South Georgia Asbestos Training

Level 0 - Awareness



How to Use This Training

- Work through the presentation in order.
- Read all the information on each slide before moving on.
- Use the forward and back buttons within PowerPoint to navigate between slides.
- Some slides contain key messages that you will be tested on in the awareness quiz.
- The training should take approximately **20 minutes** to complete.



- This training provides a basic awareness of asbestos risks within South Georgia and the South Sandwich Islands.
- It is intended for all staff and contractors who may encounter asbestos-controlled environments as part of their activities in the Territory.



Aims

At the end of this module you should:

- Understand where asbestos exists in South Georgia.
- Understand the health risks associated with asbestos.
- Know how asbestos is managed.
- Know what to do if you encounter suspected asbestos.
- Understand the limits of this training.



What is Asbestos?

- Asbestos is a naturally occurring mineral made up of microscopic fibres.

- It was widely used in a range of products until the mid 1990's because it is:
  - Heat resistant
  - Chemical resistant
  - Strong and durable
  - A good insulator
  - High tensile strength



Three main asbestos types are commonly encountered:

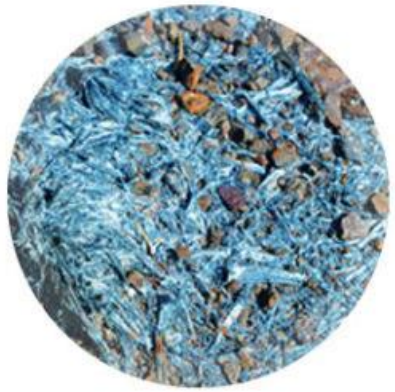
- Chrysotile (white asbestos)
- Amosite (brown asbestos)
- Crocidolite (blue asbestos)



Chrysotile

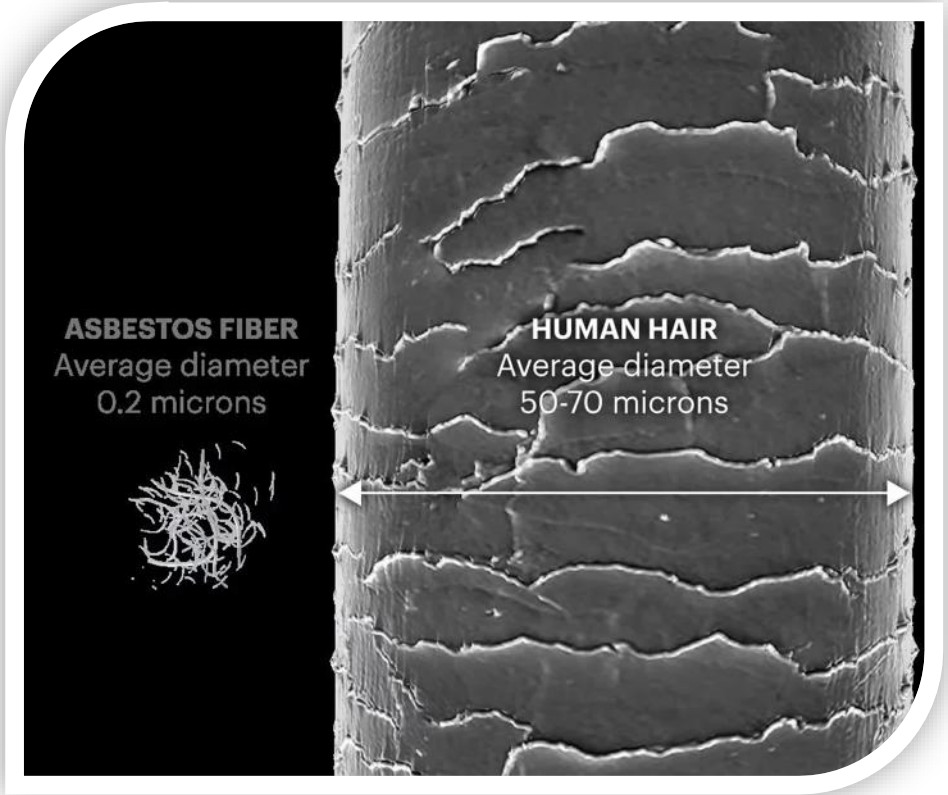


Amosite



Crocidolite

- When disturbed, asbestos can release fibres into the air.
- These fibres are too small to see with the naked eye.
- An asbestos fibre is around 300 times smaller than a human hair.



Asbestos at the Whaling Stations

South Georgia's whaling stations were large industrial facilities.

- Asbestos was commonly used for:
  - Pipe insulation
  - Boiler insulation
  - Engine rooms
  - Steam systems
  - Gaskets and seals
  - Fire protection
- Although operations ceased many years ago, asbestos-containing materials (ACMs) remain.



Different types of asbestos materials

- Asbestos was used in many different products and building materials.
- Some asbestos materials are **hard and stable**, while others are **soft and easily damaged**.
- The risk increases when asbestos is damaged and fibres are released into the air.



Lower risk

Higher risk



Asbestos gasket

- Hard and compressed material
- Less likely to release fibres when left undisturbed
- Still requires appropriate management

Asbestos pipe insulation (lagging)

- Soft and crumbly material
- Can release large numbers of fibres if damaged
- Should never be disturbed

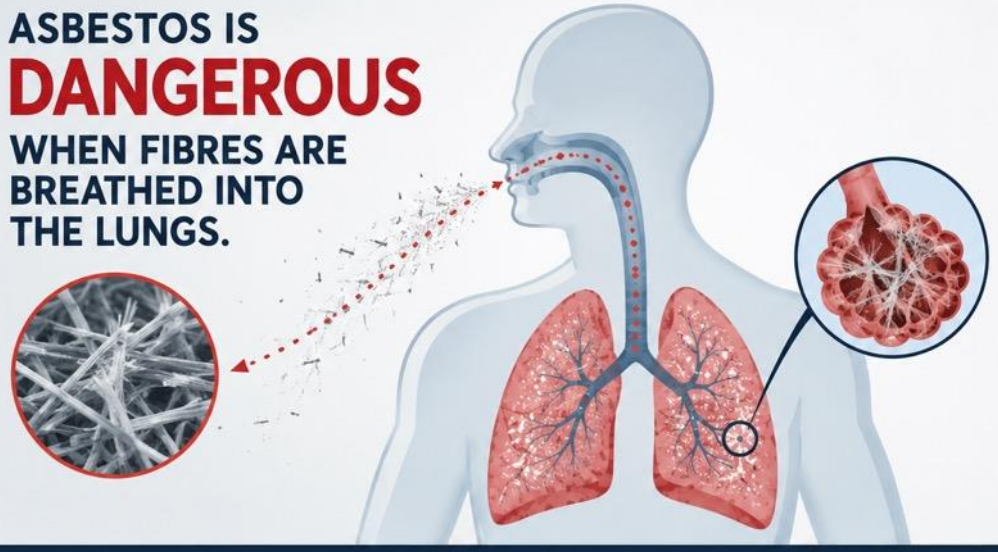
Why is Asbestos Dangerous?

- Asbestos is dangerous when fibres are breathed into the lungs.
- Exposure can cause serious illnesses including:
  - Mesothelioma
  - Lung cancer
  - Asbestosis
- These diseases can take many years to develop.
- There is no valid reason to deliberately expose yourself to asbestos fibres.

The greatest protection is to avoid disturbing asbestos.



ASBESTOS IS DANGEROUS WHEN FIBRES ARE BREATHED INTO THE LUNGS.



EXPOSURE CAN CAUSE SERIOUS ILLNESSES INCLUDING:

MESOTHELIOMA

A cancer that affects the lining of the lungs or abdomen.

LUNG CANCER

A cancer that begins in the lungs and can spread to other parts of the body.

ASBESTOSIS

A serious lung disease caused by scarring of lung tissue.

THERE IS NO SAFE LEVEL OF ASBESTOS EXPOSURE.
PROTECT YOURSELF. PROTECT OTHERS.

Asbestos-related deaths in the UK

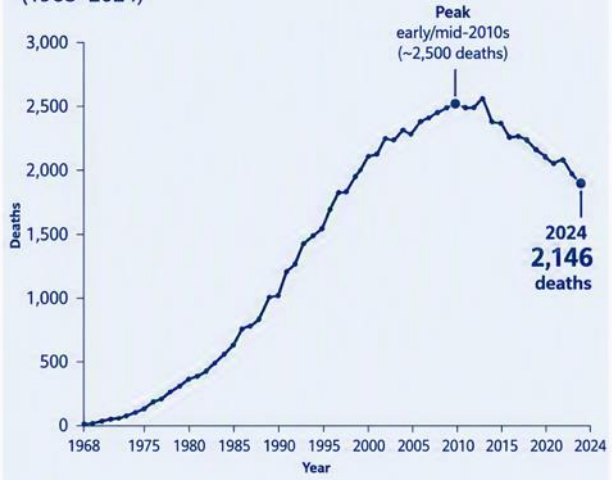
The legacy of past exposure – and the increased risk when combined with smoking

HSE figures show the long-term impact of asbestos exposure, with thousands of people still dying each year.

HSE
Health and Safety Executive

Mesothelioma deaths in the UK (HSE figures)

Annual number of mesothelioma deaths (1968–2024)



Mesothelioma deaths increased for several decades following widespread use of asbestos, peaking in the early/mid-2010s before gradually declining.

~5,000
asbestos-related deaths per year

HSE estimate for the UK overall (mesothelioma and lung cancer deaths combined).

~2,100
asbestos-related lung cancer deaths per year

HSE estimate.
A similar number of asbestos-related lung cancer deaths occurs each year to mesothelioma deaths.

2,146
mesothelioma deaths in 2024

Latest HSE figure for the UK.

How much does the risk increase?

Compared to a baseline non-smoker with no asbestos exposure (risk = 1x).

Exposure Category	Risk Compared to a Baseline Non-Smoker with No Asbestos Exposure
No asbestos & non-smoker	1x (Baseline risk)
Asbestos exposure only	~5x to 7x higher risk
Smoking only	~15x to 20x higher risk
Asbestos exposure + smoking	~50x to 100x higher risk

The combination of asbestos exposure and smoking greatly multiplies the risk of mesothelioma and lung cancer.

Stopping smoking is the most effective way to reduce this risk.

Source: Health and Safety Executive (HSE), Mesothelioma Mortality Statistics, and Asbestos-Related Lung Cancer Statistics.

Figures for Great Britain.

Safer workplaces. Healthier lives.

Where is Asbestos Found on South Georgia?

- Asbestos-containing materials are associated with historic whaling infrastructure





- Asbestos is **not expected within the modern research station facilities at King Edward Point.**

- Most of the asbestos from Grytviken was removed during clean-up operations and buried on site
- A small amount of asbestos remains in some structures e.g. gaskets
- These are managed and do not pose a risk if left un-disturbed
- The vessels, **Albatross, Petrel and Dias**, contain large amounts of friable asbestos in the engine rooms and are **strictly off limits**



Roles and responsibilities

Effective asbestos management relies on everyone understanding roles and responsibilities

Duty Holder - The GSGSSI nominated lead for asbestos management within the territory including responsibility for issuing permits, risk assessments and training

Government Officer – Supports operational coordination and may be involved in incident response and emergency situations

Line manager – Responsible for making sure safe systems of work and that staff have undertaken relevant training

You – Responsible for not undertaking activities that exceed training, working safely and reporting incidents



Access Restrictions

- The former whaling stations at Husvik, Stromness, Leith and Prince Olav are **Prohibited Areas**.
- Entry is controlled because of:
  - Asbestos hazards
  - Structural instability
  - Falling debris
  - Heritage protection requirements
- Entry to Prohibited Areas requires:
  - A Regulated Activity Permit (RAP)
  - Additional training



Grytviken is the only whaling station accessible without a Regulated Activity Permit.

What Should I Do?

At Awareness Level you are **not expected to work with asbestos**.

Your responsibility is simple: **No Interaction – No Disturbance**

Do:

- ✅ Follow signs and instructions
- ✅ Stay within authorised areas
- ✅ Follow permit conditions

Don't:

- ❌ Touch suspect materials
- ❌ Pick up debris
- ❌ Enter restricted areas
- ❌ Investigate unknown materials



How is Asbestos Managed?

Asbestos risk is managed through **Regulated Activity Permits (RAPs)**

The RAP system controls:

- Site access
- Activities undertaken
- Training requirements
- Environmental protection measures

The Government of South Georgia and the South Sandwich Islands (GSGSSI) is responsible for:

- Controlling access
- Authorising work
- Managing environmental risks



What Happens if Something Goes Wrong?

If you discover damaged material or suspect asbestos has been disturbed:

STOP

- Stop work immediately.

WITHDRAW

- Move away safely.

RECORD

- Take a photo and GPS position if safe.

REPORT

- Notify the Duty Holder or designated contact.

Do not:

- **Investigate**
- **Touch**
- **Move**
- **Clean up**



What This Training Does NOT Allow You To Do

Completion of this module **does not permit you to:**

- Work on asbestos
- Handle asbestos waste
- Enter Prohibited Areas
- Disturb materials including contaminated soil
- Undertake surveys
- Carry out remediation work

Additional training and permits are required for:

- Entry into Prohibited Areas
- Any activity involving asbestos disturbance



Summary

Key Messages

Remember:

- ✅ Asbestos exists primarily within historic whaling infrastructure.
- ✅ Asbestos is hazardous when fibres become airborne.
- ✅ Most whaling stations are within Prohibited Areas.
- ✅ No Interaction – No Disturbance.
- ✅ If in doubt: STOP, WITHDRAW, RECORD, REPORT.



Quiz

When you are ready click here to go to the quiz

Good luck!

