# Know Your Bones Community Risk Report Fourth Edition 2025

know your bones

bone health assessment tool

Garvan Institute of Medical Research

HEALTHY BONES AUSTRALIA

A JOINT INITIATIVE FOR FRACTURE PREVENTION

# Forewords

**Professor Peter Ebeling AO**
Chair Healthy Bones Australia

Osteoporosis is a common chronic disease in Australia. However, many related fractures could be prevented and this opportunity can improve quality of life and reduce the cost on the healthcare system. I urge policy makers, general practitioners and the community to focus on prevention, early diagnosis and pro-active treatment of poor bone health.

**Greg Lyubomirsky**
CEO Healthy Bones Australia

Healthy Bones Australia is committed to protecting bone health in the community. The *Know Your Bones* online self-assessment is easily accessible and can help consumers to review their risk. Consumers with risk factors must discuss bone health with their doctor and be investigated for osteoporosis. Especially when a fracture has occurred (from a minor trip or fall)! This report demonstrates the need for immediate action.

**Professor Peter Wong**
Medical Director Healthy Bones Australia

General practitioners work at the front line of osteoporosis care and there are a range of treatment options available to manage osteoporosis. When bones are weaker than normal the risk of fracture increases, and a related fracture (at any site in the body) is considered serious. We must intervene early, diagnose underlying bone fragility and treat osteoporosis.

**Elaine Cotter**
Consumer Advocate. Member – Healthy Bones Australia National Consumer Advisory Committee

I have lived with osteoporosis for many years, and a late diagnosis meant I suffered from many fractures. I work with Healthy Bones Australia to raise awareness nationally. If you have weak bones you need to know as early as possible and doctors need to take action to stop fractures.

## Know Your Bones Benefits

- ✓ **Preventative health initiative**
- ✓ **Accessible across Australia, including rural and remote communities**
- ✓ **Focus on consumers to identify individual risk**
- ✓ **Data outcomes reported to highlight gaps in care and areas for action**
- ✓ **A successful translational research project based on Australian research**

## About Know Your Bones

*Know Your Bones* is an online consumer self-assessment based on Australian research. The program was developed by Healthy Bones Australia and the Garvan Institute of Medical Research in response to the growing prevalence of osteoporosis and related fractures.

The self-assessment is an awareness and prevention program. It helps the community review risk factors for poor bone health. The tool provides personalised recommendations which can be discussed with a general practitioner as required.

## About this Report

This *Know Your Bones* Community Risk Report, Fourth Edition[1] represents de-identified data which has been self-reported via the online self-assessment questionnaire. *Know Your Bones* asks consumers a series of evidence-based questions under four key areas:

- Medical history includes age, weight, previous fracture, previous falls
- Medical conditions which can impact bone health
- Lifestyle risk factors
- Medication/supplement use

This report is based on 126,815 completions (as at 15 September 2025).

# Report Overview

## Opportunity to close care gaps

### Bone status to be routinely investigated in priority groups

- **38% of adults reporting a clinical risk factor had not had a bone density test**
- **Of individuals reporting a clinical risk factor over 30% had 2 or more (higher risk group)**
- **Nearly half (49.7%) of minimal trauma fractures occurred in adults aged 50-69 years**

### Treatment rates to be higher to protect bone health

- **Only 14% of individuals reporting a minimal trauma fracture (some of whom reported multiple fractures) were on osteoporosis medication**
- **87% of all reported fractures occurred at the following sites (in order) – foot, wrist, ankle, rib, spine and lower leg**
- **Treatment rates for hip and spine fractures have improved**

### Focus on lifestyle changes to support bone health

- **Combination of boosting calcium intake, adequate vitamin D status and targeted exercise (involves resistance training, weight bearing exercise) and challenging balance training in older adults**

# Snapshot of Bone Health in Australia

- Over 196,000 fractures annually,[2] costing $3.9 billion and representing largest component of total disease cost of $4.9 billion[2]
- Hip fracture is the most costly type of fracture however fractures at other sites are more common (spine, wrist, arm and leg)[2]
- Nearly half of people who experienced a hip fracture had a previous fracture[3]

[1]This report is available online at Healthy Bones australia website www.healthybonesaustralia.org.au/about-us/publications-reports

[2]Bohingamu Mudiyanselage S, Watts JJ, Gebremariam K, Abimanyi-Ochom J, Osteoporosis and fractures in Australia. A burden of disease analysis, 2023 to 2033. Healthy Bones Australia 2024.

[3]Australian and New Zealand Hip Fracture Registry Annual Report 2017. https://anzhfr.org/wp-content/uploads/2017/08/ANZHFR-Annual-Report-2017.pdf

# Summary – Key Findings*

## Know Your Bones Community Engagement

- Self-assessment completions 126,815
- Majority 81% of self-assessment usage in adults 50 years+

| Female | 83% | Male | 17% |
|---|---|---|---|
| under 50 years | 15% | under 50 years | 4% |
| 50-69 years | 52% | 50-69 years | 7% |
| 70 years+ | 16% | 70 years+ | 6% |

## Fracture Status and Bone Density Testing Status

- Number of assessments completed that reported a minimal trauma fracture 18%
- Based on total number of minimal trauma fractures reported, half occurred in adults aged 50-69 years
- Number of assessments completed that reported a minimal trauma fracture and reported status of bone mineral density (BMD) testing:
  - Reported 'yes' for BMD testing 53%
  - Reported 'no' for BMD testing 40%
  - Reported 'don't know' for BMD testing 7%
- Number of assessments completed that reported a minimal trauma fracture and reported medication status:
  - On medication 14%
  - Not on medication 86%
- Main reported minimal trauma fracture sites:
  - Majority 87% of fractures reported at a combination of sites: Foot, wrist, ankle, forearm, ribs, spine, lower leg

## Clinical Risk Factors†

- Number of assessments completed and clinical risk factors reported:
  - Reported 'yes' to a clinical risk factor 35%
  - Reported 'no' to a clinical risk factor 65%
- Based on those reporting a clinical risk factor only 52% reported having a bone mineral density (BMD) test
- Based on those reporting 'yes' to a clinical risk factor the majority 70% had a single clinical risk factor and 30% had 2 (or more) clinical risk factors
- Number of assessments completed and total lifestyle risk factors reported:
  - The majority 98% reported having a lifestyle risk factor

## Older Adults

- People over 70 years Bone Mineral Density (BMD) testing status:
  - Reported 'yes' for BMD testing 62%
  - Reported 'no' for BMD testing 28%
  - Reported 'don't know' for BMD testing 10%
- People over 70 years with a Minimal Trauma Fracture (MTF) by treatment status:
  - Reported 'on medication' 23%
  - Reported 'not on medication' 77%
- People over 70 years with a Clinical Risk Factor:
  - Reported '1+ clinical risk factors' 49%, of which
  - Reported 'yes' for BMD testing 65%

## Younger Adults

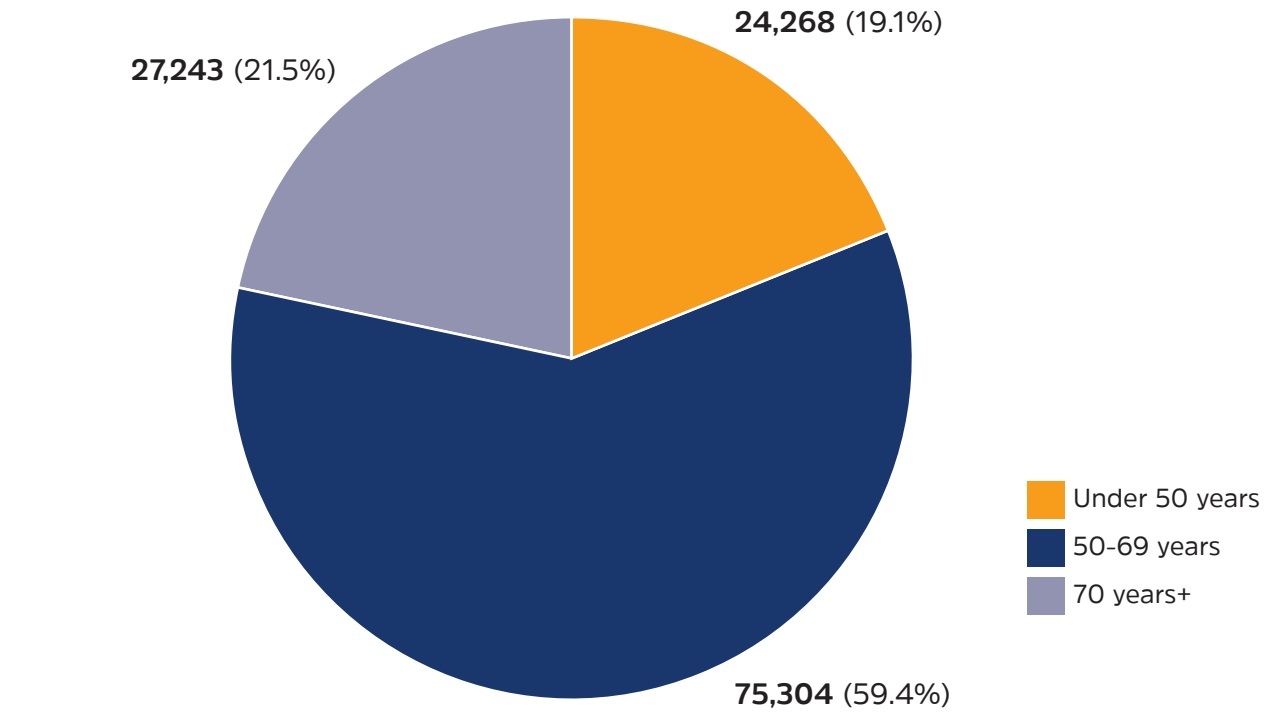
Notably 19% of completions were adults under 50 years. Poor bone health in younger adults can relate to specific risk factors – early menopause, low testosterone, coeliac disease, anorexia nervosa, breast cancer treatment and cortico-steroid use. It is important to protect bone health in these groups.

*Percentages rounded.

†Risk factors: Clinical risk includes: Daily oral use glucocorticoids, early menopause/low testosterone, loss of height, coeliac disease, overactive parathyroid, overactive thyroid, rheumatoid arthritis, chronic liver or kidney disease, treatment for breast cancer or prostate cancer. Lifestyle risk includes: smoking, alcohol intake, lack of adequate calcium/vitamin D/exercise.

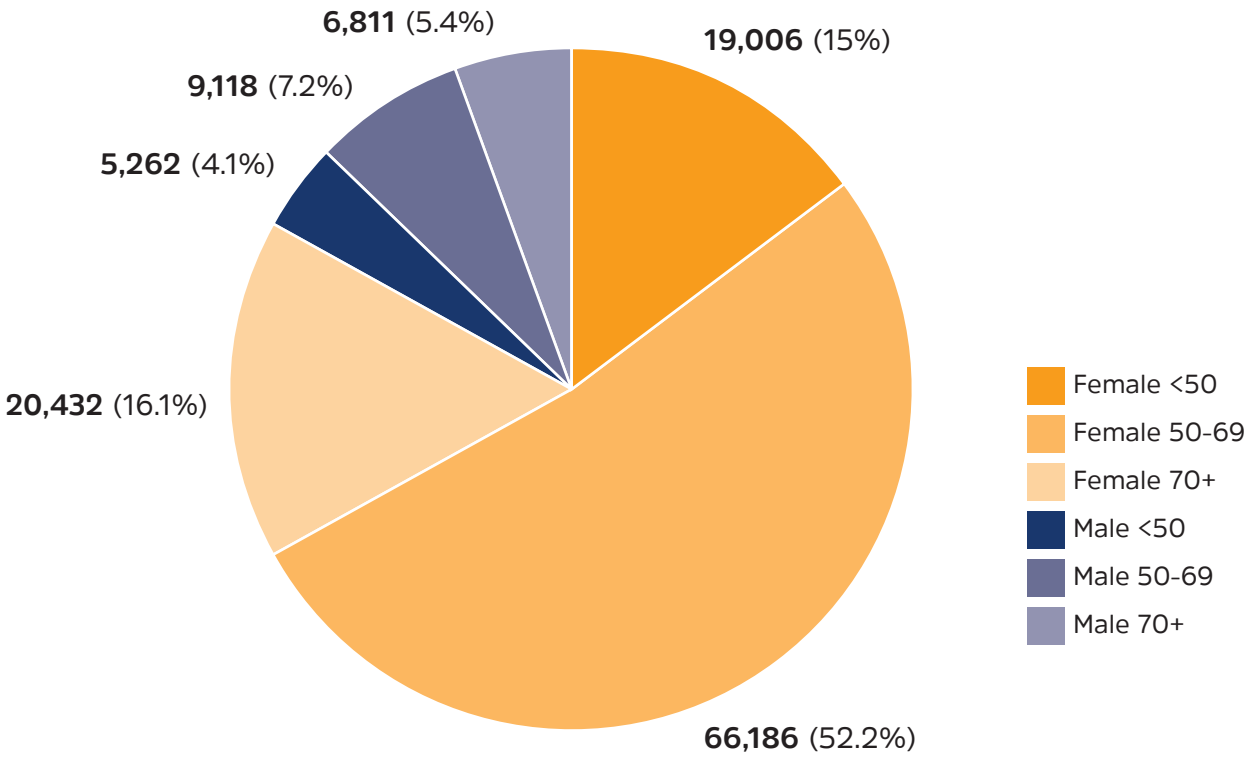
## Number of Assessments by Age

(Total no: 126,815)



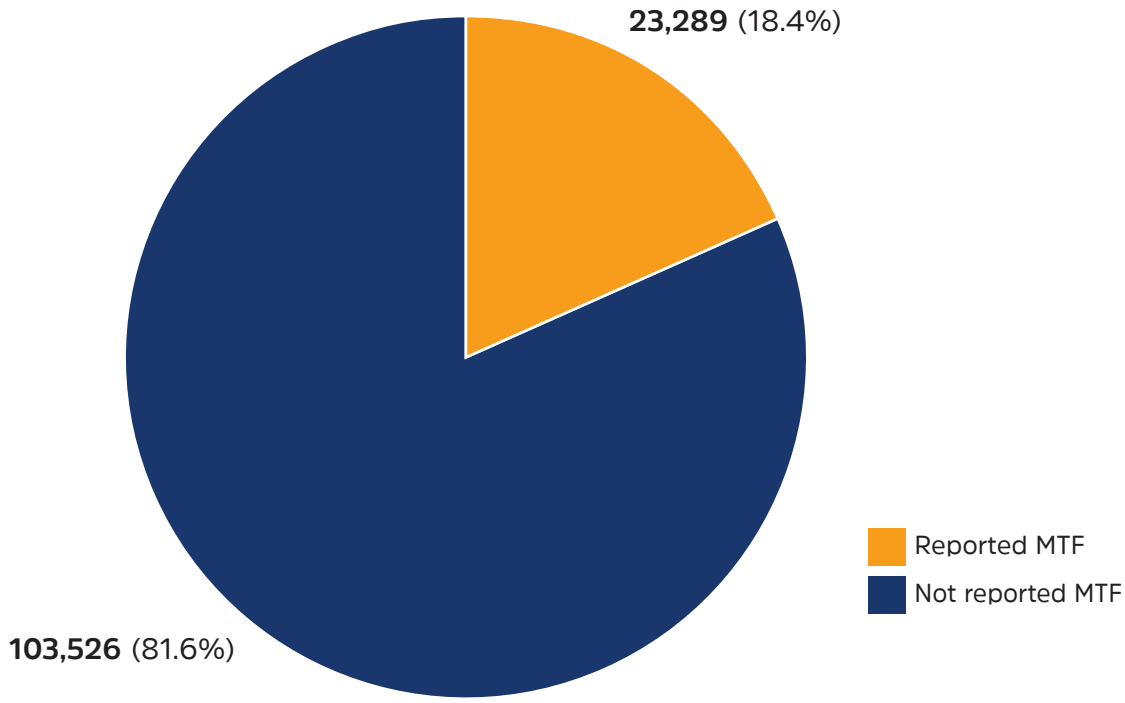

## Number of Assessments by Gender and Age

(Total no: 126,815)



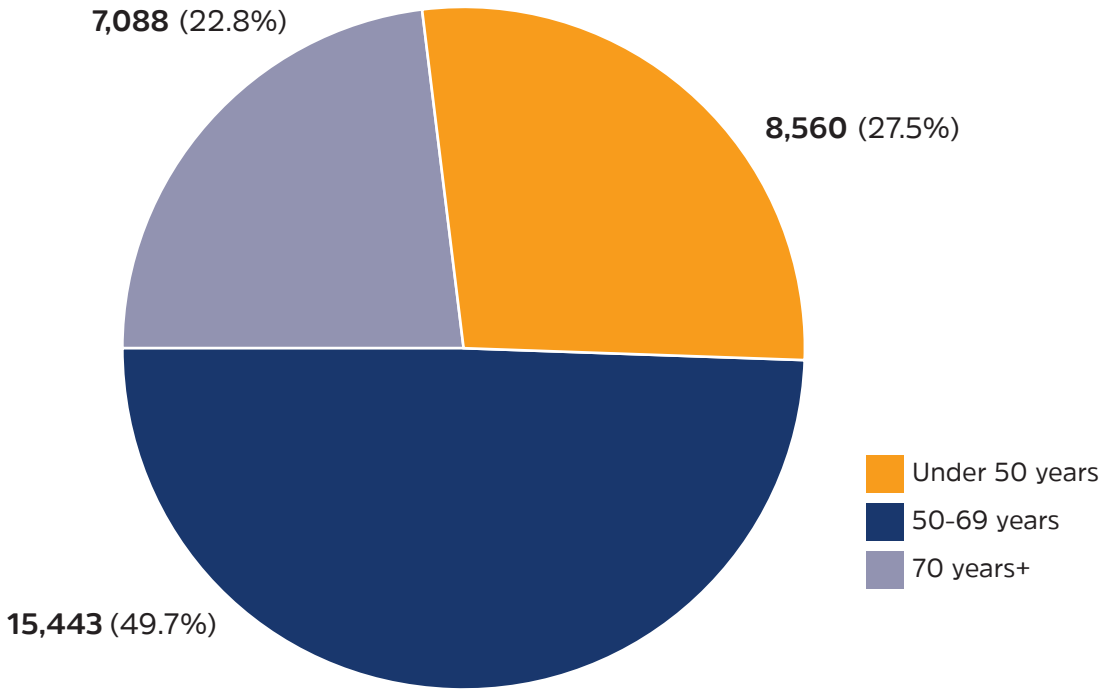
## Number of Assessments and Minimal Trauma Fracture (MTF) Status

(Total no: 126,815)



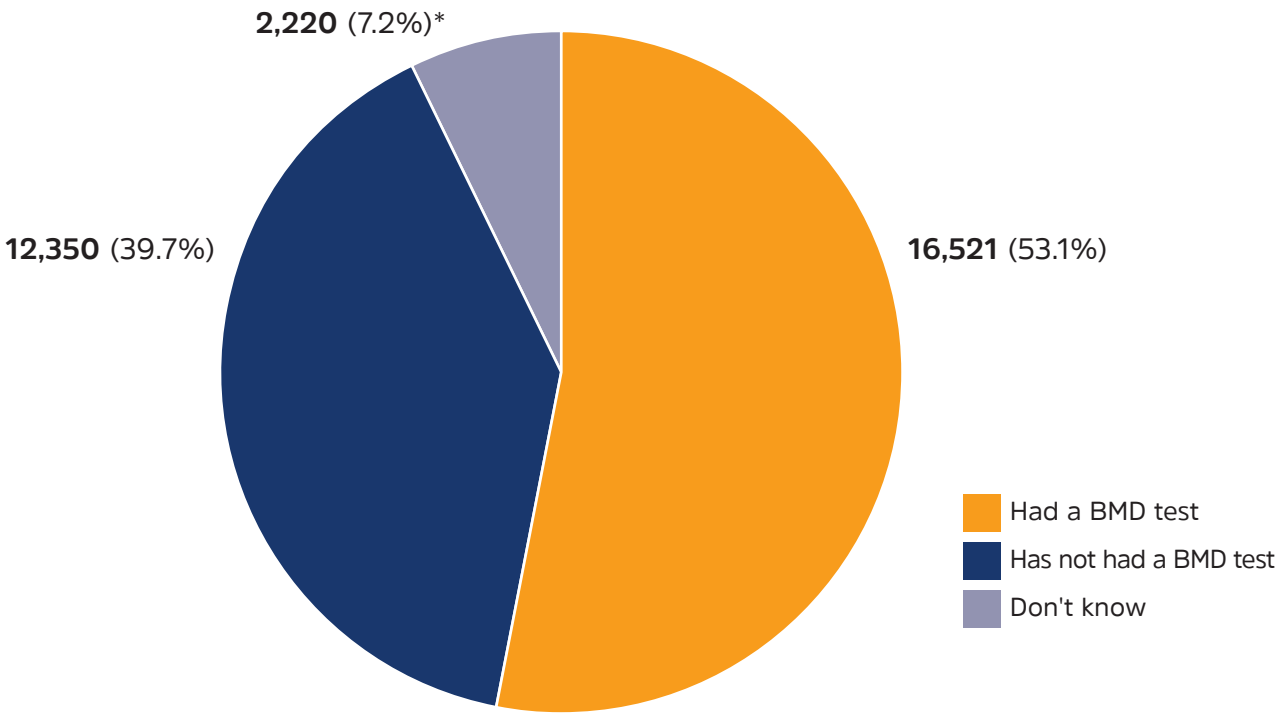

## Total Number of reported Minimal Trauma Fractures (MTFs) by Age

(Total no: 31,091)



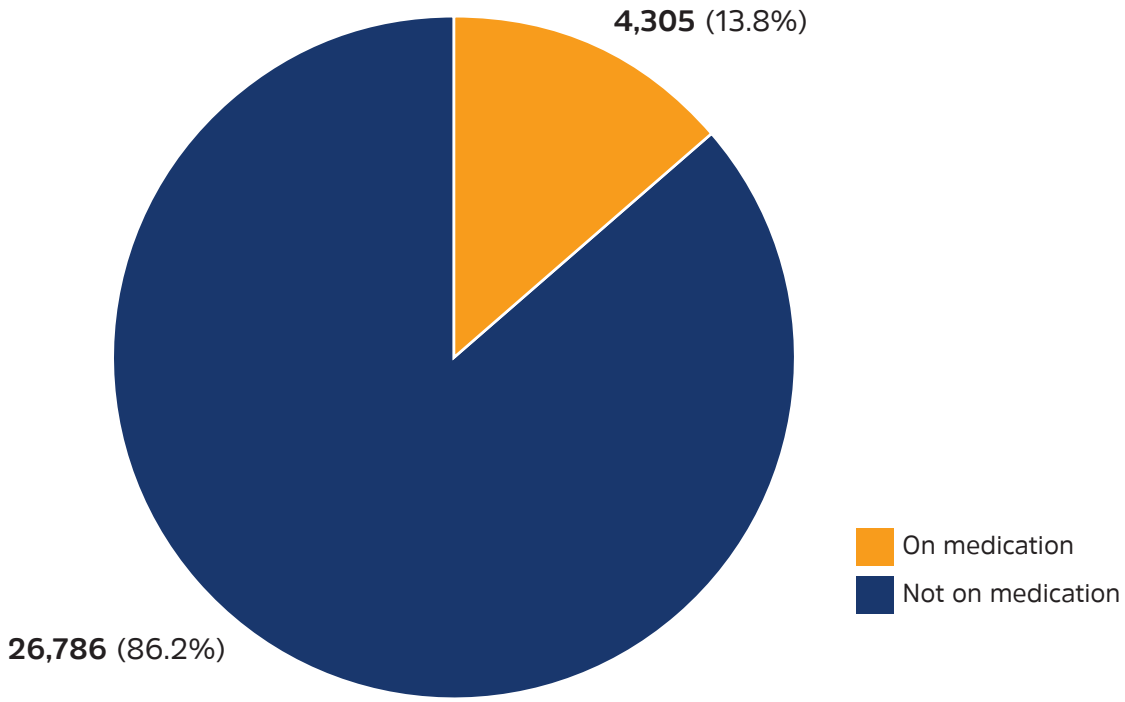
## Number of Assessments that reported a Minimal Trauma Fracture (MTF) by Bone Mineral Density (BMD) Test Status

(Total no: 31,091)




## Number of Assessments that reported a Minimal Trauma Fracture (MTF) by Status of Treatment

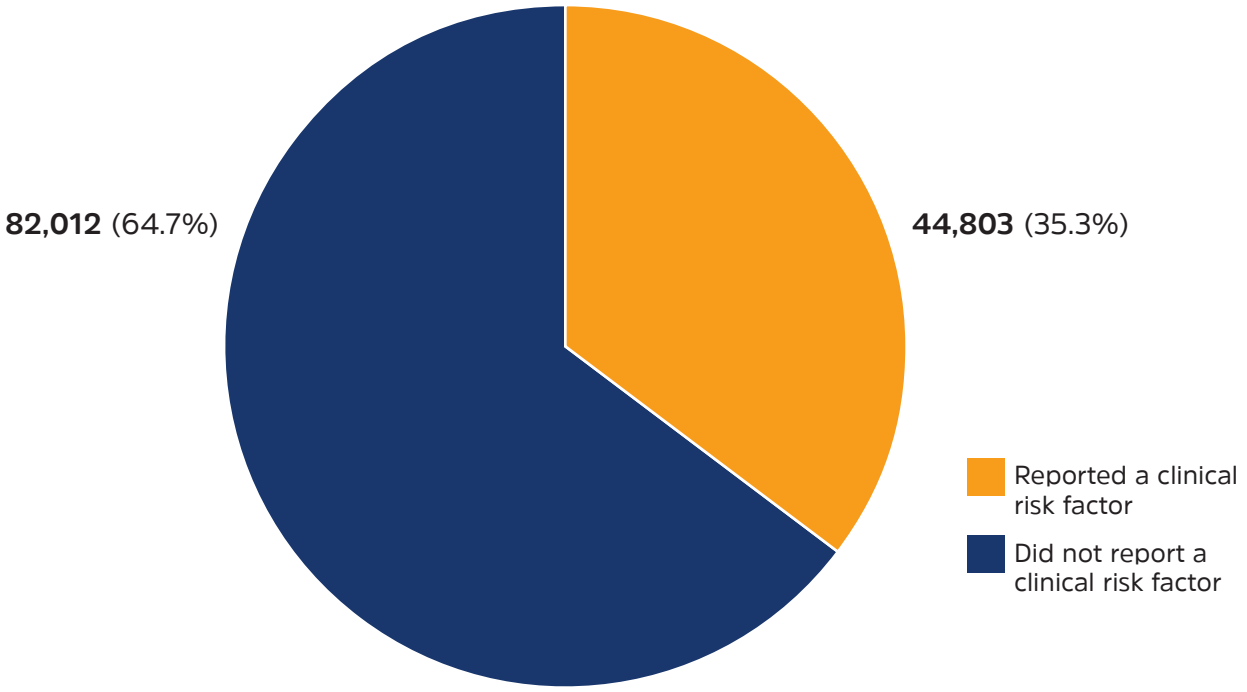
(Total no: 31,091)




*Percentage rounded.

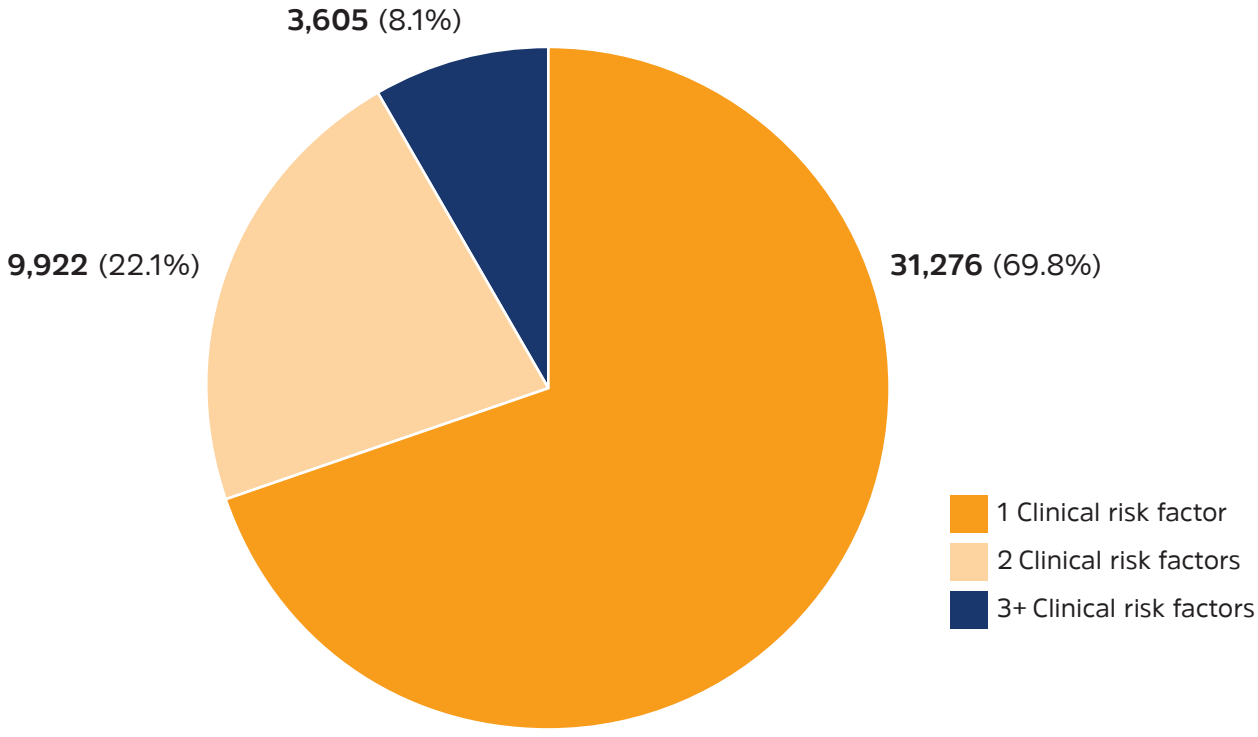
## Number of Assessments by Total Clinical Risk Factors† Reported

(Total no: 126,815)




## Number of Assessments Reporting 1 or More Clinical Risk Factors†

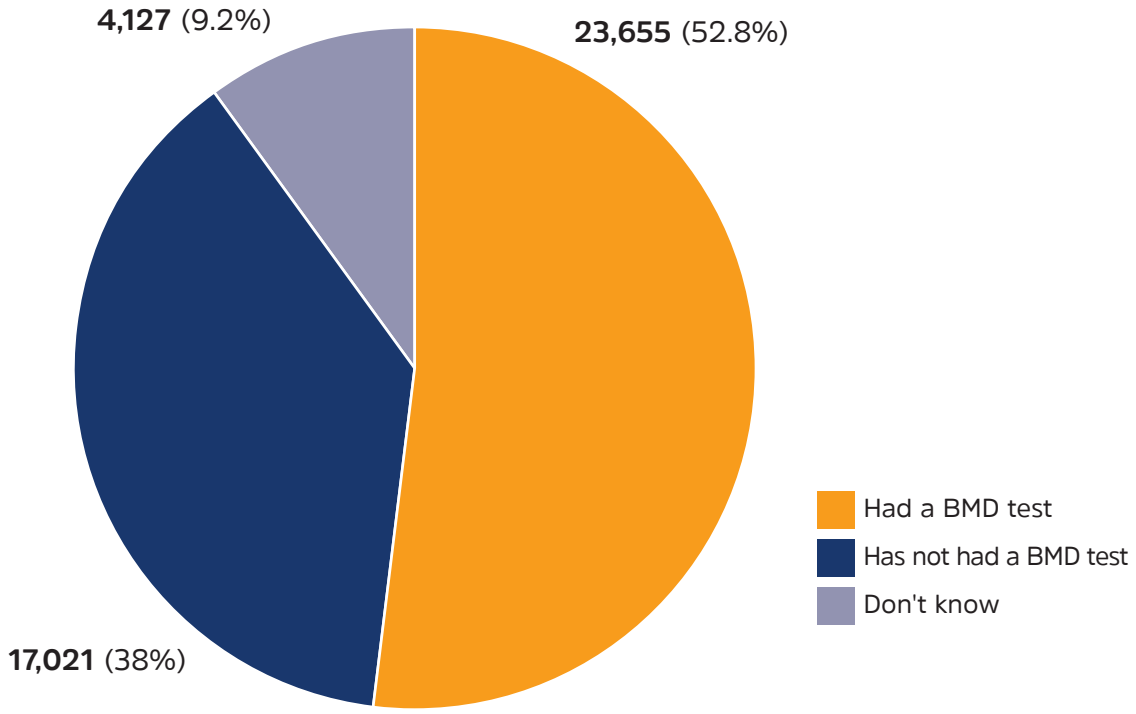
(Total no: 44,803)




†Clinical risk factors include: Daily oral use glucocorticoids, early menopause/low testosterone, loss of height, coeliac disease, overactive parathyroid, overactive thyroid, rheumatoid arthritis, chronic liver or kidney disease, treatment for breast cancer or prostate cancer.

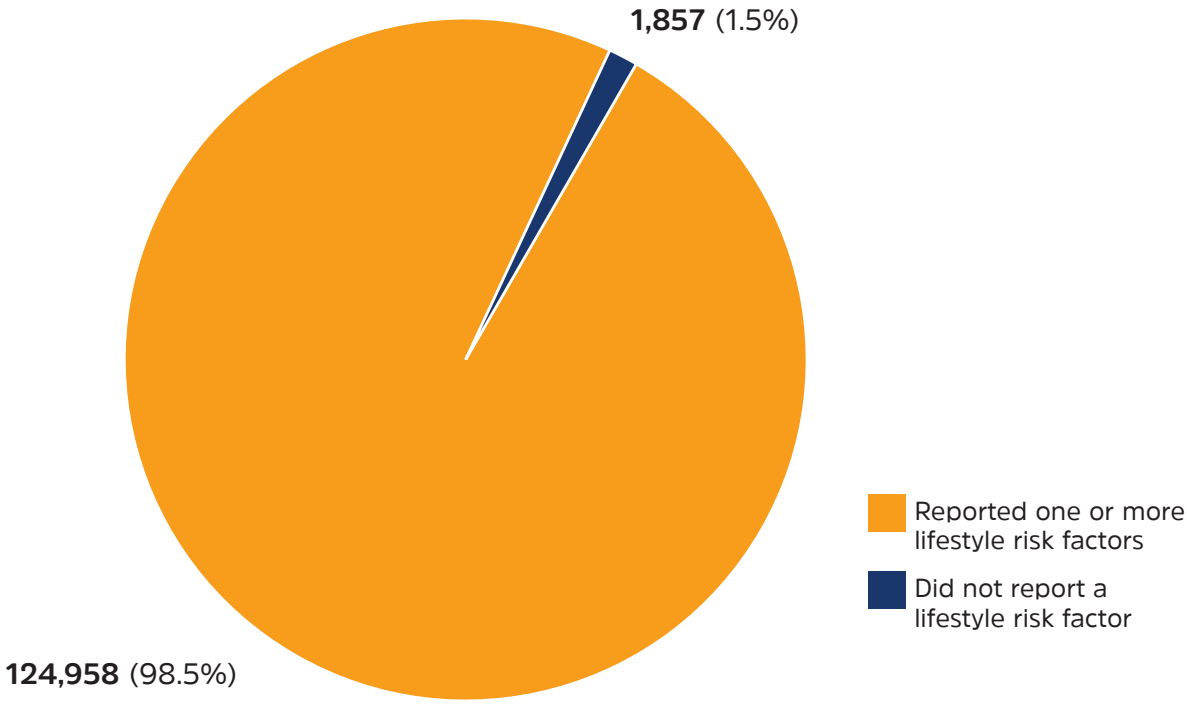
## Number of Assessments with Clinical Risk Factors† by Bone Mineral Density (BMD) Test Status

(Total no: 44,803)




## Number of Assessments by Total Lifestyle Risk Factors†

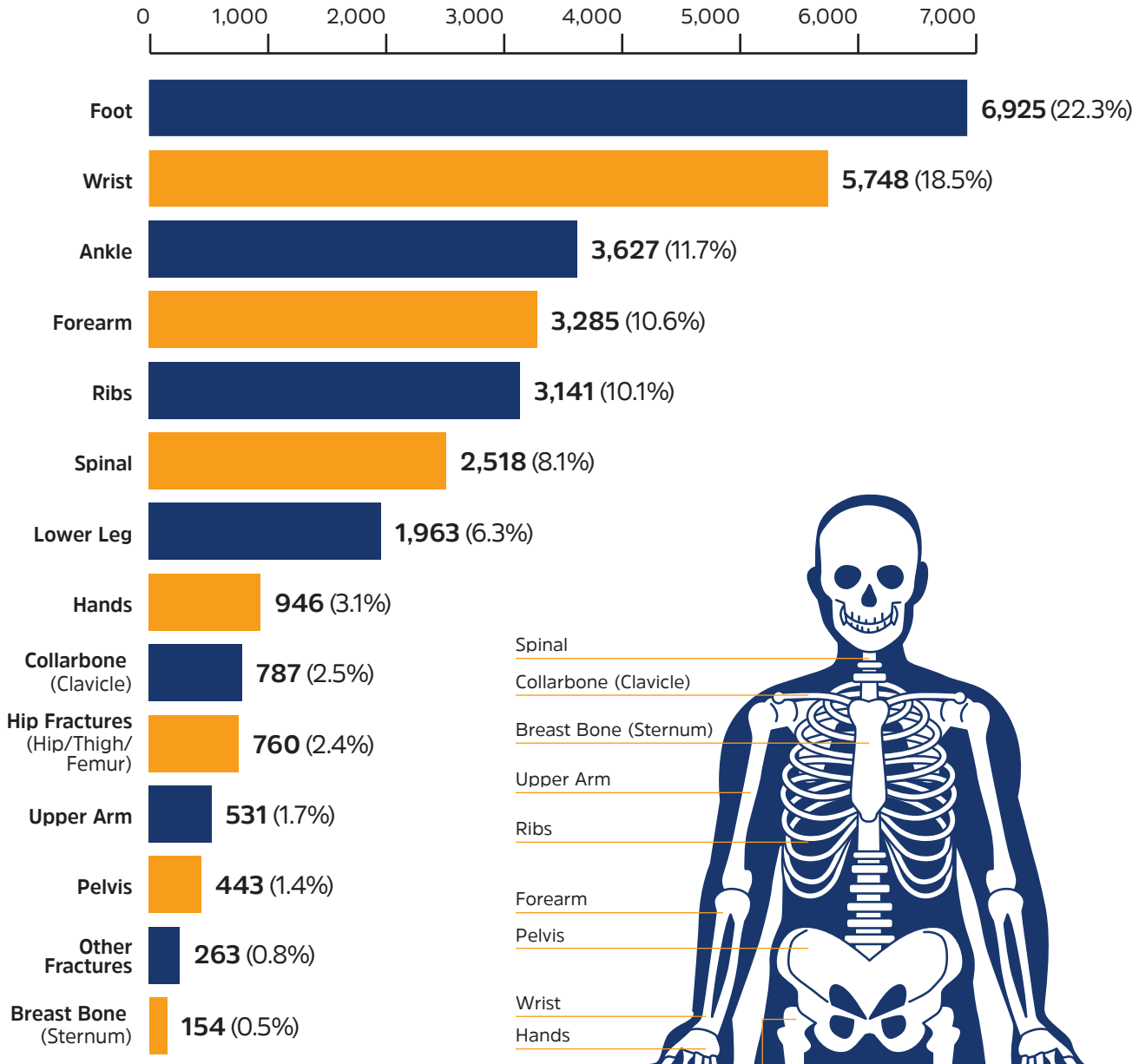
(Total no: 126,815)

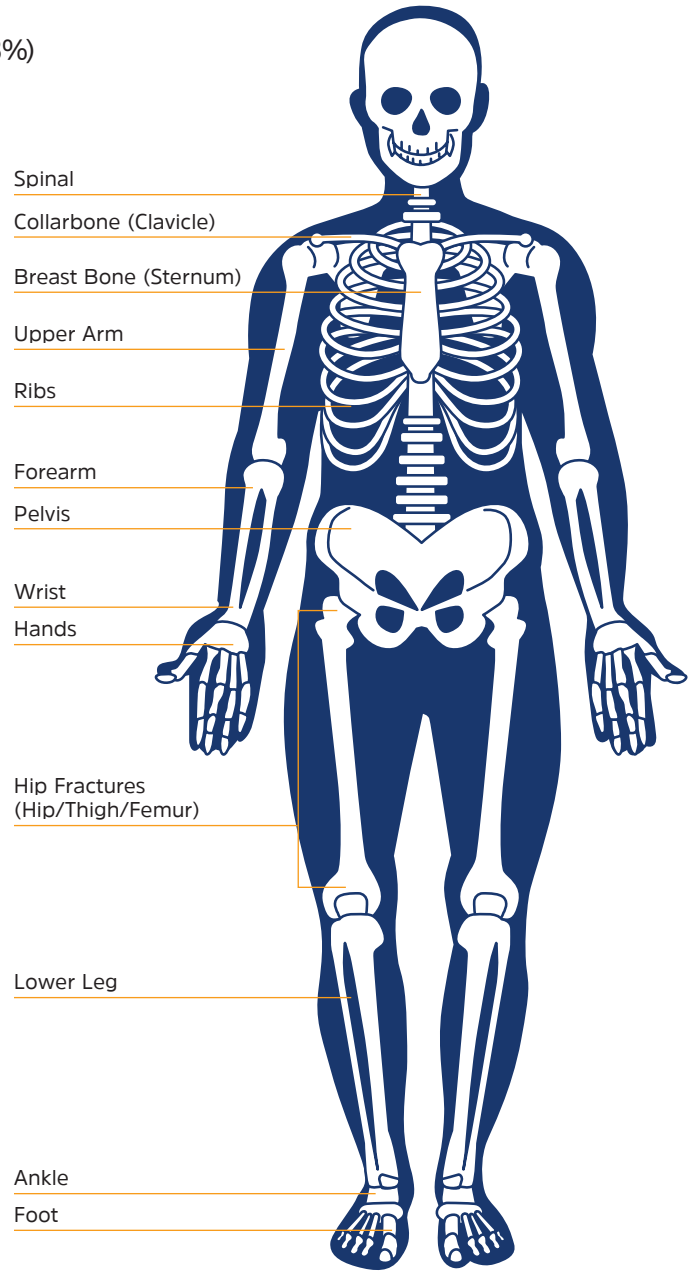



†Lifestyle risk factors include: smoking, alcohol intake, lack of adequate calcium/vitamin D/exercise.

## Total Number of Minimal Trauma Fractures (MTFs) by Body Site*

(Total no: 31,091)



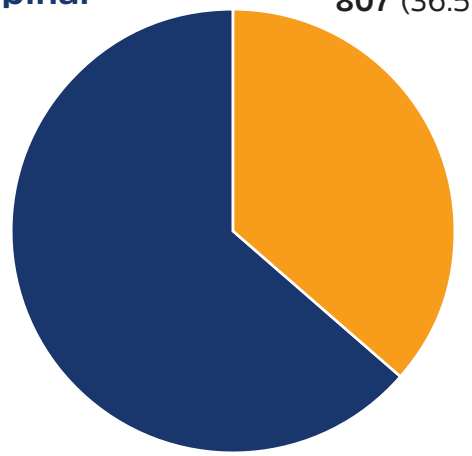




**73% of Minimal Trauma Fractures (MTFs) reported in adults age 50+**

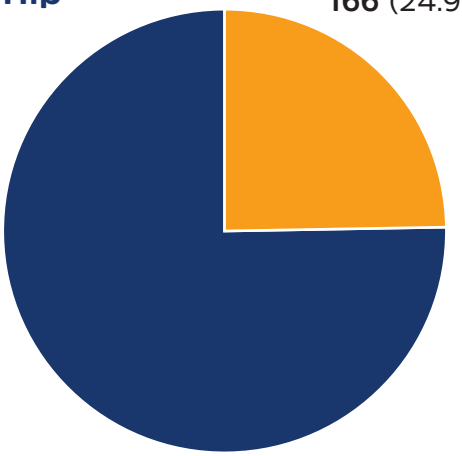
*Percentages rounded.

## People Aged 50+ with Minimal Trauma Fracture (MTF) at a Specific Body Site by Medication Status

### Spinal

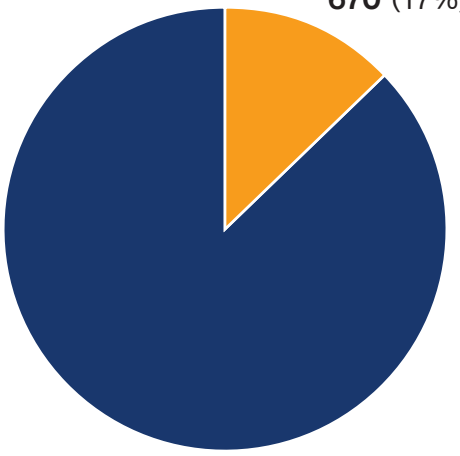



### Hip

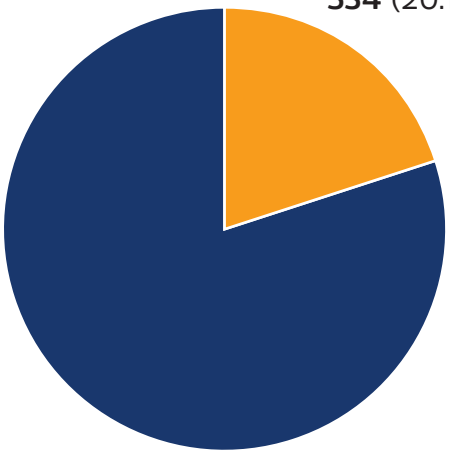



On medication
Not on medication

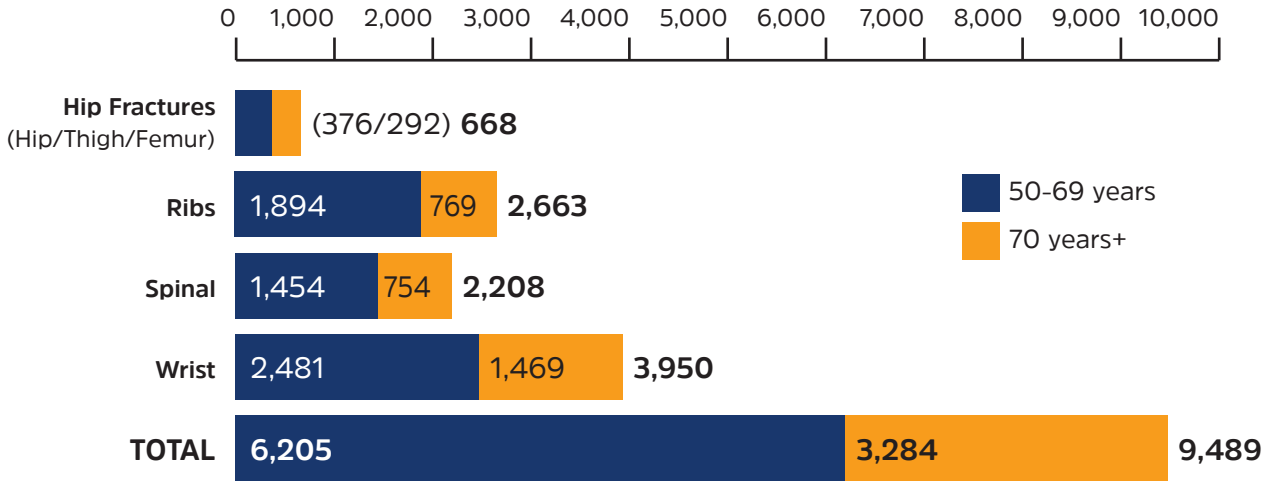
### Wrist




### Ribs

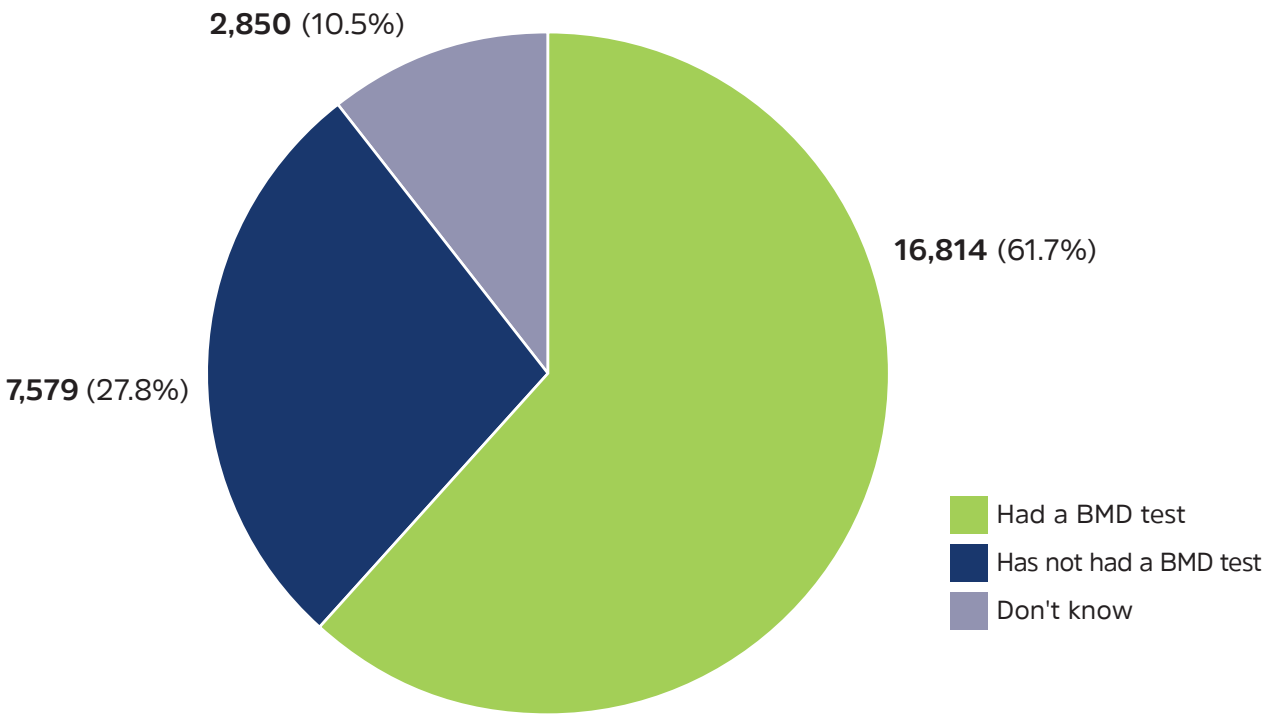



## Number of Minimal Trauma Fractures (MTFs) at a Specific Body Site by Age Group



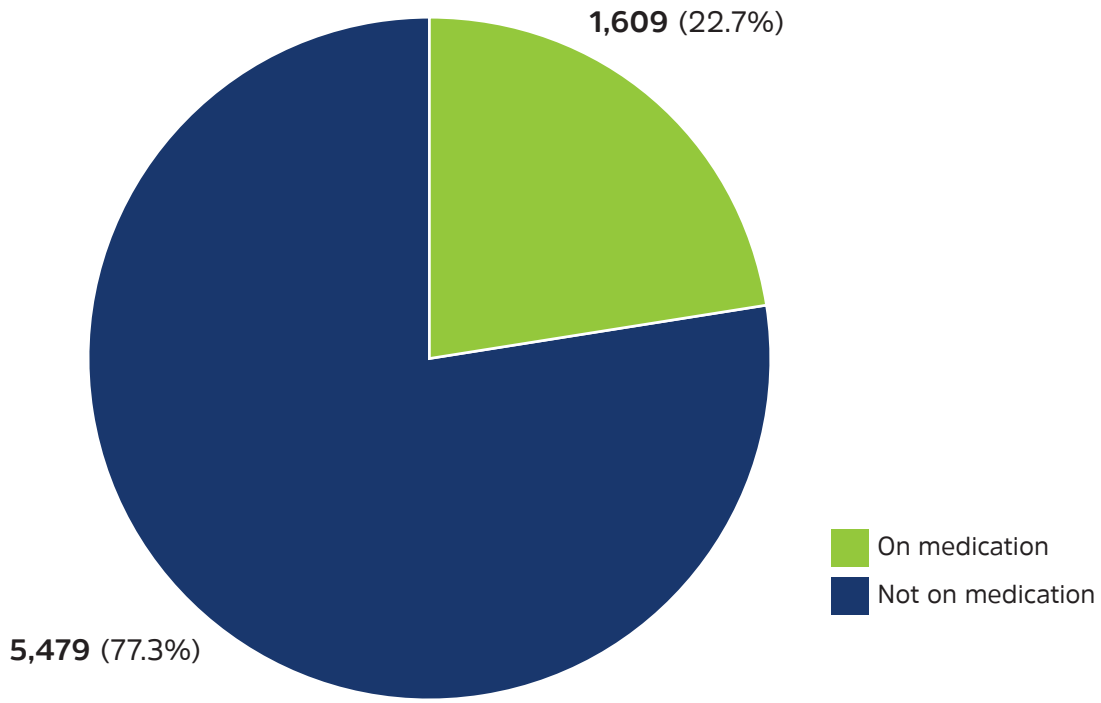
## People Age 70+ Bone Mineral Density (BMD) Test Status

(Total no: 27,243)

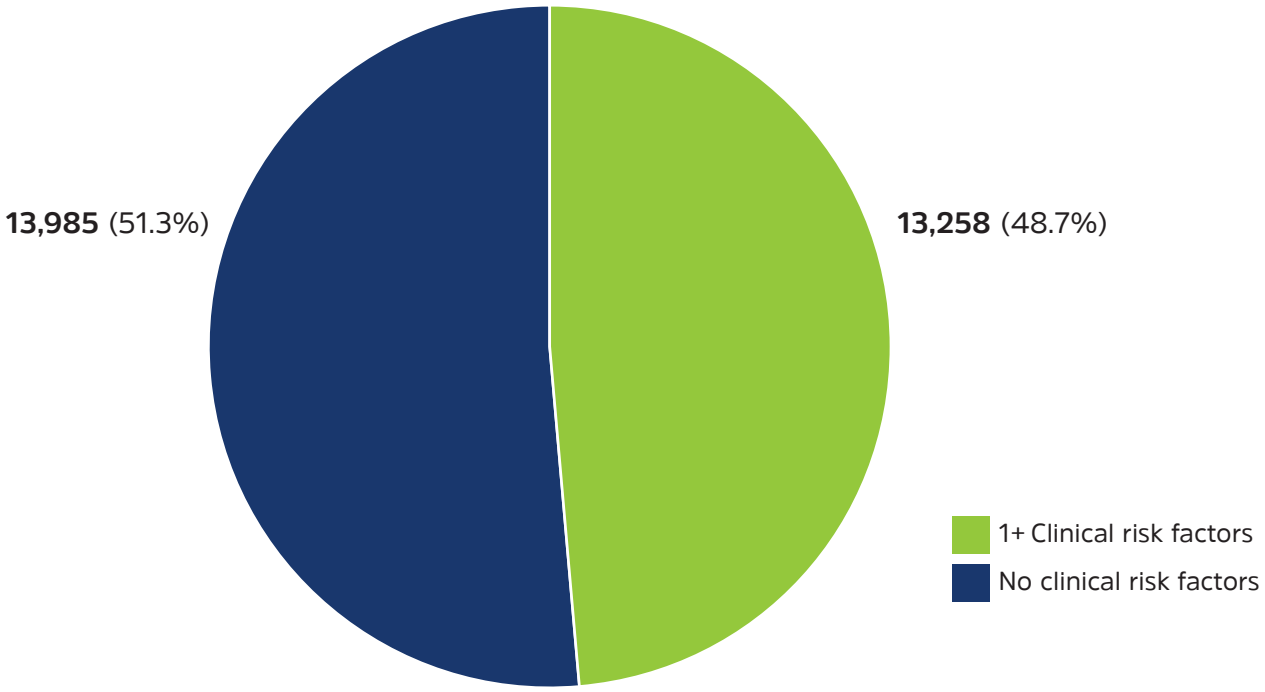



## People Age 70+ that reported a Minimal Trauma Fracture (MTF) by Status of Treatment

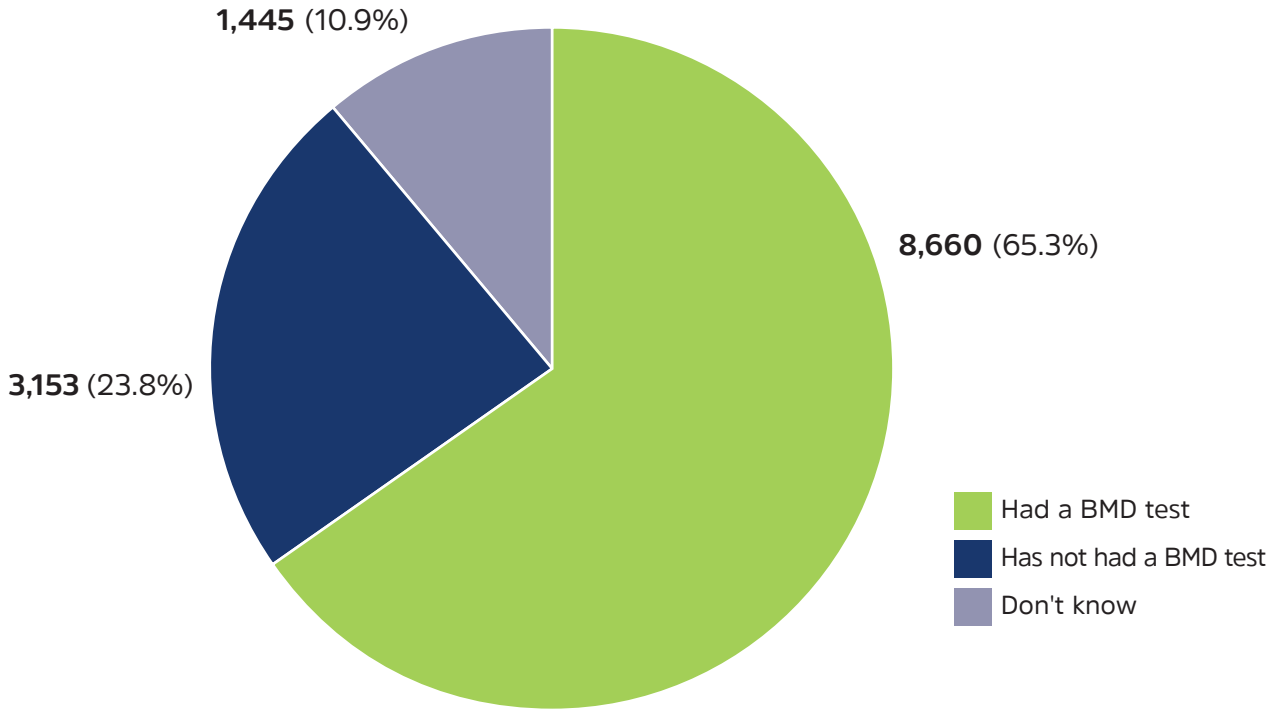
(Total no: 7,088)



## People Age 70+ Clinical Risk Factors†
(Total no: 27,243)




## People Age 70+ with Clinical Risk Factors† and Bone Mineral Density (BMD) Test Status
(Total no: 13,258)




†Clinical risk factors include: Daily oral use glucocorticoids, early menopause/low testosterone, loss of height, coeliac disease, overactive parathyroid, overactive thyroid, rheumatoid arthritis, chronic liver or kidney disease, treatment for breast cancer or prostate cancer.

# National Overview

**Poor bone health affects over 6.2 million adults age 50+**[1]

**Over 196,000 fractures annually**[1]

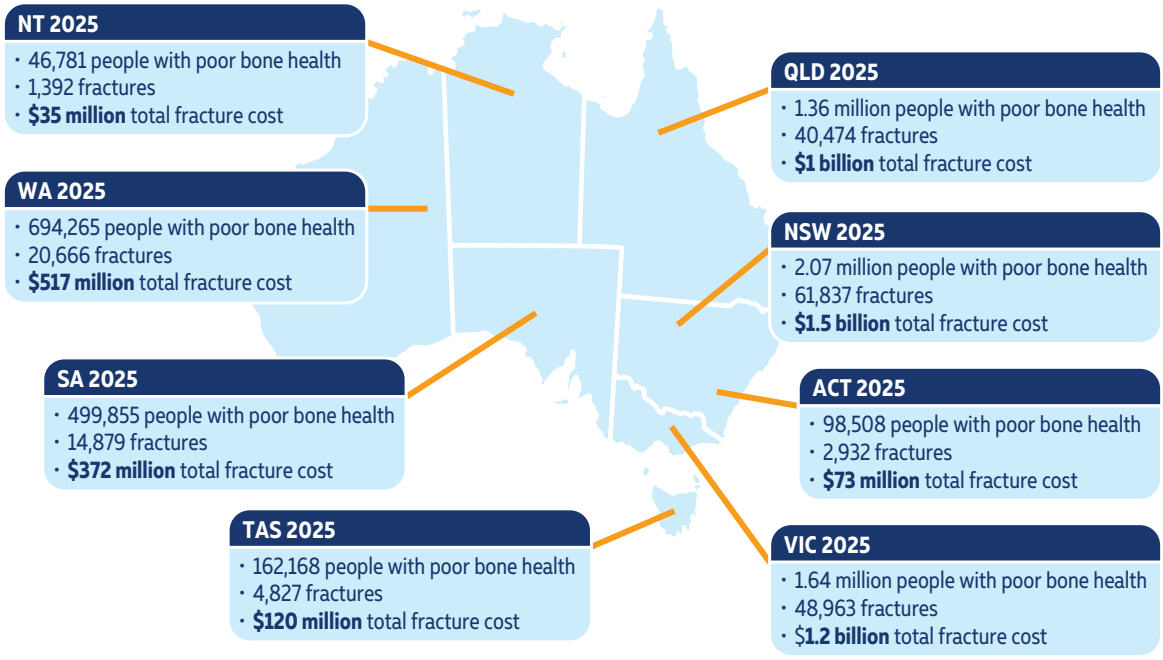
**Fractures cost $3.9 billion each year**[1]

Includes:
- Hospital costs
- Rehabilitation
- Emergency
- Home care

**Total annual cost of disease $4.9 billion**[1]

Includes:
- General medical
- Pharmaceuticals

# Issue by State and Territory[1]




[1]Bohingamu Mudiyanselage S, Watts JJ, Gebremariam K, Abimanyi-Ochom J, Osteoporosis and fractures in Australia. A burden of disease analysis, 2023 to 2033. Healthy Bones Australia 2024.
Report can be accessed at: https://healthybonesaustralia.org.au/about-us/publications-reports/


EMERGENCY

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www.knowyourbones.org.au