Radioactive iodine for an overactive thyroid
If English is not your first language

We are not allowed to use family members as interpreters, so if English is not your first language, please contact the radioisotope department to discuss whether there is a need to have an interpreter present. If you do not do this and staff consider that an interpreter is necessary, it could delay your treatment.

Telephone: 0117 342 2694
Introduction to radioactive iodine

You may be reading this leaflet because you have been referred for radioactive iodine as a treatment for an overactive thyroid (thyrotoxicosis) or an enlarged thyroid gland (a goitre) or both.

This treatment is given at the isotope unit at the Bristol Haematology and Oncology centre, which is the centre that holds the licence to store and administer the radioactive iodine. The treatment is given at an outpatient appointment, and those receiving the capsule are usually in the hospital for approximately 30 minutes.

Radioactive iodine has been used for over 50 years to treat thyroid conditions. It comes in the form of a capsule (similar in size to antibiotics) which is taken with water.

You have been referred to receive radioactive iodine treatment.

You will be receiving one of the following doses. The dose you will receive is marked.

400 Megabecquerels 600 Megabecquerels 800 Megabecquerels

Megabecquerel (MBq) = unit of measurement for radioactivity

The standard treatment doses are either 400 or 600 MBq radioactive iodine depending on your clinical need. Very occasionally, we may give a higher dose of 800 MBq. The radiation protection advice for each dose is different – this is described in the treatment schedules at the end of this booklet. It is very important that you read this information as it has implications for you and your family.

As the thyroid gland naturally takes up the iodine from the food
we eat, once digested, the radioactive iodine is absorbed by the thyroid gland and destroys some of the thyroid tissue. The aim of the treatment is to reduce the over-activity of the thyroid gland (thyrotoxicosis) or shrink it in size (goitre).

Pregnancy and fertility

We ask that all those who receive radioactive iodine do not get pregnant or cause a pregnancy for six months following treatment. You may wish to discuss your method of contraception further with your partner or doctor before you confirm whether you will be attending for treatment.

Female patients: pregnancy, breastfeeding and fertility

It is very important that you do not have radioactive iodine treatment if you are pregnant or think there is a chance you might be.

If you are female and aged between 10 and 55 years, you will be asked to sign a form to confirm that you are not pregnant.

Please note that we work to very specific guidelines which do not accept the following as methods of contraception:

- barrier methods such as condoms or the cervical cap
- any spermicidal methods
- any fertility awareness methods such as body temperature monitoring or the rhythm method.

However we will treat you with radioactive iodine if you are within one of the categories below:

- if the treatment will be given within 10 days of the start of your last menstrual cycle
✓ if you have not been sexually active since your last period
✓ if you are under 55 years of age, post-menopausal and have not had a period for at least 12 months
✓ if you have had both your ovaries removed
✓ if you have had a contraceptive intra-uterine device fitted for longer than three months, including the Mirena coil
✓ you have been sterilised or your partner has had a vasectomy
✓ if you are taking the oral contraceptive pill, progesterone only mini pill, vaginal ring, transdermal birth control patch, depo-provera injection or contraceptive implants. You must have been on the pill as instructed for at least two months without any sickness
✓ those who take the mini pill but are not having periods will be asked to have a pregnancy test prior to treatment.

It is important not to become pregnant for at least six months after radioactive iodine treatment. You may need to discuss with your own doctor how best to manage this before you attend for treatment.

We encourage you to call the isotope unit to discuss your personal circumstances before you attend for treatment.

If you are breastfeeding, you will need to stop several weeks before radioactive iodine and not start again afterwards. Radiographers will advise you about this.

The dose of radioactive iodine given to treat an overactive thyroid or enlarged thyroid gland will not affect a woman’s fertility.
Male patients: pregnancy and fertility

Male patients are advised not to cause a pregnancy for six months after radioactive iodine. You may wish to discuss with your partner or doctor how best to manage this.

CT scanning prior to treatment

If you have had a CT scan with a contrast (a drink or injection) within two months prior to the appointment date, please inform the isotopes unit when you ring to confirm your appointment.

Preparation for the radioactive iodine treatment

Please remember when you receive your appointment letter with your date for treatment you must contact the isotope unit to confirm whether or not you will be attending for treatment.

If you are taking amiodarone, you must discuss this with your endocrinologist prior to coming for treatment.

If you are taking propylthiouracil tablets, please stop taking them 14 days before treatment.

If you are taking carbimazole tablets, please stop taking them seven days before your treatment.

If you are taking thyroxine tablets, please stop taking them seven days before treatment.

If you are taking any vitamin or mineral supplements that contain iodine or kelp, you should stop taking them seven days before treatment.

Please continue to take any other medications that have been prescribed for you by your doctor for other medical conditions.
On the day of treatment

Please do not bring children or anyone who may be pregnant with you to your appointment, as you will be asked to follow the radiation protection precautions immediately after receiving the treatment. These will be discussed in more detail under the heading ‘General precautions’ (page 11).

Please ensure you eat breakfast on the day of treatment.

Before taking the radioactive iodine capsule, you should not eat anything for two hours.

After taking the capsule you should not eat for one hour.

You may drink water during this time.

What happens at the hospital

When you arrive at the Oncology Centre for your treatment, please give your name to the receptionist. A radiographer will collect you and take you to the isotope unit where the treatment will be given.

You will be seen in an individual consultation lasting approximately 10 to 15 minutes, where the radiographer will confirm that you have read the booklet ‘Radioactive iodine for an overactive thyroid’ and that you have understood the radiation protection precautions you must follow after you have had the capsule. The radiographer will talk about the treatment (please see page 10 for possible side effects), and confirm some details about your referral and what arrangements you have in place to follow the radiation protection advice after you have had the treatment. You will also be asked to sign a consent form giving your consent to have the treatment.
If you are female and aged between 10 to 55 years, you will be asked to sign a form to confirm that there is no possibility that you may be pregnant, using the criteria previously outlined in this booklet.

You will be given a yellow radiation precautions card, which you must carry with you at all times until the date that is specified on it. If you are travelling abroad within six months following your treatment we ask that you take the card with you when you travel, just in case you activate any alarms at the airport or ferry terminal, although this is very unlikely.

As soon as the pre-treatment consultation is completed, you will be taken to another room within the unit to receive the radio-iodine. You will be met by another radiographer who will ask you to confirm your name, address and date of birth and that you still consent to the treatment. You will be given a copy of your consent form for your records.

The radiographer will confirm that you are not pregnant and ask whether you have any further questions about the treatment.

You will then be shown how to take the capsule immediately before taking it. The capsule is about the size of an antibiotic capsule. It is coated so it is easy to swallow. It sits in its own little holder at one end of a clear perspex tube. At the other end of tube there is a green mouthpiece. The radiographer will hand you the clear perspex tube and ask you to put the green mouthpiece to your lips. Once the green mouthpiece touches your lips, you will be asked to tilt the tube so that the
capsule runs along the tube and into your mouth without being handled. There will be water available to take with the capsule.

Once you have swallowed the capsule, you will be escorted from the isotopes unit. As the isotopes unit is on floor 3 we ask that where possible patients walk up to the ground floor to exit from the building. Patients who are unable to use the stairs will be taken up to the reception area in a lift to which the general public do not have access. This is to avoid being in close proximity to other members of the public and staff who do not need the radiation exposure.
Follow-up

As the isotope unit does not monitor your progress after treatment, you will be asked what follow-up arrangements are in place after you have had the treatment. It is very important that your thyroid function is monitored closely after treatment. This is usually with your own doctor or endocrinologist.

It is important that you follow the radiation protection advice given so that every effort is made to protect your family, friends and the general public from exposure to radiation that they do not need.

Possible side effects of treatment

Most people notice no side effects from the treatment. A few patients may experience a recurrence of the symptoms they had when they were diagnosed with an overactive thyroid – usually five to ten days after treatment. If you get these symptoms and you have been asked not to resume any anti-thyroid medication after treatment (for example carbimazole or propylthiouracil or levothyroxine) please contact your endocrinologist immediately.

There is a chance that your thyroid may become underactive in the months or years after treatment. It is important that this is identified, and this is why blood monitoring is important after treatment. Your endocrinologist will have discussed your post treatment follow-up with you, but please ask if this is not clear.

A small number of patients may need to return for a repeat treatment. If it is necessary to have a repeat treatment, there needs to be at least six months between treatments.
General radiation protection precautions following treatment

You may drive yourself to and from your appointment. Please feel free to bring a friend or relative, but please do not bring children to the appointment.

If you are a passenger in a car, please sit in the back of the car on the opposite side to the driver on the journey home.

If you are travelling home on public transport, do not sit next to or near to a female of childbearing age or a child.

Do not sit next to the same person for more than one hour on public transport. Please change seats after one hour if your journey is longer.

Sleep apart from your partner (please check your schedule for how long).

Keep at least one metre’s distance away from everyone. Your family will be fine if you are just passing them as you move around your home. However, do not sit next to them on the sofa or cuddle them. (Please check your schedule for how long).

You should drink plenty of fluids in the 24 hours after treatment. This will result in the need to pass urine more frequently and it helps to speed up the elimination of the radioiodine.

For one week following treatment, men should sit down on the toilet to pee rather than stand up. This avoids the possibility of splashing contaminated urine on the toilet seat and surrounding area.

For one week following treatment, always flush the toilet twice after use and wash your hands thoroughly.
For one week following treatment, keep a towel and facecloth for your own use.

If you are preparing food, wash your hands frequently and keep a hand towel for your own use.

Wash all crockery and cutlery thoroughly.

There is no need to wash your clothes separately from the family wash.

**PETS:** We do not routinely give radiation protection advice regarding pets. However, we do suggest that you do not cuddle very young animals into your neck or let them sleep on your pillow. There is no problem if they routinely sleep at the foot of the bed.

You cannot pass radiation on to another person to carry to a third person. You are the source of the radiation, and it cannot be carried by others from you to their friends or family.

**SCHEDULE: If you are having 400 MBq of radioactive iodine**

If you are taking amiodarone, you **must** discuss this with your endocrinologist prior to coming for treatment.

If you are taking propylthiouracil tablets, please **stop taking them 14 days** before treatment.

If you are taking carbimazole tablets, please **stop taking them seven days** before your treatment.

If you are taking thyroxine tablets, please **stop taking them seven days** before treatment.
If you are taking any vitamin or mineral supplements that contain iodine or kelp, you should **stop taking them seven days** before treatment.

Please continue to take any other medications that have been prescribed for you by your doctor for other medical conditions.

Once you have taken the radioactive iodine capsule, you **MUST carry the yellow radiation protection precautions card with you at all times for 20 days after treatment.**

**Day of treatment to day four**

Keep at least a metre’s distance between yourself and all other people.

Avoid places of entertainment such as pubs, clubs, theatres and restaurants where you are required to sit in close proximity to people.

Sleep apart from your partner for four nights and do not allow children to get into bed with you. You may have separate beds in the same room but please ensure they are at least a metre apart.

**From day four to day seven after treatment**

You can now mix with adults as usual.

However during this time, you **MUST continue to keep at least one metre away from pregnant women and small children and avoid all close prolonged contact with them.**

**From day seven to day 20 after treatment**

During this time, you may have 15 minutes close contact per day with pregnant women and small children.
From day 20 after treatment

No restrictions apply. You are free to return to your normal routine.

Please keep the yellow radiation precautions card for six months after treatment if you may be travelling abroad. There is a very small chance you could activate alarms at airports or ferry ports. If this occurs, please show the yellow card.

**SCHEDULE: If you are having 600 MBq of radioactive iodine**

If you are taking amiodarone, you **must** discuss this with your endocrinologist prior to coming for treatment.

If you are taking propylthiouracil tablets, please **stop taking them 14 days** before treatment.

If you are taking carbimazole tablets, please **stop taking them seven days** before your treatment.

If you are taking thyroxine tablets, please **stop taking them seven days** before treatment.

If you are taking any vitamin or mineral supplements that contain iodine or kelp, you should **stop taking them seven days** before treatment.

Please **continue to take any other medications that have been prescribed for you by your doctor for other medical conditions.**

Once you have taken the radioactive iodine capsule you **MUST carry the yellow radiation protection precautions card with you at all times for 25 days after treatment.**
Day of treatment to day seven of treatment

Keep at least a metre’s distance between yourself and all other people.

Avoid places of entertainment such as pubs, clubs, theatres and restaurants where you are required to sit in close proximity to people.

Sleep apart from your partner for seven nights and do not allow children to get into bed with you. You may have separate beds in the same room, but please ensure they are at least a metre apart.

Day seven of treatment to day 12 of treatment

You can mix with adults as usual.

You **must** continue to keep pregnant women and small children at least a metre’s distance from yourself and avoid all close prolonged contact with them.

Day 12 of treatment to day 25 of treatment

You may have 15 minutes close contact per day with pregnant women and small children up until 25 days after treatment.

25 days after treatment

No restrictions apply.

Keep the yellow radiation protection precautions card for six months after treatment if there is a chance you may be travelling abroad, as you may set the alarms off at airports or ferry ports.
SCHEDULE: If you are having 800 MBq of radioactive iodine

If you are taking amiodarone, you **must** discuss this with your endocrinologist prior to coming for treatment.

If you are taking propylthiouracil tablets, please **stop taking them 14 days** before treatment.

If you are taking carbimazole tablets, please **stop taking them seven days** before your treatment.

If you are taking thyroxine tablets, please **stop taking them seven days** before treatment.

If you are taking any vitamin or mineral supplements that contain iodine or kelp, you should **stop taking them seven days** before treatment.

**Please continue to take any other medications that have been prescribed for you by your doctor for other medical conditions.**

Once you have taken the radioactive iodine capsule you **MUST** carry the yellow radiation protection precautions card with you at all times for 30 days after treatment.
Day of treatment to day 10 of treatment

Keep at least a metre’s distance between yourself and all other people.

Avoid places of entertainment such as pubs, clubs, theatres and restaurants where you are required to sit in close proximity to people.

Sleep apart from your partner for seven nights and do not allow children to get into bed with you. You may have separate beds in the same room, but please ensure they are at least a metre apart.

Day 10 to day 15 after treatment

You can mix with adults as usual. However, during this time you must continue to keep pregnant women and small children at least a metre’s distance from yourself and avoid all close prolonged contact with them.

Day 15 to day 30 after treatment

You may have 15 minutes close contact per day with pregnant women and small children up until 30 days after treatment.

30 days after treatment

No restrictions apply. Please keep the yellow radiation precautions card for six months after treatment if you may be travelling abroad. There is a very small chance you will activate alarms at an airport or ferry port. If this occurs, please show the yellow card.
Please note that if for any reason you would value a second opinion concerning your diagnosis or treatment, you are entirely within your rights to request this. The first step would usually be to discuss this with the doctor or other lead clinician who is responsible for your care.

Smoking is the primary cause of preventable illness and premature death. For support in stopping smoking contact Smokefree Bristol on 0117 922 2255.

As well as providing clinical care, our Trust has an important role in research. This allows us to discover new and improved ways of treating patients. While under our care, you may be invited to take part in research. To find out more please visit: www.uhbristol.nhs.uk/research-innovation or call the research and innovation team on 0117 342 0233.

For access to other patient leaflets and information please go to the following address:

www.uhbristol.nhs.uk/patients-and-visitors/information-for-patients/

Hospital switchboard: 0117 923 0000
Minicom: 0117 934 9869
www.uhbristol.nhs.uk

For an interpreter or signer please contact the telephone number on your appointment letter.

For this leaflet in large print, audio or PDF format, please email patientleaflets@uhbristol.nhs.uk.

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