in 5-mL vials. HBIG costs >$600 per 5-mL vial, and OHA has a very limited supply.
  - HBIG dosage recommendations
    - Adults: 0.06 mL/kg; IM
    - Infants <12 months: 0.5 mL single dose
- Insurance status of each contact
  - LHDs should bill insurance for HBIG if the contact has insurance

4.3 IG for measles
- Number of contacts needing IG
- Weight and age of each contact eligible for IG
- Exact dosing for each contact eligible for IG
Acquiring state-supplied prophylaxis

- IG is supplied in 2-mL and 10-mL vials.
- IG dosage recommendations
  - Infants <12 months: 0.5 mL/kg; IM
  - Pregnant women and severely immunocompromised: 400 mg/kg; IV
  - Other persons: 0.5 mL/kg (maximum 15 mL); IM
- Insurance status of each contact
  - LHDs should bill insurance for IG if the contact has insurance

4.4 Vaccine for VPDs
- Number of contacts needing vaccine
- Insurance status of each contact
- Age of contacts (some vaccine dosage is based on age)

4.5 Immune globulin for other diseases
- Number of contacts needing IG
- Age and weight of contacts
- Exact dosing for each contact eligible for IG

5. POST-APPROVAL PROCESS

5.1 IG-Immunization Program notations for LHDs
IG is provided by ACDP for use in prophylaxis when the primary care providers are unable to obtain it. LHDs should contact ACDP if they need this product. Questions about eligibility coding in ALERT IIS and insurance billing can be directed to a county’s OIP health educator or the PST Manager.

5.2 HBIG-Immunization Program notations for LHDs
Obtain the insurance status of the contact in need of HBIG. Bill the insurance company if they have insurance. Questions about eligibility coding in ALERT IIS, and insurance billing should be referred to the county’s OIP health educator or the PST Manager.

5.3 State-supplied vaccine or IG questions
Any questions about vaccine or immune globulin availability should be referred to the OIP PST Manager, or another OIP Manager. Eligibility coding questions should go to a county’s OIP health educator.

5.4 ACDP Instructions
The ACDP on-call epidemiologist will contact the OIP Vaccine Clerk with notification of approval for prophylaxis during work hours. If IG is needed for 5 or more persons, additional approval must be obtained from the ACDP Section Manager (or acting manager) or the ACDP/Immunization Medical Director.
Information obtained in section 4 will be provided by ACDP on-call epidemiologist to the OIP Vaccine Clerk. If the Vaccine Clerk is not available, the
Acquiring state-supplied prophylaxis

ACDP on-call epidemiologist will contact the PST Manager, the PST VFC Coordinator, the OIP Section Manager or another manager until someone is reached. During off hours, the on-call epidemiologist will contact the OIP PST Manager or Section Manager via the Health Security, Preparedness, and Response (HSPR) Program Duty Officer. The OIP representative will contact the requesting LHD with shipping details. All contact information is listed below.

<table>
<thead>
<tr>
<th>Name</th>
<th>Phone-Day</th>
<th>Phone-Off Hours</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACDP (on-call)</td>
<td>971.673.1111</td>
<td>971.673.1111</td>
<td>N/A</td>
</tr>
<tr>
<td>ACDP Section Manager: Zints Beldavs</td>
<td>971.673.0166</td>
<td>N/A</td>
<td><a href="mailto:zintars.g.beldavs@dhsoha.state.or.us">zintars.g.beldavs@dhsoha.state.or.us</a></td>
</tr>
<tr>
<td>ACDP/Immunization Medical Director: Paul Cieslak</td>
<td>971.673.1082</td>
<td>N/A</td>
<td><a href="mailto:paul.r.cieslak@dhsoha.state.or.us">paul.r.cieslak@dhsoha.state.or.us</a></td>
</tr>
<tr>
<td>OIP (Main Line)</td>
<td>971.673.0300</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>VFC Manager: Mimi Luther</td>
<td>971.673.0296 or 503.320.7245</td>
<td>Contact via the HSPR Duty Officer</td>
<td><a href="mailto:lydia.m.luther@dhsoha.state.or.us">lydia.m.luther@dhsoha.state.or.us</a></td>
</tr>
<tr>
<td>OIP Section Manager: Aaron Dunn</td>
<td>971.673.0318</td>
<td>N/A</td>
<td><a href="mailto:aaron.dunn@dhsoha.state.or.us">aaron.dunn@dhsoha.state.or.us</a></td>
</tr>
<tr>
<td>OIP Vaccine Clerk: Shelby Williams</td>
<td>971.673.0313 or 503.349.3859</td>
<td>N/A</td>
<td><a href="mailto:shelby.williams@dhsoha.state.or.us">shelby.williams@dhsoha.state.or.us</a></td>
</tr>
</tbody>
</table>

REFERENCES

1. CDC. Postexposure Prophylaxis to Prevent Hepatitis B Virus infection. MMWR 2006; 55(RR16); 30-31. [https://www.cdc.gov/mmwr/preview/mmwrhtml/rr5516a3.htm?s_cid=rr5516a3_e](https://www.cdc.gov/mmwr/preview/mmwrhtml/rr5516a3.htm?s_cid=rr5516a3_e) Accessed 11 October 2017.


4. Centers for Disease Control and Prevention. Updated U.S. Public Health Service Guidelines for the Management of Occupational Exposures to HBV, HCV, and HIV and Recommendations for Postexposure Prophylaxis. MMWR 2001; 50(RR11); 1-42. Available at:
UPDATE LOG

August 2018 – Updated section 5.4 (ACDP Instructions) - ACDP on-call epidemiologist must get approval from ACDP Section Manager or ACDP/Immunization Medical Director if IG is requested for 5 or more persons. (Poissant)

October 2017 – Updated hepatitis A IG dosage. (Poissant)


April 2015 – Clarified approval process as OIP no longer has an on-call person. (Poissant)

June 2014 – Removed perinatal hepatitis B prophylaxis from table 1 because the state does not provide HBIG for that purpose. Hospitals are required to have it on hand. Measles information added. Removed varicella section. Section on immune globulin for other diseases added. Updated contact information in section 5.3 – individual names replaced with position title, and off hours contact for the Immunization Program has been directed to the HSPR Duty Officer. (Poissant/Schrauben)

July 2012 – Guidelines created. (Poissant)