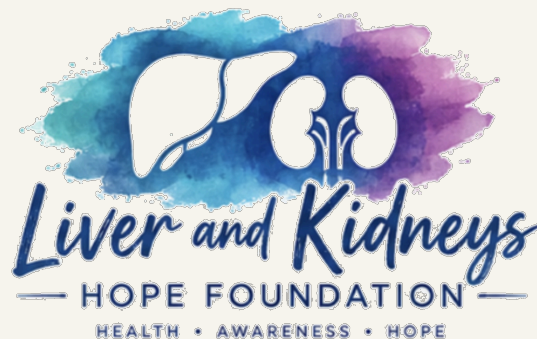




PATIENT & COMMUNITY EDUCATION SERIES

Understanding Liver Transplantation

A plain-language, comprehensive guide to liver transplantation — evaluation, the waiting list, the surgery itself, lifelong care afterward, and what life after transplant genuinely looks like.

Written for patients being evaluated, on the waiting list, or living with a transplant

Health Education Series · EDU-LIV

A publication of The Liver and Kidneys Hope Foundation · a Nevada 501(c)(3) nonprofit

First Edition

Important: This guide is provided for general educational purposes only. The Liver and Kidneys Hope Foundation is a nonprofit focused on liver-health education, community support, and outreach — it is **not a medical provider** and does not offer diagnosis, treatment, or medical advice. Nothing here should replace a conversation with a qualified, licensed healthcare professional, including your transplant team, who knows your history.

CONTENTS

What's Inside

Liver transplantation is one of the great success stories in modern medicine — a genuine cure for many of the conditions covered throughout this guide series. It's also a major undertaking, involving evaluation, waiting, surgery, and lifelong follow-up. This guide walks through the entire journey, honestly and completely.

- 1 Your Liver: A Quiet, Hardworking Organ >
- 2 What Is a Liver Transplant? >
- 3 Who Needs a Liver Transplant? >
- 4 The Evaluation Process: Are You a Candidate? >
- 5 The MELD Score & Organ Allocation >
- 6 Getting Listed & the Waiting Period >
- 7 Deceased Donor Liver Transplant >
- 8 Living Donor Liver Transplant >
- 9 Being a Living Donor: What It Involves >
- 10 The Transplant Surgery Itself >
- 11 Immediate Recovery: The Hospital Stay >
- 12 Immunosuppression: Preventing Rejection >
- 13 Understanding Rejection: Signs & Treatment >
- 14 Infection Risk & Prevention >
- 15 Other Complications After Transplant >
- 16 Long-Term Follow-Up & Monitoring >
- 17 Life After Transplant: Diet, Exercise & Daily Life >
- 18 Recurrence of the Original Disease >



- 19 Emotional Aspects & Support >
- 20 Special Situations >
- 21 Long-Term Outlook, Prevention & Myths vs. Facts >
- ★ Questions, Glossary, Resources & Disclaimer >

A NOTE BEFORE YOU BEGIN

This guide covers liver transplantation as a whole process, applicable across the many underlying conditions covered in our companion guides — cirrhosis, liver cancer, acute liver failure, and the genetic and autoimmune conditions throughout this series. Wherever your own condition fits, the process described here follows largely the same path.

SECTION 1 Your Liver: A Quiet, Hardworking Organ

Before discussing transplantation, it helps to appreciate just how much the liver does every day — and why replacing it, when necessary, can restore so much.

Your liver is the largest solid organ inside your body, weighing roughly 1.4 kg (about 3 pounds) in an adult. Scientists have identified more than **500 distinct functions** it performs: processing nutrients, making bile, filtering toxins and medications, producing clotting proteins, and storing vitamins. When the liver fails, all of these functions are affected at once — which is exactly why replacing the whole organ can be so transformative.

A remarkable capacity to regenerate

The liver is one of the only human organs that can regrow significant portions of itself. This regenerative ability is central to modern liver transplantation — it's what allows a living donor to give a portion of their liver and regrow to a full, functioning size, and what allows a partial graft, split between two recipients, to grow into a complete liver in each.

Why transplantation can be so effective

Unlike treatments that manage the effects of a failing liver, transplantation replaces the organ itself — addressing every one of those hundreds of functions at once, rather than treating each complication individually. For many patients, this offers something close to a genuine cure.

DID YOU KNOW?

The first successful human liver transplant was performed in 1967. Since then, survival rates and quality of life after transplant have improved dramatically, reflecting decades of advances in surgical technique, immunosuppression, and post-transplant care.

KEY POINT

Liver transplantation is major surgery with a genuine recovery process and lifelong follow-up — and for the right candidate, at the right time, it offers the closest thing to a cure that advanced liver disease has.

SECTION 2 What Is a Liver Transplant?

A liver transplant is a surgical procedure that replaces a diseased or failing liver with a healthy one, from either a deceased donor or a living donor.

The basic concept

During the operation, the diseased liver is removed and replaced with a healthy donor liver (or, for living donation, a portion of one), which is connected to the recipient's blood vessels and bile

duct. Over the following weeks, the new liver — or, in the case of a partial living-donor graft, the growing portion — takes over the full range of the liver's functions.

Two main sources of donor livers

- **Deceased donor transplant** — using a whole liver, or sometimes a portion of one, from someone who has died and whose family or advance directive authorized organ donation. Covered in Section 7.
- **Living donor transplant** — using a portion of liver from a living, healthy volunteer, most often a family member or close friend. Covered in Sections 8-9.

Why it can be curative

For most of the conditions covered throughout this guide series, the liver disease itself resides in the liver — meaning replacing the organ removes the diseased tissue entirely. For a few specific genetic conditions (such as Wilson's disease or alpha-1 antitrypsin deficiency, covered in our companion guides), this also cures the underlying metabolic defect, since it originates in liver cells themselves.

KEY POINT

A liver transplant is not simply "one more treatment" — for many patients, it represents a genuine, lasting solution to a problem that other treatments could only manage, not resolve.

DID YOU KNOW?

Unlike some other organ transplants, a liver transplant recipient's original liver is completely removed during the operation — the new liver (or growing partial graft) takes over entirely, rather than working alongside the old one.

SECTION 3

Who Needs a Liver Transplant?

Liver transplantation is considered for a wide range of conditions covered throughout this guide series, once other treatments are no longer sufficient.

Condition category	General transplant scenario
Decompensated cirrhosis (any cause)	Once complications like ascites, variceal bleeding, or encephalopathy become difficult to manage, or the MELD score reaches a certain range.
Acute liver failure	When the liver fails to recover with intensive supportive care, often on an urgent timeline, as covered in our companion acute liver failure guide.
Liver cancer within specific criteria	For eligible patients with early-stage hepatocellular carcinoma, transplantation can treat both the cancer and the underlying liver disease.
Certain genetic conditions	Including Wilson's disease and alpha-1 antitrypsin deficiency, where transplant can cure the underlying metabolic defect.
PBC, PSC, and autoimmune hepatitis	Once these conditions progress to decompensated cirrhosis despite treatment.

KEY POINT

Whatever the underlying cause, transplant is generally considered once the liver's remaining function, or the complications it's causing, outweigh what other available treatments can manage — your hepatologist will help identify the right timing for this conversation.

DID YOU KNOW?

As some causes of liver disease have become more treatable in recent decades (notably hepatitis C), the mix of conditions leading to transplant has shifted, with MASLD/MASH-related cirrhosis and alcohol-related liver disease becoming increasingly common reasons for transplant in many countries.

SECTION 4

The Evaluation Process: Are You a Candidate?

Before being listed for transplant, candidates go through a thorough evaluation — designed to confirm that transplant is the right option and to give a scarce, life-saving organ the best possible chance of a good long-term outcome.

What the evaluation covers

- **Overall health**, including heart, lung, and kidney function, and screening for other conditions that could affect surgical risk or recovery.
- **The severity and cause of liver disease**, including MELD score and specific complications.
- **Cancer screening**, to rule out any other active cancers that would affect candidacy.

- **Psychosocial evaluation**, including your support system, mental health, and, where relevant, your relationship with alcohol and plans for sustained abstinence, as our companion alcohol-related liver disease guide describes in depth.
- **Practical readiness**, such as reliable transportation, insurance coverage, and support for the demanding post-transplant follow-up schedule.

Why this process is so thorough

Because donor organs are scarce and the surgery and recovery are significant, this evaluation exists to identify who is likely to have the best outcome — not to judge or exclude people unfairly, but to ensure a life-saving resource goes where it can do the most good, and that each recipient has support to sustain their new liver long-term.

KEY POINT

The evaluation can feel lengthy and, at times, invasive — but each piece serves a genuine purpose in protecting both your own outcome and the value of the donor organ itself.

TALK WITH YOUR TRANSPLANT TEAM

It's reasonable to ask directly what your specific center's evaluation process involves, how long it typically takes, and what you can do to prepare.

SECTION 5 The MELD Score & Organ Allocation

Understanding the MELD score — one of the most important numbers in liver transplant medicine — helps explain how donor organs are allocated and prioritized.

What MELD measures

The MELD score (Model for End-Stage Liver Disease) is calculated from blood tests — typically bilirubin, creatinine, and INR, sometimes including sodium (MELD-Na) — producing a number that estimates short-term risk from liver disease. A higher score generally reflects more severe liver dysfunction and, correspondingly, greater urgency for transplant.

How allocation generally works

In many countries, including the United States, donor livers are allocated largely based on MELD score combined with other factors such as blood type compatibility and geographic considerations — meaning patients with higher scores are generally prioritized, reflecting greater medical urgency, though local allocation policies and priority categories can add nuance to this general principle.

Special priority categories

Certain situations — including acute liver failure meeting specific urgent criteria, or liver cancer within defined criteria — may receive additional priority points beyond the standard MELD calculation, reflecting their own specific urgency or the risk that waiting itself poses to a good outcome.

KEY POINT

Your MELD score isn't a fixed, permanent number — it's recalculated periodically as your blood tests change, meaning your position and priority can shift over time as your condition evolves.

TALK WITH YOUR TRANSPLANT TEAM

It's reasonable to ask: "What is my current MELD score, and how does that translate to my position and expected wait time at this specific center?"

SECTION 6 Getting Listed & the Waiting Period

Once evaluation is complete and you're approved as a candidate, you're placed on the waiting list — a period that can bring its own particular mix of anticipation, uncertainty, and practical preparation.

How long waiting typically takes

Wait times vary considerably, influenced by MELD score, blood type, geographic region, and local organ availability — some patients wait weeks, others considerably longer. Your transplant team can give you a realistic sense of expected timing for your specific situation.

Staying ready while you wait

- **Staying reachable** at all times, since a donor organ can become available with very little notice.
- **Continuing regular follow-up** with your transplant center, including periodic reassessment of your MELD score and overall health.
- **Maintaining your health as best you can**, including nutrition and, where appropriate, physical activity, to support your readiness for surgery.
- **Managing complications promptly** as they arise, staying in close communication with your care team.

The emotional experience of waiting

This period is genuinely difficult for many patients and families — a mix of hope, anxiety, and the strange reality of waiting for a phone call that depends on someone else's tragedy. These

feelings are completely understandable, and Section 19 addresses this emotional weight directly.

KEY POINT

While waiting can feel like a passive, powerless period, staying engaged with your health and readiness is a genuinely active, valuable role you can play throughout it.

SECTION 7 Deceased Donor Liver Transplant

Most liver transplants use a liver from a deceased donor — someone who has died and whose family or advance directive authorized organ donation, offering a final, generous act with lasting impact.

How deceased donor livers are used

A deceased donor liver can be transplanted whole into one recipient, or, in some cases, split between two recipients (often an adult and a child, or two appropriately sized recipients) — made possible by the liver's distinct anatomical segments and its capacity to regenerate.

Matching and logistics

Donor livers are matched to recipients based on blood type compatibility, size compatibility, and the MELD- based priority system described in Section 5. Because donor organs must be transplanted within a limited window of time after recovery, timing and logistics are coordinated rapidly once an organ becomes available.

The call, and what happens next

When a matching organ becomes available, you'll typically receive an urgent call to come to the hospital right away. Final compatibility checks are performed, and if everything proceeds as expected, surgery follows soon after — a moment many patients describe as surreal, given how suddenly it can happen after a long wait.

KEY POINT

Deceased organ donation is a profound gift, and the process exists to honor that gift by matching organs as effectively and fairly as possible to the recipients who need them most urgently.

DID YOU KNOW?

Many transplant recipients later choose to write to their donor family, through their transplant center, to express gratitude — a meaningful, though entirely optional, part of some patients' post-transplant experience.

SECTION 8 Living Donor Liver Transplant

In some situations, a portion of liver from a living, healthy volunteer can be transplanted — made possible by the liver's remarkable regenerative capacity in both donor and recipient.

How it works

A surgeon removes a portion of the donor's liver (the specific portion depends on the recipient's size and needs) and transplants it into the recipient. Over the following weeks to months, the remaining liver tissue in the donor, and the transplanted portion in the recipient, both regenerate — typically reaching close to full, functional liver volume in both people.

Why living donation is considered

- **Shorter wait times** for the recipient, potentially avoiding further deterioration while waiting for a deceased donor organ.
- **Scheduled, planned surgery** rather than the urgent, unpredictable timing of deceased donor transplant.
- **An option when a suitable, willing donor is available** and passes their own thorough evaluation.

Who can be a living donor

Living donors are most often family members or close friends of the recipient, though some centers also accept non-directed (altruistic) donors. Candidates undergo their own separate, thorough medical and psychological evaluation, covered in Section 9, to ensure the donation is safe for them and made with full, informed understanding.

KEY POINT

Living donation is a significant, generous gift, and it's also a genuinely safe, well-established procedure for appropriately screened donors — the evaluation process exists specifically to protect donor safety and ensure truly informed, voluntary consent.

DID YOU KNOW?

Living donor liver transplant has been performed successfully for several decades, with an established track record of good outcomes for both donors and recipients at experienced transplant centers.

SECTION 9 Being a Living Donor: What It Involves

If you're considering being a living liver donor, understanding what the process genuinely involves — for you, not just the recipient — is an essential part of making a fully informed decision.

The donor evaluation

Potential donors undergo their own comprehensive medical evaluation (assessing liver health, overall health, and anatomical suitability) and psychological evaluation, including an assessment specifically designed to ensure the decision is voluntary and free from any undue pressure, often involving an independent donor advocate separate from the recipient's care team.

The donor surgery and recovery

Donor surgery is a significant operation, generally involving several days of hospitalization and several weeks of recovery before returning to normal activities, including work. As with any major surgery, it carries real, if generally low, risks, which the evaluation and consent process addresses thoroughly and honestly.

Life after donation

The vast majority of living donors recover well, with their remaining liver tissue regenerating to near-normal volume and function, generally allowing a full return to normal life, including physical activity, after recovery is complete.

KEY POINT

Being a living donor is entirely voluntary, and a thorough, honest understanding of the real risks and recovery process — not just the gift to the recipient — is an essential part of that decision.

IF YOU'RE CONSIDERING DONATION

Speak candidly with the donor evaluation team about any concerns or hesitations you have — this conversation is designed to support your own informed decision, separate from any pressure you may feel from the recipient's situation.

SECTION 10 The Transplant Surgery Itself

Understanding roughly what happens during the operation can help ease some of the uncertainty around this major step.

What the surgery involves

Under general anesthesia, the diseased liver is carefully removed, and the donor liver (or portion) is connected to the recipient's blood vessels (the hepatic artery, portal vein, and major veins) and bile duct. The operation is complex and typically takes several hours, sometimes longer for more complicated cases.

The surgical team

Transplant surgery involves a specialized team, including transplant surgeons, anesthesiologists, and operating room staff experienced specifically in this procedure — reflecting the specialized expertise required for the operation's particular technical demands.

Immediately after surgery

Patients typically go to an intensive care unit immediately after surgery for close monitoring, before being transferred to a regular hospital ward as recovery progresses, covered in Section 11.

KEY POINT

While the details of the operation itself involve complex surgical technique, understanding the basic outline — removal, connection, and close monitoring afterward — is generally enough for most patients and families; your surgical team can address more specific technical questions if you'd like them.

DID YOU KNOW?

Because the new liver, or growing partial graft, needs time to fully establish its blood supply and function, some degree of temporary abnormality in liver blood tests immediately after surgery is expected and closely monitored, rather than necessarily being a sign of a problem.

SECTION 11 Immediate Recovery: The Hospital Stay

The hospital stay after transplant involves close monitoring and a gradual, staged return toward normal function — understanding this timeline helps set realistic expectations.

Intensive care

The first period after surgery, typically a few days, involves close monitoring in an intensive care unit, watching for early signs of how well the new liver is functioning and for any immediate surgical complications.

Moving to a regular ward

As recovery progresses, patients transition to a regular hospital ward, where the focus shifts toward regaining strength, establishing the immunosuppression regimen (Section 12), and preparing for discharge — typically over one to a few weeks total, depending on individual recovery and any complications.

Learning your new routine

During this hospital stay, you'll begin learning the details of your lifelong medication regimen, warning signs to watch for, and the follow-up schedule ahead — a genuinely significant amount of new information, which your transplant team will help you absorb gradually, often with written materials and repeated reinforcement rather than expecting everything to be retained at once.

KEY POINT

The amount of new information during this period can feel overwhelming — it's completely reasonable to ask questions repeatedly, request things in writing, and involve a family member in these early conversations to help retain everything.

DID YOU KNOW?

Many transplant centers have dedicated transplant nurse coordinators specifically to help patients and families navigate this period and the transition home — a valuable resource worth using fully.

SECTION 12

Immunosuppression: Preventing Rejection

Because the immune system naturally recognizes a transplanted liver as foreign tissue, lifelong medication to calm this immune response is essential — one of the most important, non-negotiable aspects of life after transplant.

Why immunosuppression is necessary

Without medication to suppress this immune response, the body would attack and eventually reject the new liver. Immunosuppressive medications calm this response enough to protect the transplanted organ, while trying to preserve enough immune function to still fight off infections reasonably well.

A typical medication approach

Most patients take a combination of immunosuppressive medications, often at higher doses immediately after transplant, gradually reduced to lower, long-term maintenance doses over

the following months, as the risk of rejection naturally decreases somewhat over time (though it never disappears entirely).

Lifelong, non-negotiable adherence

NEVER STOP OR SKIP IMMUNOSUPPRESSIVE MEDICATION WITHOUT MEDICAL GUIDANCE

These medications must be taken exactly as prescribed, for life. Missing doses or stopping on your own — even temporarily, even if you feel completely well — significantly raises the risk of rejection, which can seriously damage or destroy your transplanted liver. If cost, side effects, or any other barrier is making adherence difficult, **tell your transplant team immediately** rather than skipping doses quietly — they have real solutions and resources to help.

KEY POINT

Consistent, lifelong immunosuppression is the single most important behavior protecting your transplanted liver — building sustainable daily habits around it is one of the most valuable investments you can make in your long-term outcome.

SECTION 13

Understanding Rejection: Signs & Treatment

Rejection is the immune system's attack on the transplanted liver — and while it can sound frightening, most rejection episodes, when caught and treated, are effectively managed without losing the transplanted organ.

Types of rejection

- **Acute rejection**, the more common type, can occur at any point but is most common in the first several months after transplant — often caught through routine monitoring before causing noticeable symptoms.
- **Chronic rejection**, a slower, more gradual process occurring over a longer period, is less common but can be more difficult to reverse.

Signs that may indicate rejection

- **Abnormal liver blood tests**, often the first and only sign, caught through routine monitoring before any symptoms appear.
- **Fatigue, fever, or jaundice**, in more noticeable cases.
- **Abdominal discomfort or swelling**.

How rejection is diagnosed and treated

Suspected rejection is generally confirmed with a liver biopsy, and treated with adjustments to immunosuppressive medication — often a temporary increase or change in regimen. Most acute rejection episodes respond well to this treatment when caught reasonably promptly.

KEY POINT

Regular monitoring exists specifically to catch rejection early, often before you'd notice anything yourself — this is exactly why consistent follow-up blood tests matter so much, even when you feel completely well.

DID YOU KNOW?

A single episode of treated rejection does not mean your transplant has "failed" — many patients experience at least one rejection episode, treat it successfully, and go on to have excellent long-term outcomes.

SECTION 14 Infection Risk & Prevention

Because immunosuppression reduces the immune system's activity, infection risk is genuinely increased after transplant — understanding this risk and its prevention is a core part of post-transplant life.

Why infection risk rises

The same immune suppression that protects your new liver from rejection also reduces your body's ability to fight off infections, particularly in the first several months after transplant when immunosuppression doses are typically highest.

Prevention strategies

- **Vaccinations**, ideally updated before transplant where possible, with certain vaccines (particularly live vaccines) generally avoided afterward given immunosuppression — your transplant team can guide your specific vaccination plan.
- **Preventive antimicrobial medications**, often prescribed for a defined period after transplant to protect against specific infections more common during this higher-risk window.
- **Practical precautions**, including hand hygiene, food safety practices, and caution around sick contacts, particularly in the early months after transplant.
- **Prompt reporting of any fever or signs of infection** to your transplant team, rather than waiting to see if it resolves on its own.

SEEK PROMPT MEDICAL ATTENTION FOR FEVER

Fever after transplant should be reported to your transplant team promptly — infections can progress more quickly and seriously in an immunosuppressed person, making early evaluation important.

KEY POINT

Infection risk is highest in the earlier months after transplant and generally decreases somewhat over time as immunosuppression doses are reduced — though some increased risk persists for as long as you remain on these medications.

SECTION 15 Other Complications After Transplant

Beyond rejection and infection, a few other complications are worth understanding as part of the complete picture of post-transplant care.

Surgical complications

As with any major surgery, bleeding, bile duct problems, or issues with the blood vessel connections can occasionally occur, generally identified and addressed during the early recovery period through close monitoring.

Medication side effects

Long-term immunosuppression carries its own set of possible side effects, including effects on kidney function, blood pressure, blood sugar, and cholesterol — part of why long-term monitoring (Section 16) tracks these factors alongside liver-specific tests.

Increased cancer risk

Long-term immunosuppression is associated with a modestly increased risk of certain cancers, particularly skin cancers, making sun protection and regular skin checks a genuinely worthwhile part of long-term care.

Cardiovascular risk

Transplant recipients face an increased risk of cardiovascular disease over time, related both to medication effects and pre-existing risk factors — making blood pressure, cholesterol, and blood sugar management an important ongoing focus, similar to its importance throughout many of the conditions in this guide series.

KEY POINT

These risks are well-understood and actively monitored for as a standard part of long-term transplant care — knowing about them supports informed partnership with your care team, not cause for alarm.

DID YOU KNOW?

Because of these specific risks, transplant recipients are generally recommended for more frequent skin checks and cardiovascular risk monitoring than the general population — a routine, expected part of long-term follow-up.

SECTION 16 Long-Term Follow-Up & Monitoring

Transplant care doesn't end at discharge — regular, lifelong follow-up is what keeps your new liver, and your overall health, on track for the years ahead.

What ongoing monitoring involves

- **Regular blood tests**, tracking liver function, immunosuppressant medication levels, kidney function, and other markers — very frequent in the early months, gradually spacing out over time as things stabilize.
- **Periodic imaging**, particularly if the original condition (such as liver cancer) requires ongoing surveillance.
- **Monitoring for medication side effects**, including blood pressure, cholesterol, blood sugar, and kidney function.
- **Skin checks and general cancer screening**, as covered in Section 15.

The gradual transition to a longer-term rhythm

Visit frequency is typically highest in the first year, then gradually decreases as your transplant team gains confidence in your stability — though some level of regular, lifelong monitoring continues indefinitely.

Your role in this partnership

Consistent attendance at follow-up appointments, honest reporting of symptoms or medication challenges, and reliable lab testing are your essential contributions to this long-term partnership with your transplant team.

KEY POINT — YOU ARE THE CONSTANT

Keeping your own simple record of medications, doses, and lab trends genuinely helps, especially since your care may eventually be shared between your transplant center and a more local hepatologist or primary care provider over time.

MAKE THE MOST OF APPOINTMENTS

Worth asking regularly: "Are my immunosuppressant levels in the right range?" and "Is there anything in my other health markers — blood pressure, kidney function, cholesterol — that needs attention?"

SECTION 17

Life After Transplant: Diet, Exercise & Daily Life

With successful transplant and consistent follow-up, most recipients return to a full, active life — this section covers what daily life genuinely looks like.

Diet

Most patients can eventually return to a generally balanced, healthy diet, with some specific precautions — particularly avoiding grapefruit and grapefruit juice, which can interact with certain immunosuppressive medications, and generally following food safety practices more carefully given ongoing, if reduced, infection risk.

Physical activity and exercise

Gradually returning to physical activity, guided by your transplant team's recommendations, supports recovery, cardiovascular health, and overall wellbeing — many recipients go on to resume quite vigorous activity levels once fully recovered.

Returning to work and normal activities

Many recipients return to work, hobbies, and normal daily activities within a few months of transplant, though timing varies based on individual recovery and the nature of the work or activity involved.

Alcohol and certain substances

Alcohol is generally advised against, given the transplanted liver's importance and, for those transplanted for alcohol-related liver disease specifically, the sustained abstinence commitment made during evaluation.

KEY POINT

For most recipients, life after transplant genuinely returns to something close to normal — work, travel, exercise, and hobbies are all realistic goals, built around the ongoing foundation of medication adherence and regular follow-up.

TALK WITH YOUR TRANSPLANT TEAM

Ask specifically about any dietary restrictions relevant to your particular medications, and what timeline is realistic for returning to your specific work or activities.

SECTION 18 Recurrence of the Original Disease

For some underlying conditions, there's a possibility the original disease can recur in the transplanted liver over time — worth understanding honestly, alongside how it's monitored and managed.

Conditions with some recurrence risk

Original condition	Recurrence pattern
MASLD/MASH	Can recur, particularly if underlying metabolic risk factors aren't well managed after transplant.
Alcohol-related liver disease	Risk relates directly to any return to alcohol use after transplant.
Autoimmune hepatitis	Can recur in a minority of patients, sometimes requiring adjusted immunosuppression.
PBC and PSC	Can recur in a minority of cases, generally slow to develop and often manageable.
Hepatitis B and C	Modern antiviral treatments have dramatically reduced recurrence risk compared to earlier eras.

Conditions that don't recur

As covered in our companion guides, certain genetic conditions — including Wilson's disease and alpha-1 antitrypsin deficiency — are genuinely cured by transplant, since the new liver carries normal genes and doesn't carry the risk of recurrence.

KEY POINT

Recurrence risk, where it exists, is generally monitored for as part of routine long-term follow-up, and managing the same underlying risk factors that caused your original disease — metabolic health, alcohol, or immune activity — remains relevant even after transplant.

DID YOU KNOW?

Because recurrence risk varies so much by original condition, your specific long-term monitoring plan is tailored to your particular history — worth understanding clearly what your own transplant team is watching for.

SECTION 19 Emotional Aspects & Support

Liver transplantation touches far more than the physical body — the emotional journey, for patients and families alike, deserves just as much genuine attention.

Before transplant: waiting and uncertainty

The waiting period can bring anxiety, hope, guilt (particularly the complicated feeling of hoping for an organ that depends on someone else's death), and exhaustion. These feelings are completely normal and worth discussing openly with your transplant team's social worker or psychologist, who exist specifically to support this part of the journey.

After transplant: adjustment and gratitude

Many recipients describe a complex mix of profound gratitude, relief, and sometimes unexpected feelings of guilt or a changed sense of identity — adjusting to life with someone else's organ, and to a lifelong medication routine, is a genuine psychological adjustment, not just a physical one.

Supporting family members and caregivers

Caregivers supporting someone through evaluation, waiting, surgery, and recovery often carry significant emotional and practical burden themselves — their own support and self-care matter genuinely, not as an afterthought.

IF YOU ARE STRUGGLING

If you are experiencing persistent low mood, hopelessness, or thoughts of harming yourself — whether as a patient or a caregiver — please reach out to a healthcare professional or a crisis line. The **988 Suicide & Crisis Lifeline** (call or text 988 in the United States) is free, confidential, and available 24/7. You do not have to manage this alone.

COMMUNITY MATTERS

Transplant-specific support groups, alongside organizations like The Liver and Kidneys Hope Foundation, connect patients and families with others who genuinely understand this particular journey, from waiting through long-term life after transplant.

SECTION 20 **Special Situations**

Liver transplant considerations look somewhat different across certain groups and circumstances.

Children (pediatric transplant)

Children can require liver transplant for various congenital and acquired conditions, with pediatric transplant centers offering specialized expertise for the unique surgical, medical, and developmental considerations involved, including growth and long-term development on lifelong immunosuppression.

Pregnancy after transplant

Many transplant recipients go on to have healthy pregnancies, generally recommended only after a period of stability (often at least a year post-transplant), with close coordination between the transplant team and obstetrics, since some immunosuppressive medications require adjustment during pregnancy.

Retransplantation

In a minority of cases, a second transplant may become necessary — due to chronic rejection, recurrence of the original disease, or other complications — following a similar evaluation and allocation process as the first transplant.

Older adults

Transplant is increasingly performed successfully in carefully selected older patients, with evaluation focusing particularly on overall health and ability to tolerate both the surgery and lifelong immunosuppression.

TALK WITH YOUR TRANSPLANT TEAM

If any of these situations apply to you or a loved one, mention it directly — it may shape your specific evaluation, timing, or long-term care plan.

SECTION 21

Long-Term Outlook, Prevention & Myths vs. Facts

Liver transplant outcomes have improved substantially over recent decades — genuine, well-earned reason for optimism, alongside a few practical points worth understanding clearly.

The long-term outlook

Many transplant recipients live full, active lives for many years, even decades, after transplant. Long-term success depends heavily on consistent immunosuppressant adherence, regular follow-up, and managing the general health factors (blood pressure, cholesterol, blood sugar) covered throughout this guide.

What supports the best long-term outcome

- **Absolute consistency with immunosuppressive medication.**
- **Regular, lifelong follow-up appointments and lab testing.**
- **Managing cardiovascular risk factors** proactively.
- **Sun protection and regular skin checks**, given increased skin cancer risk.
- **Avoiding alcohol** and managing any recurrence-relevant risk factors from your original condition.

Myths vs. facts

Myth	Fact
"A liver transplant is a last resort with poor outcomes."	Liver transplant is one of the most successful transplant procedures in medicine, with many recipients living full, active lives for decades.
"Once transplanted, I don't need to worry about my liver anymore."	Lifelong immunosuppression, monitoring, and attention to recurrence risk and general health remain essential for life.
"If I feel fine, I can skip a dose of my immunosuppressant occasionally."	Missing doses significantly raises rejection risk, even when you feel completely well — consistency is essential.
"A rejection episode means the transplant has failed."	Most acute rejection episodes are successfully treated with medication adjustment, without losing the transplanted liver.
"Living donation is too risky to ever consider."	Living donor liver transplant has a well-established safety track record at experienced centers, with thorough evaluation protecting donor safety.

KEY POINT

If you remember one thing from this page: liver transplantation, for the right candidate, offers a genuinely excellent long-term outlook — built on the foundation of consistent, lifelong partnership with your transplant team.

CLOSING

Questions, Glossary, Resources & Disclaimer

Questions you might ask your transplant team

- What is my current MELD score, and how does that translate to expected wait time?
- Would I be a candidate for living donor transplant, and do I have anyone in mind to discuss this with?
- What does my specific immunosuppression regimen look like, and what side effects should I watch for?
- What are the signs of rejection or infection I should watch for at home?
- What is my center's long-term follow-up schedule?
- What support resources are available for me and my family through this process?

Glossary

Term	Plain-language meaning
Graft	The transplanted liver (or portion of one).
Immunosuppression	Medication that calms the immune system to prevent organ rejection.
Living donor	A living volunteer who donates a portion of their liver.
MELD score	A scoring system estimating liver disease severity, used to prioritize transplant candidates.
Rejection	The immune system's attack on a transplanted organ.
Retransplantation	A second liver transplant, needed in a minority of cases.

About The Liver and Kidneys Hope Foundation

The Liver and Kidneys Hope Foundation (TLHF) is a Nevada-based 501(c)(3) nonprofit dedicated to liver- health education, community support, and outreach. Through educational materials like this guide, community programming, our chapter network, volunteer efforts, and fundraising initiatives, we work to raise awareness of liver conditions and support the people affected by them, including those navigating transplant evaluation, waiting, and life after transplant. The Foundation is not a medical provider and does not deliver clinical care.

A NOTE ON SOURCES AND CURRENCY

This guide reflects widely accepted, general medical understanding of liver transplantation intended for patient education. It does not cite individual studies, and practices around allocation policy and immunosuppression continue to evolve. For the most current, individualized information, your transplant team is the best resource.

Full disclaimer

PLEASE READ

This publication is provided by The Liver and Kidneys Hope Foundation for **general educational purposes only**. It is **not medical advice** and is not a substitute for professional diagnosis, treatment, or the judgment of a qualified, licensed healthcare provider, including your transplant team, who knows your personal history. The Liver and Kidneys Hope Foundation is **not a medical provider** and does not practice medicine, provide clinical services, or establish a provider-patient relationship through this material.

Do not use this guide to diagnose or treat a health problem or disease, and do not disregard or delay seeking professional medical advice because of something you have read here. Never adjust or stop immunosuppressive medication without guidance from your transplant team, as doing so can cause organ rejection. Fever, jaundice, or other new symptoms after transplant should be reported to your transplant team promptly. If you think you may have a medical emergency, contact your local emergency services immediately.

The Foundation makes no warranties about the completeness, accuracy, or currency of this information and accepts no liability for actions taken based on it. Always consult your own healthcare professional.

The Liver and Kidneys Hope Foundation · Health Education Series (EDU-LIV) · "Understanding Liver Transplantation," First Edition

© The Liver and Kidneys Hope Foundation. Created for educational and community outreach use.