

ASBESTOS **SAFETY FUTURES**

Managing risks and embracing opportunities for Australia's asbestos legacy in the digital age

FACTSHEET



MEGATRENDS AND SCENARIOS FOR ASBESTOS-RELATED WORK

The Asbestos Safety Futures report identifies issues and trends that will impact on asbestos-related work over the next 10-20 years, with implications for exposure risk.

Megatrends are large scale drivers of change, while scenarios are contrasting futures of how these drivers could show up in the future. This report aims to inform asbestos management policy, research and practice to ensure Australia is well-placed to prevent future asbestos-related diseases.

Policy Opportunities

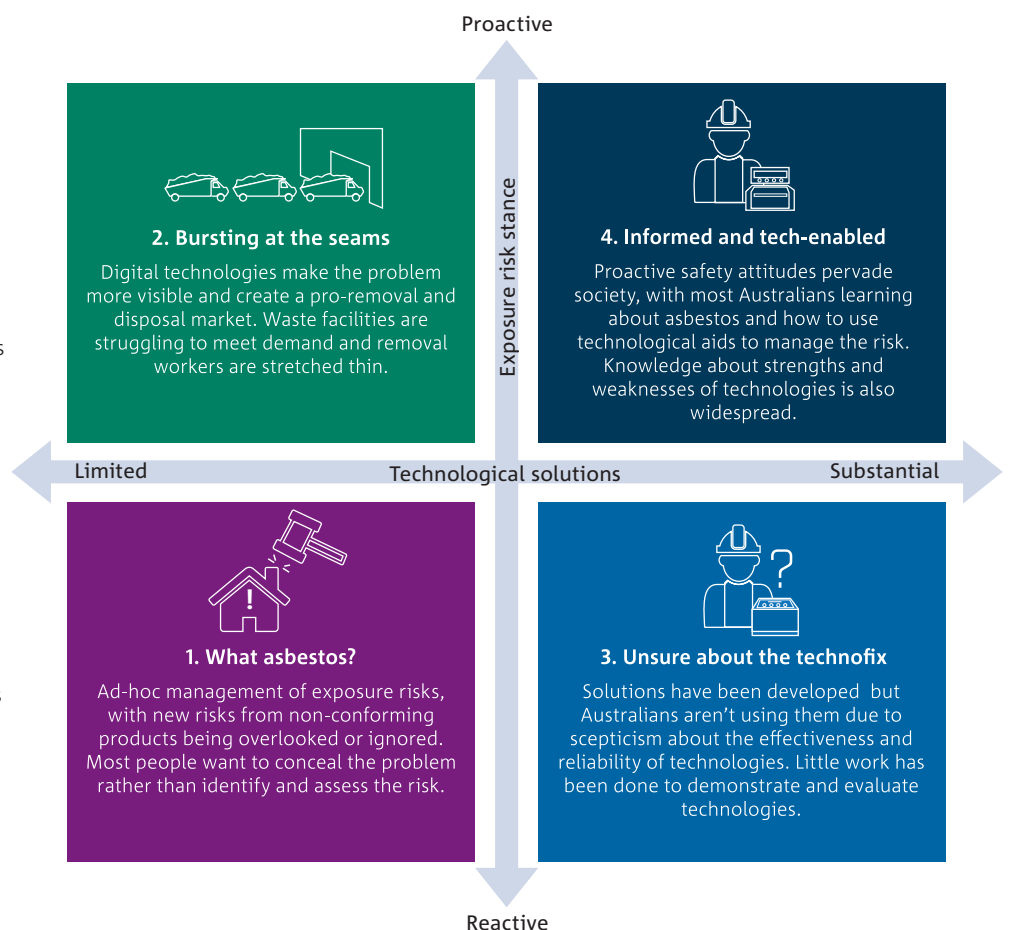
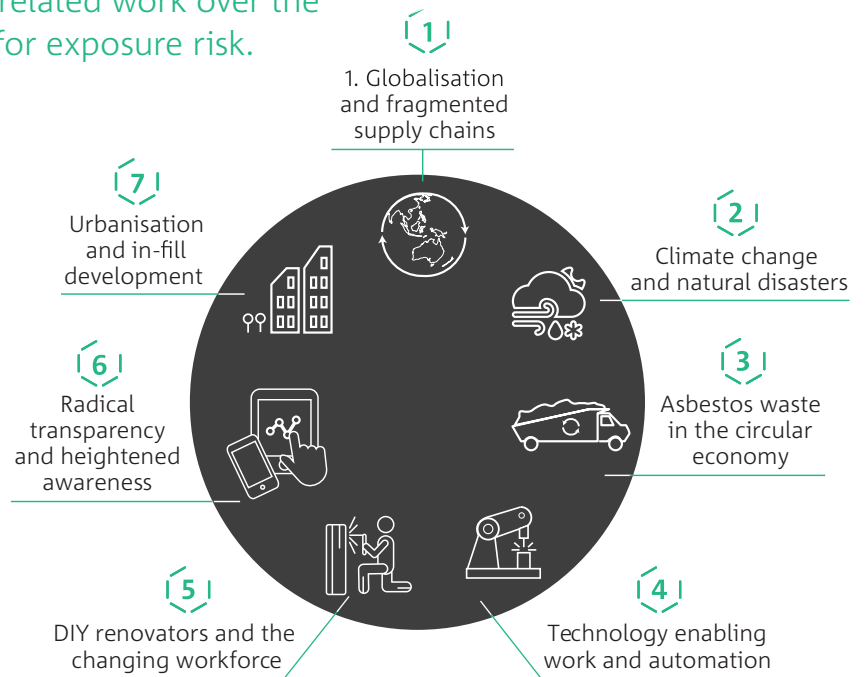
1. Data infrastructure is underutilised and more investment in developing and linking data sets can enable effective management of asbestos risks.
2. New hazmat technology could support handling of ACMs, but will require investment, vetting and training.
3. Asbestos removal market changes, workforce changes and new technology could disrupt the balance between labour supply and demand for asbestos related work and requires monitoring.

Future actions to consider:

1. Continue collaborating across jurisdictions and levels of government to create an asbestos dataset and mapping application.
2. Further investigate the pipeline for asbestos related technology innovation and support the development of knowledge targeted to major challenges of our asbestos legacy.
3. Ensure employment monitoring strategies consider the growing need for an asbestos related workforce with the right skills and training.

Using scenarios to respond to key uncertainties and impacts for asbestos related work in the future

Future asbestos risks and market responses are underpinned by two key uncertainties: The emergence of technologies to address asbestos exposure risks associated with in-situ management, removal and disposal and the extent to which governments, industry and the general public manage exposure risks.



AUSTRALIA'S ASBESTOS LEGACY

Asbestos in Australia was predominantly used in building and infrastructure, including panels for internal and external lining of walls, corrugated tiles and panels used in roofing and fencing, and pipes used in factories, downpipes, and water reticulation and sewerage systems.



Industrial application. Large scale mining of asbestos ramped up globally as industrialists realised the material's flexibility, durability and heat resistance properties, which were well-suited to the challenges of industrial workplaces of the day.

1880s – early 1900s

1920s – 1950s

Early application in buildings and infrastructure. Australia commenced manufacturing asbestos containing building sheets, roof tiles and pipes.



C

D



Post-war boom. Demand for high volume affordable housing made asbestos 'fibro' products the ideal choice, from the post-war cottage for returning servicemen and women to a growing popularity for beachside holiday dwellings, better known as 'beach shacks'.

1950s – 1970s

1970s – 2000s

Phasing out asbestos. Consumption of fibro building products peaked in the 70s, and then dropped away rapidly during the 80s, coinciding with a ban on asbestos mining in Australia in 1987 due to mounting public concern about health impacts. The market shifted to brick and tile housing during this time, but asbestos containing fibro continued to be used in eaves, walls and ceilings. Australia banned the use of asbestos containing materials in 2003, but the legacy remains.



G

H



Renovation boom. Property investors and home makers modernise and refurbish houses in many inner city and post-war suburbs around major Australian cities, as well as many coastal towns and villages. Non-conforming building products containing asbestos has been an issue in recent years.

2000s – Now

What could happen in the next 10-20 years?

IMAGE AND COPY WRITE INFORMATION

- a. White Gold Pioneers: Asbestos Mining. Crushing room, Johnson Mine, Thetford Mines, QC, early 20th century
- b. Truck loaded with asbestos cement sheets from manufacturer Asbestos Products Ltd, Lawrence Street, Alexandria, N.S.W., 1937 Image sourced from the State Library of NSW.
- c. Suburban house with Durabestos gable designed and made by Wunderlich Limited, E A Bradford, Sydney, New South Wales, Australia, 1924. Wunderlich Collection: Museum of Applied Arts and Sciences. Gift of CSR Limited, 1980.
- d. Suburban house with tiles and Durabestos facing designed and made by Wunderlich Limited, Wunderlich Limited, Redfern, New South Wales, Australia, 1930s. Wunderlich Collection: Museum of Applied Arts and Sciences. Gift of CSR Limited, 1980.
- e. Construction of housing commission homes, Birmingham Gardens, N.S.W., 1957. Image sourced from the State Library of NSW.
- f. Booklet cover 'Designs of Small Homes', Wunderlich Limited, Redfern, N.S.W., 1955. Wunderlich Collection: Museum of Applied Arts and Sciences. Gift of CSR Limited, 1980.
- g. Lowset brick with asbestos may be found under eaves, in bathrooms, laundries, kitchens and under flooring (carpet underlay, vinyl tiles or sheeting, wall and floor tiles), roofing and electrical power boxes etc. Location unknown. Image sourced from asbestosawareness.com.au.
- h. Australian Block of Flats - asbestos may be found under eaves, in bathrooms, laundries, kitchens and under flooring (carpet underlay, vinyl tiles or sheeting, wall and floor tiles), roofing and electrical power boxes etc. Location unknown. Image used with permission from asbestosawareness.com.au.
- i. Classic Post War Fibro Home / Weekender / Beach House - well maintained. Asbestos is located in the walls, roofing (unpictured), electrical power box, garage and laundry. Location unknown. Image used with permission from asbestosawareness.com.au.
- j. Victorian Semi-Detached - asbestos can be found in addition of dormer window (pictured) from attic conversions, extensions, in bathrooms, laundries, kitchens and under flooring (carpet underlay, vinyl tiles or sheeting, wall and floor tiles), roofing and electrical power boxes etc. Location unknown. Image used with permission from asbestosawareness.com.au.

CONTACT US

t 1300 363 400
+61 3 9545 2176
e collaborate@data61.csiro.au
w www.data61.csiro.au

FOR FURTHER INFORMATION

George Quezada
Research Scientist
t +61 7 3833 5553
e george.quezada@data61.csiro.au
w www.data61.csiro.au