

## Crosswalk between 2013 and 2020 US Public Health Service (PHS) Guideline and OPTN Policy<sup>1</sup>

This crosswalk is intended to assist transplant hospitals in comparing the 2013 PHS Guideline and 2020 PHS Guideline to current and new policies approved by the OPTN Board of Directors in December 2020. Use of this crosswalk is not an OPTN obligation and does not guarantee an assessment of compliance with OPTN obligations. New policies will go into effect on March 1, 2021 unless otherwise noted.

Recommendation Category	2013 PHS Guideline	2020 PHS Guideline	OPTN Policy
Risk assessment of living and deceased donors	OPOs should ascertain whether any of the following 14 risk criteria were present in potential organ donors.	OPOs should ascertain whether any of the following 10 risk criteria were present in potential organdonors.	2.4 Deceased Donor Medical and Behavioral History     14.1.A Living Donor Medical Evaluation Requirements  Current policy requires medical and behavioral/social assessments including whether donor meets "increased risk" designation under the PHS Guideline.  New policy requires the same assessments, however the term "increased risk" is removed. OPTN policy definition for the US PHS Guideline is updated to use 2020 for standard.
	Risk criteria (during the 12 months before organ procurement):  1. Sex with a person known or suspected to have HIV, HBV, or HCV infection  2. Drug injection for nonmedical reasons  3. Man who has had sex with another man  4. Incarceration (confinement in jail, prison, or juvenile correction facility) for ≥72 consecutive hours  5. Sex in exchange for money or drugs  6. Sex with a person who injected drugs for nonmedical reasons  7. Sex with a person who had sex in exchange for money or drugs  8. Unknown medical or social history  9. Child aged ≤18 months born to a mother known to be infected with or at increased risk for HIV, HBV, or HCV infection  10. Child who has been breastfed by a mother who is known to be infected with or at increased risk for HIV infection  11. Woman who has had sex with a man who has had sex with another man  12. Newly diagnosed or treated syphilis, gonorrhea, chlamydia, or genital ulcers  13. Hemodialysis  14. Hemodilution of the blood sample used for infectious disease testing	<ol> <li>Risk criteria (during the 30 days before organ procurement):</li> <li>Sex (i.e., any method of sexual contact, including vaginal, anal, and oral) with a person known or suspected to have HIV, HBV, or HCV infection</li> <li>Man who has had sex with another man</li> <li>Sex in exchange for money or drugs</li> <li>Sex with a person who had sex in exchange for money or drugs</li> <li>Drug injection for nonmedical reasons</li> <li>Sex with a person who injected drugs for nonmedical reasons</li> <li>Incarceration (confinement in jail, prison, or juvenile correction facility) for ≥72 consecutive hours</li> <li>Child breastfed by a mother with HIV infection</li> <li>Child born to a mother with HIV, HBV, or HCV infection</li> <li>Unknown medical or social history</li> </ol>	<ul> <li>1.2: Definitions:  United States Public Health Service (PHS) Guideline: The PHS Guideline for Reducing Human Immunodeficiency Virus (HIV), Hepatitis B Virus (HBV), and Hepatitis C Virus (HCV) through Organ Transplantation (2013).</li> <li>Definition modified to indicate "2020" Guideline.</li> <li>2.5 Hemodilution Assessment</li> <li>Current policy requires members to use the 2013 PHS Guideline and if blood specimens used for HIV, HBV, or HCV testing are hemodiluted then the donor is considered "increased risk".</li> <li>New policy requires the same criteria as 2020 Guideline, which does not classify hemodilution as a risk criteria. OPOs are still required to conduct a hemodilution assessment according to Policy 2.5.</li> </ul>



Recommendation Category	2013 PHS Guideline	2020 PHS Guideline	OPTN Policy
Risk assessment of living and deceased donors	Donors with any risk criteria should be designated as IRDs for acute HIV, HBV, and HCV infection.	Remove any specific label (e.g., "increased risk donor") to describe donors with risk factors for acute HIV, HBV, and HCV infection.	Numerous OPTN policies and sections within reference and have requirements for "increased risk" donors:  • 2.4 Deceased Donor Medical and Behavioral History  • 2.5 Hemodilution Assessment  • 2.7 HIV Screening of Potential Donors  • 2.9 Required Deceased Donor Infectious Disease Testing  • 13.11 Receiving and Accepting KPD Match Offers  • 14.4 Medical Evaluation Requirements for Living Donors  • 15.3 Informed Consent of Transmissible Disease Risk  • 16.2 Packaging and Labeling Responsibilities  New policy replaces references to "increased risk donor," and instead uses terms such as "risks," "risk criteria" or "risk factors".
Living and deceased solid organ donor testing	Test all potential organ donors (living and deceased)  HIV: anti-HIV-1/2 or HIV Ag/Ab combination assay  HBV: Anti HBc and HBsAg  HCV: NAT and anti-HCV  For IRD only, HIV NAT or HIV Ag/Ab combination	Test all potential organ donors (living and deceased)  HIV: NAT and anti-HIV  HBV: NAT, total anti-HBc, and HBsAg  HCV: NAT and anti-HCV	2.9 Required Deceased Donor Infectious Disease Testing     14.4.A Living Donor Medical Evaluation Requirements  Current policy allows HIV Ab/Ag testing. Current policy does not require HBV NAT testing. Current policy only requires either HIV NAT or HIV Ab/Ag testing on IRD donors.  New policy requires the same tests as the 2020 Guideline including NAT testing for HIV and HBV on all deceased and living donors.
	No time frame is specified for pretransplant deceased donor testing; however, results should be available at the time of transplant.	For deceased potential donors, the donorspecimen should be collected within 96 hours before organ procurement with results of these screening tests available at the time of organ procurement.	2.9 Required Deceased Donor Infectious Disease Testing  Current OPTN policy does not have timelines for deceased donor infectious disease test collection or result availability.  New policy requires the same 96-hour time frame for obtaining testing specimens as the 2020 Guideline.
	Living donors should be tested within 28 days before transplantation.	For living potential donors, testing should be performed as close as possible to the surgery but at least within the 28 days before organ procurement.	14.4.A Living Donor Medical Evaluation Requirements  Current policy matches the timing requirement.  No changes in new policy.



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Transplant candidate informed consent	Transplant center to obtain separate, specific informed consent from transplant candidates when donors are designated as IRDs.	When donors with one or more of the criteria as specified under Risk Assessment of Living and Deceased Donors are identified, OPOs should communicate this information to the appropriate transplant centers. Transplant centers should include this information in informed consent discussions with transplant candidates or their medical decision-makers. No separate, specific informed consent is recommended.  Transplant centers should contextualize these discussions by including that risk for undetected HIV, HBV, and HCV infection is very low but not zero; should transmission occur effective therapies are available, and accepting organs from donors with risk factors might increase the chance for survival.	15.3.A General Risks of Potential Malignancy or Disease Transmission     15.3.B Donors with Risk Identified Pre-Transplant  Current policy requires informed consent for use of IRD donor and use of hemodiluted sample for infectious disease testing. The informed consent must be done after the organ offer but before transplant and the consent must be documented in the medical record.  New policy removes "informed consent" and includes requirement to document informing the recipient or their agent of presence of risk (Table 15-1: Requirements for Donors with Risk Identified Pre-Transplant).
Recipient testing and vaccination	Pretransplant testing of transplant candidates for HIV, HBV, and HCV infections is recommended when the donor (living or deceased) is designated as IRD or infected with HBV or HCV.  • Type of assay not specified  • Timing: during hospital admission for transplant but before transplant	Pretransplant testing for HIV, HBV, and HCV infections should be conducted for all candidates, regardless of donor risk criteria.  • HIV: testing algorithm <sup>2</sup> • HBV: total anti-HBc, anti-HBs, and HBsAg  • HCV: NAT and anti-HCV  • Timing: During hospital admission for transplant but before transplant	15.2 Candidate Pre-Transplant Infectious Disease Reporting and Testing Requirements  Current policy only specifies that candidates must have HIV, HBV, and HCV testing to be eligible for organ transplant. It does not specify testing type or more specific timing.  New policy requires the same as the 2020 PHS Guideline recommendations for specific HIV, HBV, and HCV tests and timing. (Note: anti-HBs is referred to as HBsAb in OPTN Policy)
	<ul> <li>Posttransplant testing of organ recipients for HIV, HBV, and HCV infections should be conducted when the donor (living or deceased) is designated as IRD or infected with HBV or HCV.</li> <li>Type of testing is not specified.</li> <li>Timing: testing should be performed at 1–3 months posttransplant for HIV, HBV, and HCV and again at 12 months for HBV.</li> </ul>	Posttransplant testing for HIV, HBV, and HCV infections should be conducted for all recipients, regardless of donor risk criteria.  Type of testing: NAT for HIV, HBV, and HCV  Timing: 4–6 weeks posttransplant  Clinicians caring for liver recipients should maintain heightened awareness of the potential for delayed appearance of HBV infection and consider additional testing for HBV NAT at 1 year.  Recipients who develop signs or symptoms of liver injury after transplantation should be retested for viral hepatitis.	15.3.C Required Post-Transplant Infectious Disease Testing  Current policy does not contain specific timing or test type. It requires transplant programs to have a protocol for posttransplant testing of IRD organ recipients and to follow their protocol. Current policy does not require universal posttransplant testing for all recipients.  New policy requires universal posttransplant NAT testing for HIV, HBV, and HCV at 4-8 weeks posttransplant and HBV NAT for liver recipients at 11-13 months posttransplant. These are slightly revised from the 2020 timeframes.
	No previous PHS guideline recommendation exists for HBV vaccination of transplant candidates.	All organ transplant candidates should be vaccinated against HBV infection.	15.2 Candidate Pre-Transplant Infectious Disease Reporting and Testing Requirements  No current OPTN policy.  New policy requires transplant hospitals to assess the need to provide HBV vaccination during candidate medical evaluation and report status. If candidate is not vaccinated, reason not vaccinated must be reported and documented. This requirement will not go into effect until OMB approval, programming and notice to OPTN members.



Recommendation Category	2013 PHS Guideline	2020 PHS Guideline	OPTN Policy
Collection and storage of donor and recipient specimens	OPOs should consider archiving a deceased donor blood sample for 10 years.	OPOs and living donor recovery centers should archive donor blood specimens for at least 10 years. These specimens should be collected within 24 hours before organ procurement.	<ul> <li>2.2 OPO Responsibilities</li> <li>OPOs must currently keep blood specimens from deceased donors for serology and NAT testing for 10 years. No changes to this requirement.</li> <li>No current OPTN policy exists for living donor specimens.</li> <li>14.8.B: Living Donor Specimen and Storage (New)</li> <li>New policy requires living donor recovery hospitals to arrange for living donor specimen storage for 10 years. Specimens must be collected within 24 hours prior to organ recovery. This policy will go into effect on June 1, 2021.</li> <li>14.3 Informed Consent Requirements</li> <li>No current policy requirement exists for living donor informed consent for obtaining and storage of blood specimens as this is new policy.</li> <li>New policy includes additional specific disclosure to living donors that a blood specimen will be obtained and stored for ten years, only to be used for investigation of potential donor-derived disease. This policy will go into effect on June 1, 2021.</li> </ul>
Tracking and reporting of donor-derived disease transmission events	No recommendations in this category were substantially modified from 2013 to 2020.	No recommendations in this category were substantially modified from 2013 to 2020.	<ul> <li>2.12 Post Procurement Follow Up and Reporting</li> <li>15.1 Patient Safety Contact</li> <li>15.4 Host OPO Requirements for Reporting Post-Procurement Test Results and Discovery of Potential Disease Transmissions</li> <li>15.5 Transplant Program Requirements for Communicating Post- Transplant Discovery of Disease or Malignancy</li> <li>15.6 Living Donor Recovery Hospital Requirements for Reporting Post-Donation Discovery of Disease or Malignancy</li> <li>Current policies require reporting of potential donor-derived disease transmission events. This includes blood-borne illnesses as well as other infections and malignancies. No changes have been made.</li> </ul>

<sup>&</sup>lt;sup>1</sup> Adapted from TABLE2. Comparison of 2013 and 2020 U.S. Public Health Service guideline recommendations\* for solid organ donor assessment and transplant recipient monitoring for human immunodeficiency virus, hepatitis B virus, and hepatitis C virus infection in Jones, JM, Kracalik, I, Levi, ME "Assessing Solid Organ Donors and Monitoring Transplant Recipients for Human Immunodeficiency Virus, Hepatitis B Virus, and Hepatitis C Virus Infection — U.S. Public Health Service Guideline, 2020" MMWR Recomm Rep 2020;69 (7-8) available at: https://www.cdc.gov/mmwr/volumes/69/rr/rr6904a1.htm.

<sup>&</sup>lt;sup>2</sup> CDC; Association of Public Health Laboratories. Laboratory testing for the diagnosis of HIV infection: updated recommendations. Atlanta, GA: US Department of Health and Human Services, CDC. https://stacks.cdc.gov/view/cdc/23447.

Note: References to OPTN Policy are subject to updates based on ongoing review for consistency with the PHS Guideline. Version date: January 19, 2021