# Change Notification UK National Blood Services No. 58 - 2022

## Liver Disease

These changes apply to the Whole Blood Donor Selection Guidelines.

This is a new entry.

### 1. Non-Alcoholic Fatty Liver Disease (NAFLD):

<table>
<thead>
<tr>
<th>Excludes</th>
<th>Alcoholic Fatty Liver Disease (AFLD)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Obligatory</strong></td>
<td>Must not donate if diagnosed with:</td>
</tr>
<tr>
<td></td>
<td>• Non-alcoholic steatohepatitis (NASH)</td>
</tr>
<tr>
<td></td>
<td>• Cirrhosis</td>
</tr>
<tr>
<td><strong>Discretionary</strong></td>
<td>A diagnosis of non-alcoholic fatty liver disease does not necessarily prevent donation. If the donor is otherwise well and managed with diet and lifestyle changes such as exercise, accept.</td>
</tr>
</tbody>
</table>

**Additional information**

NAFLD is a common medical condition, caused mainly by lifestyle factors such as weight, type 2 diabetes, high blood pressure and high cholesterol. There is no drug treatment for this condition. It is usually managed with diet and lifestyle changes along with treatment of any associated medical conditions. Regular monitoring of the condition, e.g. blood tests and liver scans, should not preclude donation.

NASH is an advanced form of NAFLD. It is caused by an excessive accumulation of fat in the liver. This can progress to chronic liver inflammation and can result in cirrhosis if untreated.

### 2. Alcohol-Related Liver Disease

<p>| <strong>Obligatory:</strong> Must not donate. |
| <strong>Discretionary:</strong> If the donor is well, and |
|                   • not under specialist follow up, and |
|                   • has not been diagnosed with alcohol related hepatitis or cirrhosis, |</p>
<table>
<thead>
<tr>
<th><strong>See if relevant:</strong></th>
<th><strong>Addiction and Drug Abuse</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Additional information:</strong></td>
<td>Alcohol-related liver disease is common but preventable liver damage that is caused by drinking too much alcohol. It is reversible in the early stages when it is characterised mainly by fatty liver changes. In some individuals it may progress to alcoholic hepatitis and alcoholic cirrhosis.</td>
</tr>
</tbody>
</table>

### 3. Infective liver disease

**Includes:** Liver abscess, Glandular fever, Viral hepatitis

**Obligatory:**
- Refer to the WBDSG entry for the condition.
- If there is no specific entry, **must not donate**

**Discretionary:**
- If the donor is fully recovered and there is no specific guidance for the condition, refer to Infection – General

**See if Relevant**
- For Glandular Fever, see Infection - Acute
- Infection - General
- Hepatitis

### 4. Autoimmune Liver Disease

**Includes:** Autoimmune Hepatitis (AIH), Primary Biliary Cholangitis (PBC) and Primary Sclerosing Cholangitis (PSC)

**Obligatory:** **Must not donate if:**
- under active investigation or treatment, or
- associated with Inflammatory Bowel Disease

**Discretionary:**
- a) If well, even if on treatment to control symptoms. e.g. Cholestyramine (Questran) or Ursodeoxycholic acid (also known as Ursodiol), accept.
- b) If well and taking treatment to suppress the condition, refer to the Autoimmune Disease entry

**See if relevant:**
- Autoimmune Disease
- Hepatitis
- Steroid Therapy

**Additional information:** Autoimmune liver disease in its early stages may be asymptomatic or present with mild symptoms such as itchy skin (pruritis) and fatigue. The donor may require no treatment or treatment for symptom control only for an extended period.
Autoimmune liver disease may be diagnosed during investigation for other conditions, especially other autoimmune conditions. Treatment to suppress these diseases may include steroids, Azathioprine, and other immunosuppressants. If there is doubt about the diagnosis and treatment, refer to a DCSO.

### 5. Drug or Pregnancy Induced Liver Disease

**Includes:** Acute Liver Failure

**Obligatory:** Must not donate if
- Under active investigation, treatment or follow up by a specialist
- Has received a liver transplant
- Has chronic liver failure

**Discretionary:** If the donor has recovered, is not on treatment and has been discharged from follow up, accept.

If there is doubt about the diagnosis, refer to a DCSO.

**See if relevant:** Addiction and Drug Abuse, Tissue and Organ Recipients

**Additional information:** Liver failure may be acute or chronic. Acute liver failure (also known as fulminant liver failure) can be caused by drugs, such as paracetamol overdose, prescription medications, herbal preparations, and ingestion of toxins. Liver problems can also occur during pregnancy e.g. acute fatty liver of pregnancy (AFLP) and intrahepatic cholestasis of pregnancy (ICP). Acute liver failure can occur in an individual with no pre-existing liver disease. It is often reversible with full recovery if adequately treated.

Chronic liver failure is caused by longstanding liver disease such as autoimmune liver disease, hepatitis, alcohol-related liver disease, liver cirrhosis, haemochromatosis, and Wilson’s disease.

### 6. Liver Cirrhosis

**Obligatory:** Must not donate

**Additional Information:** Cirrhosis can be caused by many different conditions and by several different liver conditions in combination. Transmissible viruses, some of which are not detected in transfusion service testing, can cause some cases. Because cirrhosis is a sign of worsening or progressive liver disease, it is considered safest not to accept individuals with cirrhosis.
7. Liver Tumours

<table>
<thead>
<tr>
<th>Includes</th>
<th>Liver Cancer, Hepatocellular Carcinoma, Bile Duct Cancer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Obligatory</td>
<td>Must not donate.</td>
</tr>
<tr>
<td>Discretionary</td>
<td>Donors with benign liver cysts or adenomas who are fit and well, even if regularly monitored, accept.</td>
</tr>
<tr>
<td>See if relevant</td>
<td>Malignancy.</td>
</tr>
<tr>
<td>Additional information</td>
<td>If in doubt about the diagnosis, refer to a DCSO.</td>
</tr>
</tbody>
</table>

8. Inherited Diseases Affecting the Liver

<table>
<thead>
<tr>
<th>Obligatory</th>
<th>Refer to WBDSG entry for the condition.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>If there is no specific entry, must not donate</td>
</tr>
<tr>
<td>Discretionary</td>
<td>a) If the donor is well and stable on treatment for Wilson’s Disease, accept.</td>
</tr>
<tr>
<td></td>
<td>b) If the donor has Gilbert’s Syndrome and is not visibly jaundiced, accept</td>
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<tr>
<td></td>
<td>c) For other conditions, see the Inherited Diseases entry</td>
</tr>
<tr>
<td>See if relevant</td>
<td>Inherited Diseases</td>
</tr>
<tr>
<td></td>
<td>Haemochromatosis</td>
</tr>
<tr>
<td>Additional Information</td>
<td>Wilson’s disease is caused by an excessive accumulation of copper in the liver and other organs, e.g. brain. If diagnosed and treated early with chelating agents, such as Penicillamine and Trientine, and avoidance of high copper foods, the prognosis is good and individuals can lead a normal life. If there is uncertainty about the donor’s health or treatment, refer to a Designated Clinical Support Officer.</td>
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<td></td>
<td>Alpha-1-antitrypsin deficiency can occasionally cause liver disease in adults. This may lead to liver failure and the need for liver transplantation.</td>
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<tr>
<td></td>
<td>Gilbert’s syndrome is an inherited defect in bilirubin metabolism. It is harmless but can cause jaundice (yellowing of the whites of the eyes). Blood banks are unlikely to use blood that appears jaundiced. This means any visibly jaundiced donation is likely to be wasted.</td>
</tr>
</tbody>
</table>

Liver Disease: Other WBDSG changes
1. Remove Cirrhosis and Gilbert’s Syndrome entries
2. Update of links in other entries
   a) Replace the links to Cirrhosis in the entries below with a link to Liver Disease
      - Addiction and Drug Abuse
      - Haemochromatosis
   b) Replace the links to Gilbert’s Syndrome in the entry below with a link to Liver Disease
3. Update of index
   a) Redirect the index entries below from Cirrhosis to the new Liver Disease entry
      • Alpha-1 Antitrypsin Deficiency – causing cirrhosis
      • Cirrhosis
   b) Redirect the index entries below from Gilbert’s Syndrome to the new Liver Disease entry
      • Gilbert’s Disease
      • Gilbert’s Syndrome
   c) Add index entries for the following search terms
      • Liver disease
      • Liver failure
      • NAFLD
      • NASH
      • Non-Alcoholic Fatty Liver Disease
      • Non-Alcoholic Steatohepatitis
      • PBC
      • Primary Biliary Cholangitis
      • Primary Sclerosing Cholangitis
      • Wilson’s Disease

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