Cancer Council

CANCER TYPE
fact sheet

Understanding Gallbladder and Bile Duct Cancers

A guide for people affected by cancer

This fact sheet has been prepared to help you understand more about gallbladder cancer and bile duct cancer. We hope this fact sheet will help you, your family and friends understand how these cancers are diagnosed and treated.

About the gallbladder and bile ducts

The gallbladder is a small, pear-shaped organ on the right side of the abdomen (belly), under the liver. It is part of the digestive system. The gallbladder stores bile, a fluid that is made by the liver and helps your body break down fats in the foods you eat. Bile ducts are small tubes that carry bile from the liver into the small bowel (small intestine).

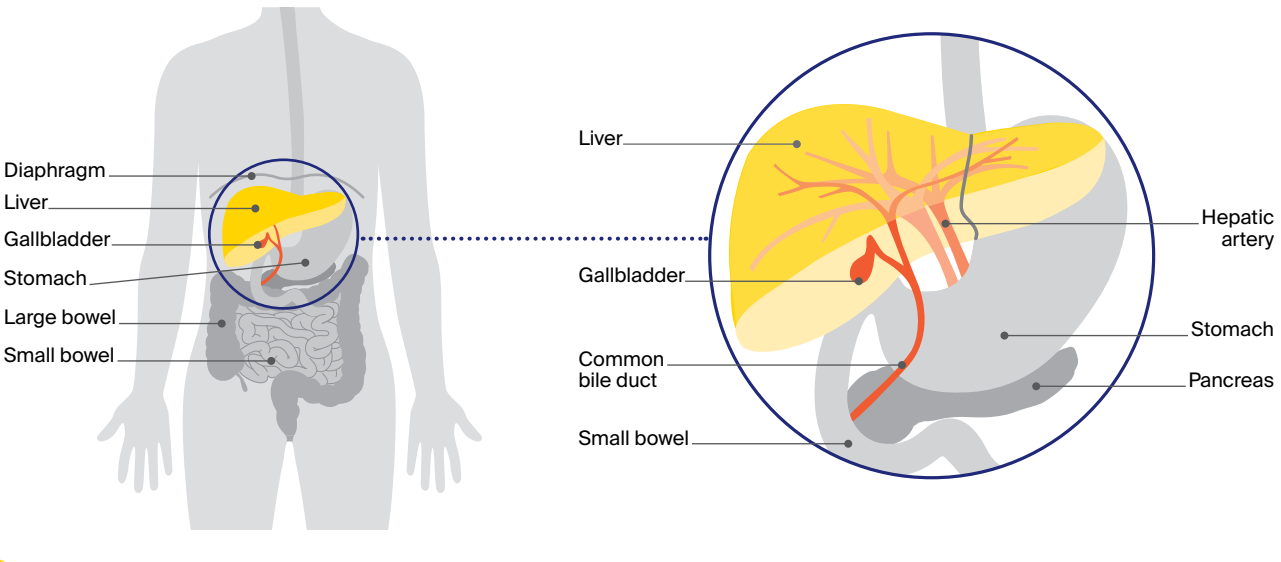
What are gallbladder and bile duct cancers?

Cancer is when cells in any part of the body become abnormal and keep growing to form a mass or lump called a tumour.

Gallbladder and bile duct cancers are 2 different types of cancers but affect the same area of the body. Bile duct cancer is sometimes called cholangiocarcinoma or biliary tract cancer.

About 85% of gallbladder cancers are adenocarcinomas, which are tumours that start in the cells that line the inside of the gallbladder. The other, less common, types of gallbladder cancer include squamous cell carcinoma, sarcoma and lymphoma.

The gallbladder and bile ducts



Bile duct cancer can happen in different places within the bile duct system. Cancers in the bile ducts that are within the liver are called intrahepatic, cancers at the point where the left and right hepatic ducts meet are called Klatskin tumours and cancers in the common bile duct outside the liver are extrahepatic tumours.

Malignant (cancerous) tumours have the potential to spread to other parts of the body through the bloodstream or lymph vessels and form another tumour at a new site. This new tumour is known as secondary cancer or metastasis.

How common are gallbladder and bile duct cancers?

About 1430 Australians are diagnosed each year with gallbladder and bile duct cancers.[1] People 65 or over are more likely to be diagnosed with these cancers than younger people.

What are the risk factors?

The exact cause of most gallbladder cancers is not known, but factors that increase your risk include:

- having had gallstones or inflammation of the gallbladder in the past
- family history of gallbladder cancer (close relative such as mother, father, sibling or child)
- other gallbladder and bile duct conditions and abnormalities, such as gallbladder polyps, choledochal cysts (bile-filled cysts) and calcified gallbladder (also known as porcelain gallbladder).

The main risk factor for bile duct cancer is long-term inflammation of the bile ducts. This may be caused by liver problems such as hepatitis and fatty liver disease. Other risk factors include exposure to certain chemicals in the printing industry, or having inflammatory bowel disease or liver conditions (which can cause scar tissue in the bile ducts).

However, most people with these risk factors do not develop cancer.

Rare Cancers Australia have a directory of health professionals and cancer services across Australia: rarecancers.org.au.

What are the symptoms?

Gallbladder cancer and bile duct cancer can be difficult to diagnose in their early stages as they don't usually cause symptoms. Sometimes, cancer is found when the gallbladder is removed or examined for another reason, such as gallstones. But most people who have surgery for gallstones do not have gallbladder cancer.

If there are symptoms, they may include:

- abdominal pain, often on the upper right side
- nausea (feeling sick) or vomiting
- jaundice (yellowing of the skin and eyes), causing dark urine (wee), pale bowel movements (poo)
- general weakness or fatigue
- a lump in the abdomen
- unexplained weight loss
- a constant itch
- fever.

Diagnosis

If your doctor thinks that you may have gallbladder or bile duct cancer, they will perform a physical examination and arrange some of the following tests:

Blood tests – These may include a full blood count (to measure your white blood cells, red blood cells and platelets), liver function tests (to measure chemicals that are found or made in your liver) and tumour markers (to measure chemicals produced by cancer cells).

Ultrasound scan – For this scan, you will lie down. A health professional called a sonographer will spread gel over the affected part of your body, and move a small device over the area. Soundwaves are used to create pictures of the inside of your body. The ultrasound images are then projected onto a computer screen. An ultrasound is painless and takes about 15–20 minutes.

CT (computerised tomography) and/or MRI (magnetic resonance imaging) scans – Special machines are used to scan and create pictures of the inside of your body. During the scan you may have an injection of dye (called contrast) into one of your veins, which makes the pictures

clearer. You will need to lie still on an examination table which slides into a large metal tube. A special type of MRI called magnetic resonance cholangiopancreatography (MRCP) shows the bile ducts in more detail. The scans are painless, though the MRI machine can be noisy.

Diagnostic laparoscopy – You will be given a general anaesthetic. The doctor will make small cuts in your abdomen. A thin tube with a camera on the end (laparoscope) will be inserted into your body so the doctor can see your gall bladder, bile ducts and other parts of your abdomen.

Cholangiography – This is an x-ray of the bile ducts to see if there is any narrowing or blockage.

ERCP (endoscopic retrograde cholangiopancreatography) – The doctor inserts a flexible tube with a camera on the end (endoscope) down your throat into your small intestine and into your bile duct while you are sedated. The camera takes images of your gut.

Biopsy – This is the removal of some tissue from the affected area for examination under a microscope. This can be done during a laparoscopy, a cholangiography or by a thin needle guided by ultrasound or CT scan.

Staging

Staging describes how far the cancer has spread. Knowing the stage helps doctors plan the best treatment for you.

Gallbladder and bile duct cancers are staged using the TNM (tumour–nodes–metastasis) system, which indicates the size of the tumour, whether it has spread to nearby lymph nodes or if has spread to other parts of the body.

"When I heard the word cancer, my mind went completely blank. I was crying so hard I didn't hear a word the doctor said after that. After a few days I started to think more clearly again." ESTHER

Staging gallbladder and bile duct cancers

The TMO system is used along with a number value from 0-IV.

Stage 0	Indicates the cancer is only in the place of origin and has not spread to nearby organs.
Stage I	Cancer cells have begun to spread to nearby tissue but are not deeply embedded. Lymph nodes are not affected. This stage is also known as early-stage cancer.
Stage II	The cancer is deeply embedded into nearby tissue. Lymph nodes may or may not be affected. This is called localised cancer.
Stage III	The cancer is larger and deeply embedded into surrounding tissue and lymph nodes are usually affected. This is also called localised cancer.
Stage IV	The cancer has spread to other parts of the body. This is known as advanced or metastatic cancer.

Treatment

Gallbladder and bile duct cancers are rare, so you may want to talk to your doctor about being referred to a specialist treatment centre with a multidisciplinary team (MDT) that regularly manages this cancer. The MDT will work out the best treatment, depending on the type and location of the cancer; if the cancer has spread; your health; and your own preferences.

You may also want to get a second opinion from another specialist team to confirm or explain the treatment options.

Surgery, radiation therapy and chemotherapy are the main treatments for gallbladder cancer and bile duct cancer. Immunotherapy and targeted therapy are also used to treat these cancers. You might have one or more of these treatments – either on their own or combined.

Surgery

Surgery is the most common treatment for gallbladder cancer and bile duct cancer. For people with early-stage disease, the gallbladder can be completely removed and the bile duct openings in the liver can be attached directly to the bowel. Sometimes a stent (small tube made of plastic or metal) will be inserted into the bile duct to help the bile flow past a blockage into the small bowel. The extent of the surgery depends on the location and stage of the tumour. Your surgeon will discuss the type of operation you may need and the side effects and risks of surgery.

Surgery to remove the gallbladder is called a cholecystectomy. Often surrounding tissue including lymph nodes, bile ducts and part of the liver will also be removed. Surgery may be performed as either open surgery or keyhole (laparoscopic) surgery.

Radiation therapy

Also called radiotherapy, radiation therapy uses a controlled dose of radiation to kill or damage cancer cells. External beam radiation therapy (EBRT) uses radiation from a large machine called a linear accelerator. The radiation is usually from x-ray beams.

You lie on a table and the machine delivers radiation to the targeted area. Each radiation session takes 10–20 minutes and is painless. A typical treatment plan might involve a session of radiation therapy every weekday for 4–6 weeks. In some instances, radiation therapy is given over a much shorter time period. The dose and duration of radiation therapy is decided by your radiation oncologist.

Selective internal radiation therapy (SIRT) is sometimes used for bile duct cancer. In SIRT, tiny radioactive beads (microspheres) made of resin or glass are inserted into your body, and target the tumour through the bloodstream.

For more information, see our *Understanding Surgery*, *Understanding Chemotherapy* and *Understanding Radiation Therapy* booklets or call 13 11 20.

Chemotherapy

Chemotherapy uses drugs to kill or slow the growth of cancer cells. You may have one chemotherapy drug, or be given a combination of drugs. This is because different drugs can destroy or shrink cancer cells in different ways. Your treatment will depend on your situation and the stage of the tumour. Your medical oncologist will discuss your options with you.

Chemotherapy is usually given through a drip into a vein (intravenously) or as a tablet that is swallowed. Chemotherapy is commonly given in cycles which may be daily, weekly or monthly. For example, a cycle may last 3 weeks – you have the drug over a few hours, followed by a rest period, before starting another cycle. The length of the cycle and number of cycles depends on the drugs being given.

Immunotherapy

Immunotherapy is a drug treatment that uses the body's own immune system to fight cancer. There are several different types of immunotherapy.

Targeted therapy

Targeted therapy is a type of drug treatment. It attacks specific cancer cell features, known as molecular targets, to stop the cancer growing and spreading. Targeted therapy is not suitable for everyone. Your doctors may test the cancer to see if the cells contain a particular molecular target.

Clinical trials

Your doctor may suggest you take part in a clinical trial. Clinical trials test new or modified treatments and ways of diagnosing disease to see if they are better than current methods. For example, if you join a randomised trial for a new treatment, you'll be chosen at random to receive either the best existing treatment or the modified new treatment. Over the years trials have improved treatments and led to better outcomes for people diagnosed with cancer. If you decide to take part in a clinical trial, you can withdraw at any time. Visit australiancancertrials.gov.au for more information or contact the Australasian Gastro-Intestinal Trials Group (AGITG) gicancer.org.au.

- See our *Understanding Clinical Trials and Research* booklet or call 13 11 20.

Side effects of treatment

All treatments can have side effects. The type of side effects that you may have and how long these last will depend on the type of treatment and where in your body the cancer is.

Some people have very few side effects and others have more. Before your treatment begins, your specialist team will discuss possible side effects, both short-term and long-term (including those that may not start immediately).

Common side effects of treatment

surgery	bleeding, damage to nearby tissue and organs (including liver failure and bile leakage), pain, infection, blood clots, weak muscles (atrophy), lymphoedema
radiation therapy	fatigue, nausea and vomiting, liver inflammation, bowel issues (such as diarrhoea) skin problems, loss of fertility
chemotherapy	fatigue, loss of appetite, nausea and vomiting, bowel issues (such as diarrhoea) hair loss, mouth sores, skin and nail problems, increased chance of infections, loss of fertility, early menopause
immunotherapy	fatigue, nausea, skin rash and itching, joint pain, diarrhoea, dry eyes
targeted therapy	fatigue, nausea, diarrhoea, constipation, sore mouth, blood pressure changes, appetite loss, bleeding and bruising, skin problems, joint aches, headache

Chemotherapy and radiation therapy may cause infertility. If you may want to have children in the future, it is important to discuss this with your treatment team before starting treatment. See our *Fertility and Cancer* booklet or call 13 11 20.

Staying well during treatment

Seek support

Feeling a range of emotions after a cancer diagnosis is normal. You may feel overwhelmed, anxious, fearful, angry, sad or lonely. Many people need emotional support before, during and after treatment. Adjusting to living with scars, changes to your physical appearance, changes to your lifestyle and how your body works can be hard. It may help to talk with a counsellor, psychologist, friend or family member. Talk to your medical team about what support services are available to you.

- See our *Emotions and Cancer* booklet or call 13 11 20 for support.

Eat and drink well

If you have had your gallbladder removed, bile made by the liver will no longer be stored between meals. Bile instead will flow directly from your liver into your small intestine and there will still be enough bile produced for normal digestion. You should still be able to eat a normal diet after your gallbladder is removed, but it's a good idea to avoid high-fat foods for a few weeks after surgery while your body adjusts.

Eating well can help you cope with some of the common side effects of cancer treatment and help you recover faster. You can discuss individual nutrition with health professionals such as dietitians.

Get active

Research shows exercise can benefit people during and after cancer treatment. Being active can help you cope with some of the common side effects of cancer treatment and speed up recovery. It can also improve quality of life by giving you more energy, keeping your muscles strong, helping you maintain a healthy weight and boosting your mood.

- See our *Exercise for People Living with Cancer* booklet.

Follow-up appointments

After treatment, you will need check-ups every 3–12 months for several years to confirm that the cancer hasn't come back. Between visits, let your doctor know immediately if you have new symptoms or any other health problems.

If the cancer comes back

For some people, cancer does come back after treatment. This is known as recurrence. Depending on where the cancer comes back, treatment may include surgery, radiation therapy or chemotherapy.

- For free copies of Cancer Council's booklets on *Understanding Palliative Care*, *Living with Advanced Cancer* and *Facing End of Life,* visit your local Cancer Council website or call 13 11 20.

Question checklist

Asking your doctor questions will help you make an informed choice. You may want to include some of the questions below in your list.

- What type of cancer do I have?
- What stage of cancer do I have?
- What are the treatment options for me?
- What is the goal of the treatment?
- What are the possible risks or side effects of my treatment?
- How long will all the treatment take? Will I have to stay in hospital?
- Is this treatment covered by Medicare or private insurance? Will there be extra expenses?

Where to get help and information

Call Cancer Council 13 11 20 for more information about cancer. Health professionals can listen to your concerns, provide information, and put you in touch with local services and support groups. Ask for free copies of booklets that may be relevant to you, or download digital versions from your local Cancer Council website:

ACT	**actcancer.org**
NSW	**cancercouncil.com.au**
NT	**cancer.org.au/nt**
QLD	**cancerqld.org.au**
SA	**cancersa.org.au**
TAS	**cancer.org.au/tas**
VIC	**cancervic.org.au**
WA	**cancerwa.asn.au**
Australia	**cancer.org.au**

Other useful websites

You can find many useful resources online, but not all websites are reliable. These websites are good sources of support and information.

Australasian Gastro-Intestinal Trials Group (AGITG)	**gicancer.org.au**
Pancare Foundation	**pancare.org.au**
Rare Cancers Australia	**rarecancers.org.au**

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Note to reader
Always consult your doctor about matters that affect your health. This fact sheet is intended as a general introduction and is not a substitute for professional medical, legal or financial advice. Information about cancer is constantly being updated and revised by the medical and research communities. While all care is taken to ensure accuracy at the time of publication, Cancer Council Australia and its members exclude all liability for any injury, loss or damage incurred by use of or reliance on the information provided in this fact sheet.

References
1. Australian Institute of Health and Welfare (AIHW), *Cancer Data in Australia 2024,* viewed August 2025, available from aihw.gov.au/reports/cancer/cancer-data-in-australia

This fact sheet is funded through the generosity of the people of Australia. To support Cancer Council, call your local Cancer Council or visit your local website.

Cancer Council acknowledges Traditional Custodians of Country throughout Australia and recognises the continuing connection to lands, waters and communities. We pay our respects to Aboriginal and Torres Strait Islander cultures and to Elders past and present.

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