

# Mortality estimates of occupational injuries and ill health in Singapore

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## Introduction

Occupational deaths can be broadly grouped into those resulting from work-related injuries or from work-related diseases or illnesses.

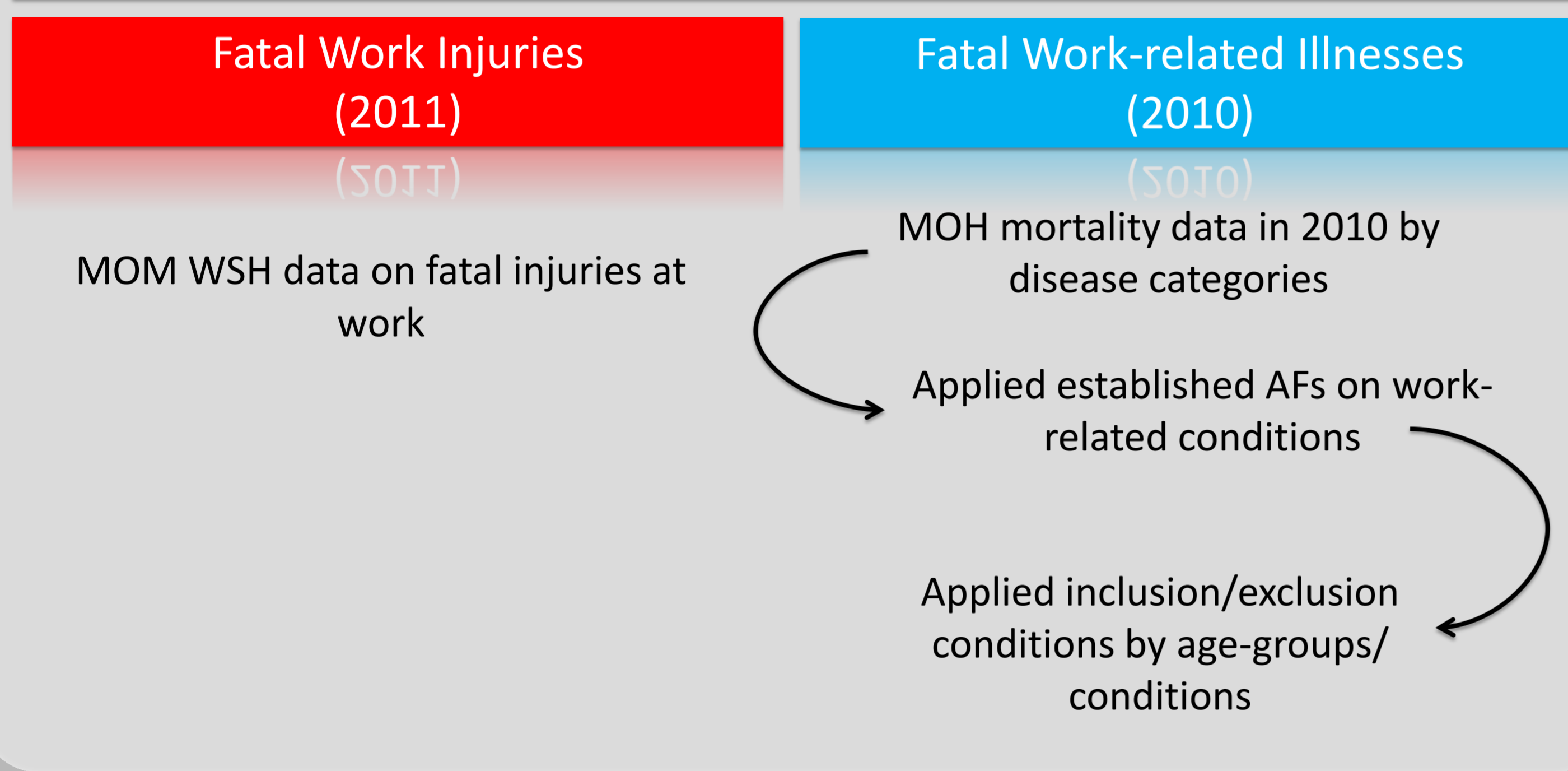
For the former, fatal injuries are well documented and reported at the national level in Singapore. However, the actual work-related mortality due to illnesses is still not as complete. Hence, we aim to estimate the number of deaths that could be work-related using epidemiological methods. This is so that more awareness could be raised among the stakeholders for better workers' protection and prevention.

## Methods

To estimate work-related mortality for Singapore residents, we applied disease-specific attributable fractions (AFs) from Nurminen and Karjalainen's 2001 paper to the all-cause mortality data in 2010 from the Ministry of Health.

Some of the AFs were adjusted to take into account the local context. Foreign workers' estimated figures was taken as proportional to that of the resident population. For work-related injuries, data from the Ministry of Manpower was used.

### Work-related Mortality



## Conclusion

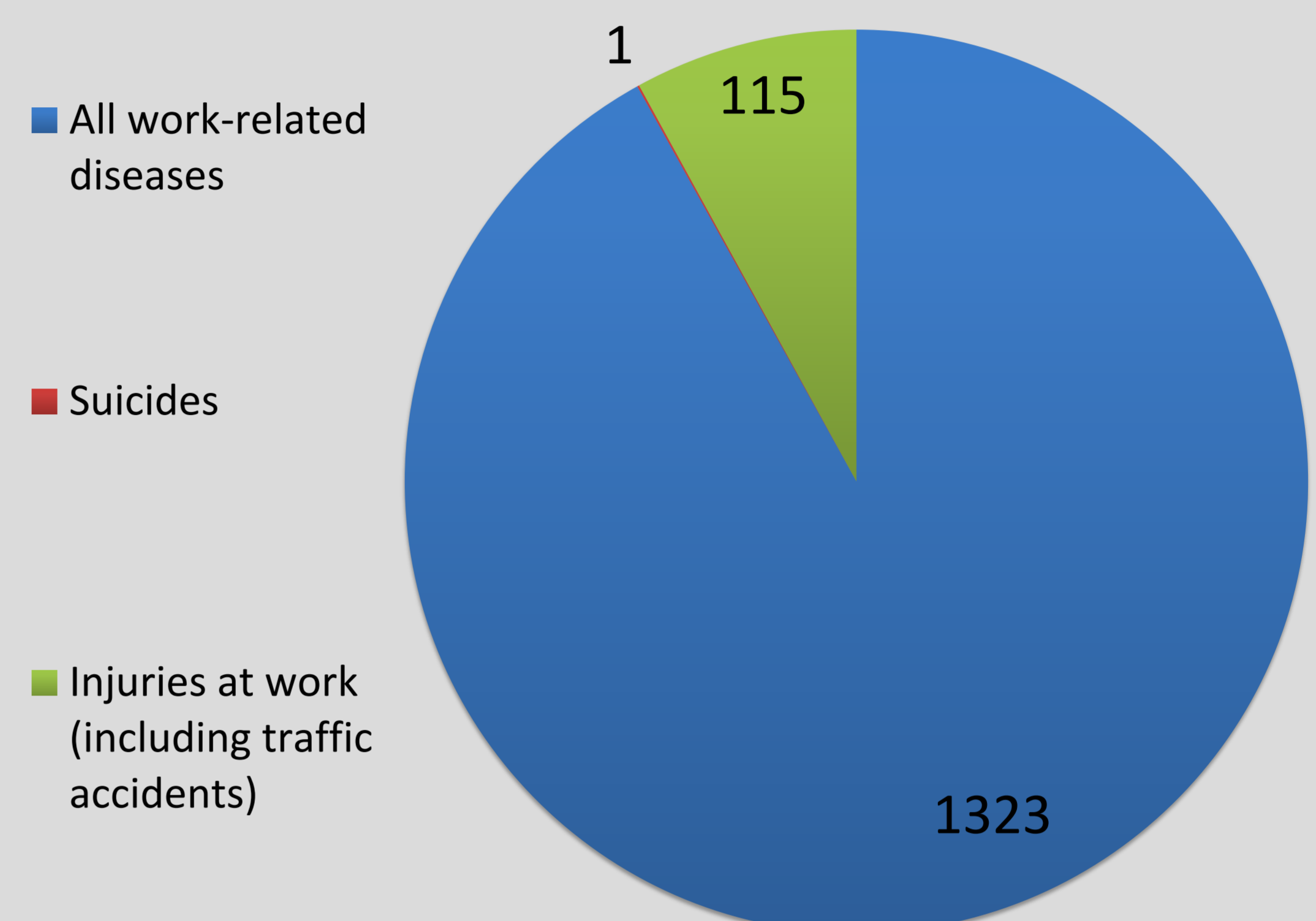
Whilst the exact figures reported here are not the key focus, we hope that the magnitude of these figures would provide a range for stakeholders to gauge the real scale of the problem, especially to bring greater awareness and control of occupational health hazards.

Many work-related diseases, such as occupational cancers can be eliminated by reducing the exposures. Applying a Vision Zero and zero harm at work mindset is needed for eliminating or radically reducing the burden of injuries and illnesses from work.

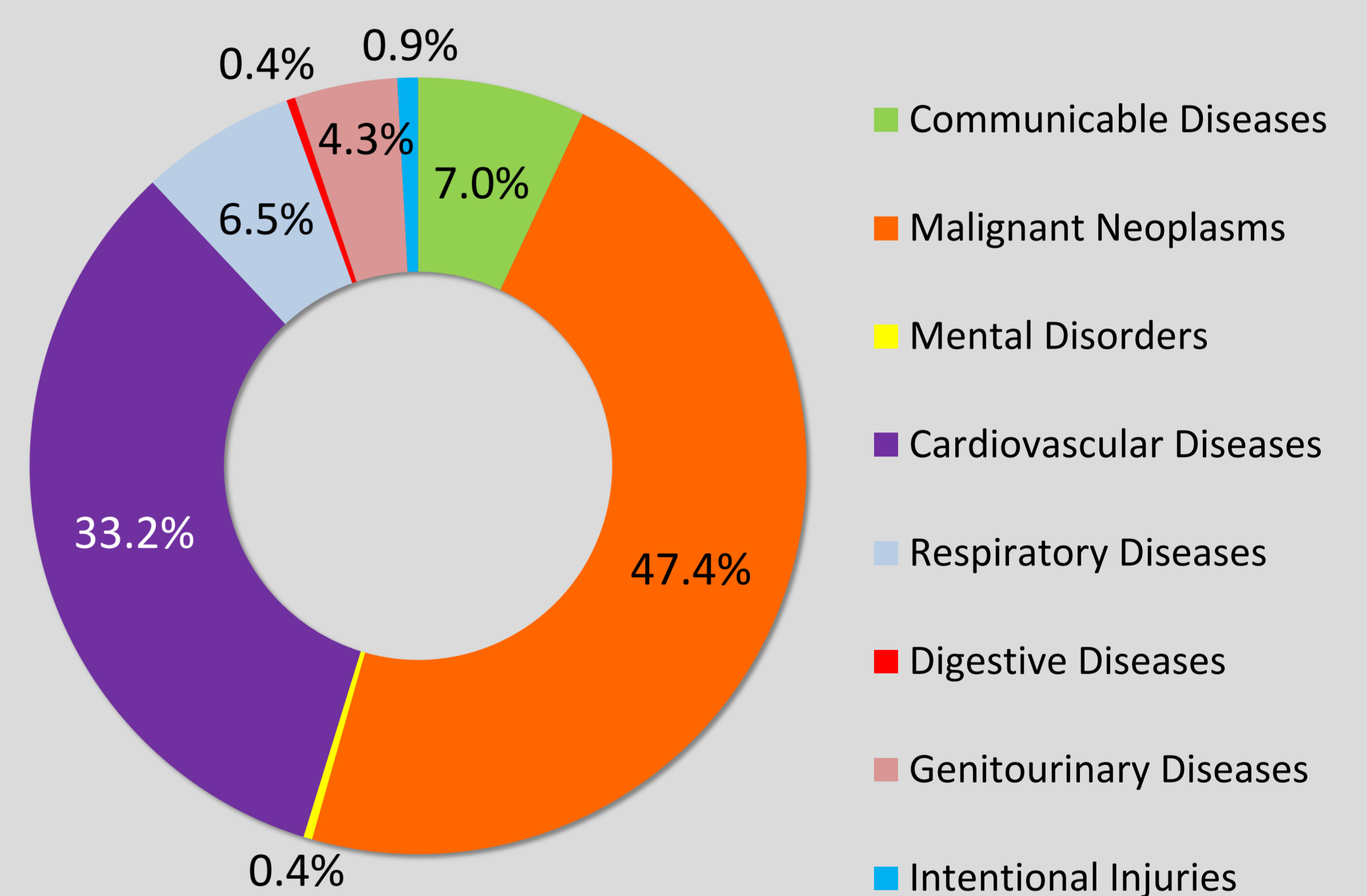
## Results

We estimate 115 fatal occupational injuries, one intentional injury and 1,323 fatal work-related diseases totalling 1,439 fatal work-related injuries and illnesses in 2011. While cancers and cardiovascular diseases kill many more workers than injuries, attention has traditionally been on the lesser number but more acute deaths from injuries. This is reflected in the number of injuries reported as compared to the cases of occupational diseases.

### Estimated work-related deaths



### % Deaths from work-related diseases



Malignant neoplasms and cardiovascular diseases at 47% and 33% were the top illnesses responsible for more than half of deaths from work-related diseases.