



# Research on Walkability and Public Health

Prepared by Social Policy Research (SPR)  
For Walk DVRC

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# Research Initiatives



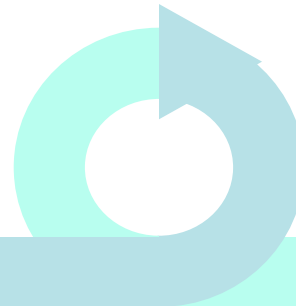
**Walk DVRC Ltd.** is an NGO that engages the public to promote walkability and livability with the goal of creating a healthier and more inclusive city. Walk DVRC advocates for a fairer sharing of public space between pedestrians and cars with an initial focus on Hong Kong's Central Business District – Des Voeux Road Central (DVRC).

Since the 1990's, multidisciplinary walkability research has accumulated, in the field of health sciences as well as the traffic planning and later also of urban planning. Overall awareness of the importance of health in the last three decades has grown in the field of urban planning.



**Urban Planning**

Along DVRC, previous discussion mainly focuses on environmental and economic benefits. By reconnecting Urban Planning and Public Health aspect, Walk DVRC would like to conduct a research study on **walkability** and **respiratory diseases**.



**Public Health**



# Research Objectives

**Social Policy Research (SPR)** was responsible for conducting the field survey to solicit views from the people walking along Des Voeux Road Central (DVRC), and analysing and presenting the collected responses.

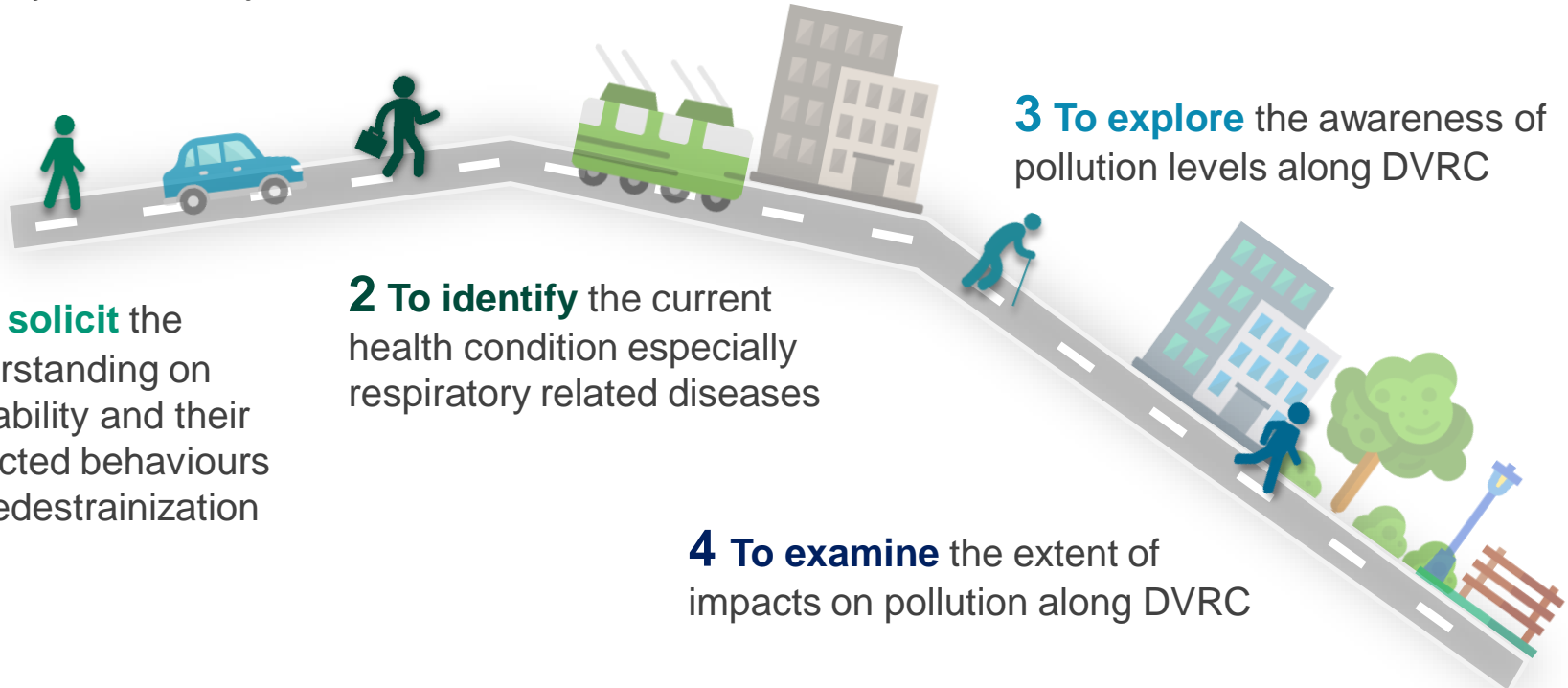
The key research objectives are:

**1 To solicit** the understanding on walkability and their expected behaviours on pedestrainization

**2 To identify** the current health condition especially respiratory related diseases

**3 To explore** the awareness of pollution levels along DVRC

**4 To examine** the extent of impacts on pollution along DVRC



# Research Method – Overview

## Target Respondents

People aged 15 or above walking along DVRC including pedestrians, workers, residents and tourists.

## Methodology

A structured questionnaire was designed.  
On-site face-to-face interviews were conducted by trained and experience interviewers.  
Verbal consents were sought from the respondents prior to the interviews.

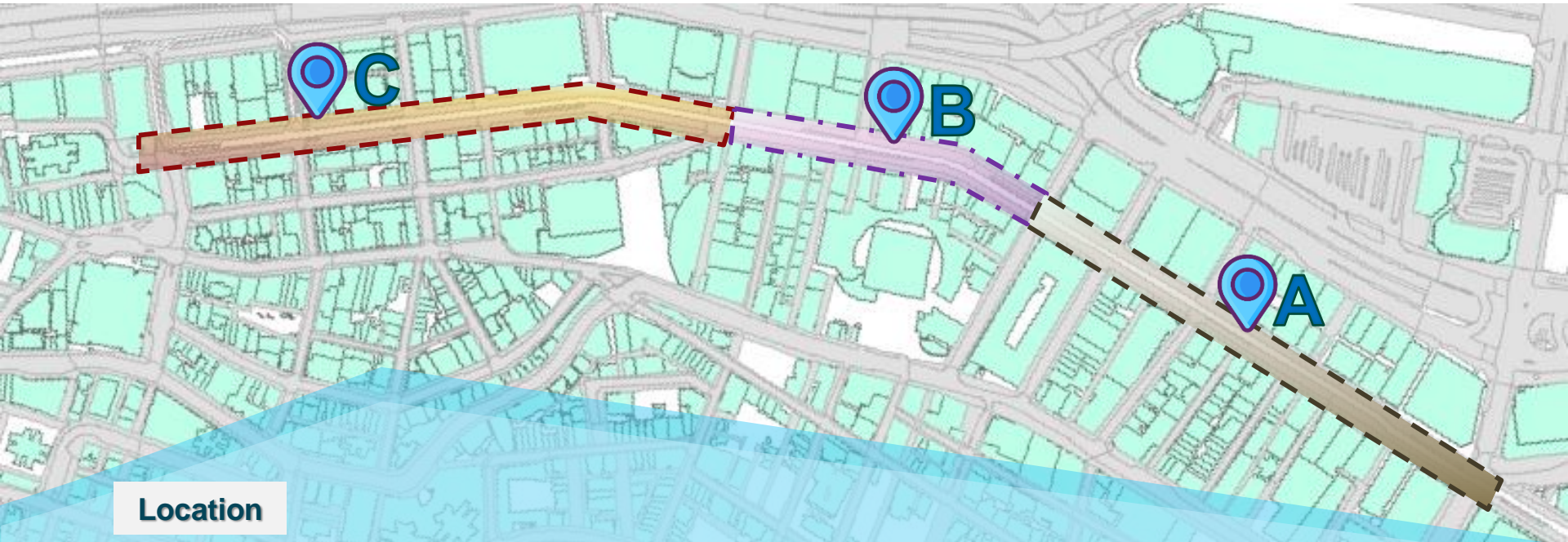
## Results

The fieldwork was conducted from 19 to 31 October 2019 covering different times of the day on both weekdays and weekends.  
A total of 414 interviews were successfully conducted.



# Research Method – Locations

Interviewers were deployed to conduct on-site face-to-face interviews at three areas along DVRC.



## Location

**Area A:** Pedder Street To Jubilee Street (World Wide House To Hang Seng Bank Headquarters)

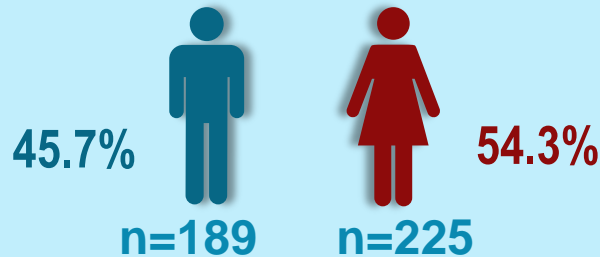
**Area B:** Jubilee Street To Wing Lok Street (Dah Sing Life Building To Infinitus Plaza Shopping Arcade)

**Area C:** Wing Lok Street To Morrison street (Golden Centre To Western Market)

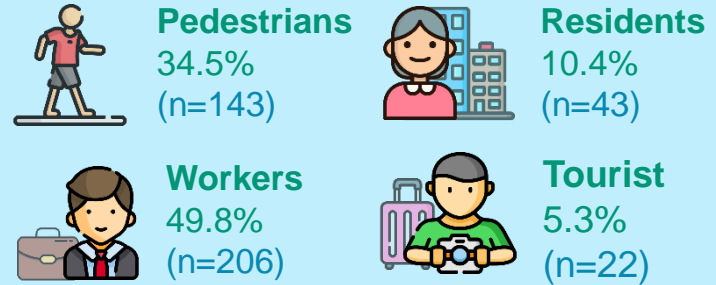
# Research Method – Demographics

The profile of 414 respondents is summarized as follows:

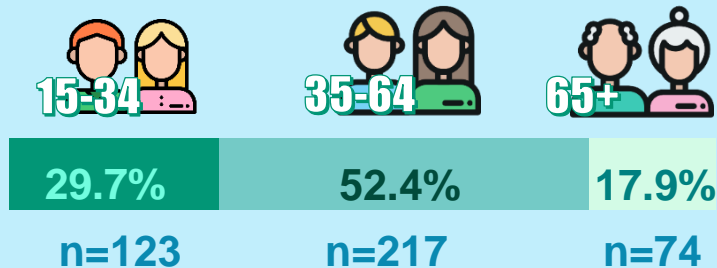
## Gender



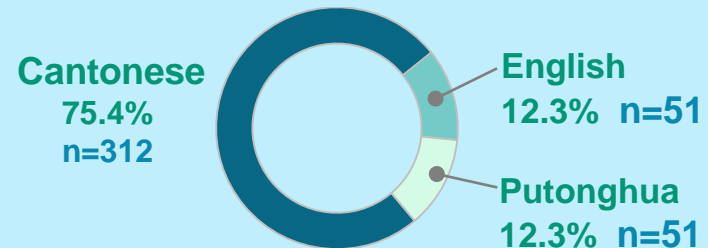
## Types



## Age



## Language Used for Interview





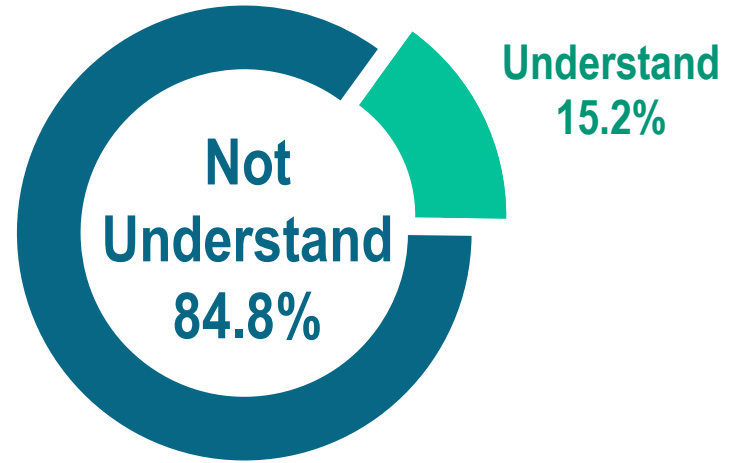
# Understanding of the Concept of “Walkability and their Expected Behaviours on Pedestrianization

**Walkability** is considered an important dimension of health communities.

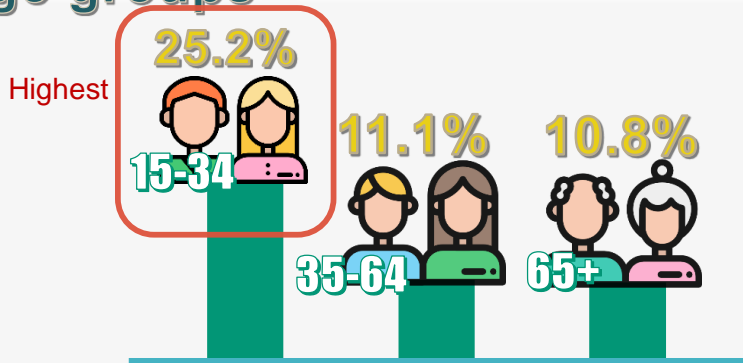
**Walkability** is the extent to which the built environment supports and encourages walking by providing for pedestrian comfort and safety, connecting people with varied destinations within a reasonable time and effort, and offering visual interest in journeys throughout the network.



# Understanding the Concept of “Walkability”



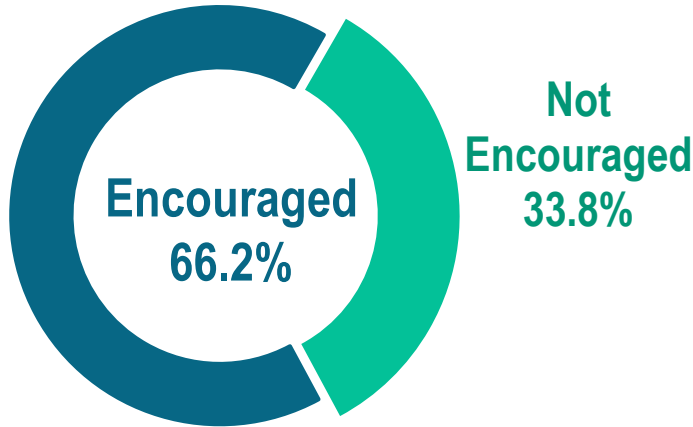
## Age groups



- Difference is statistically significant



About one in seven respondents (15.2%) of respondents expressed that they understood the concept of “walkability” whereas the remaining (84.8%) did not understand.



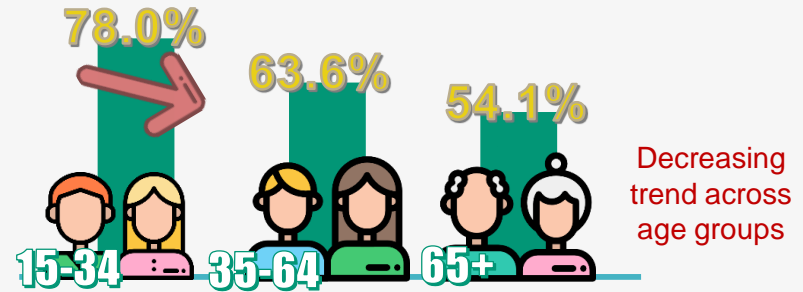
# Encouraged to WALK MORE

if DVRC had less car and more room for people



About two-thirds (66.2%) of respondents expressed that they would be encouraged to **walk more** if DVRC had less car and more room for people.

## Age groups

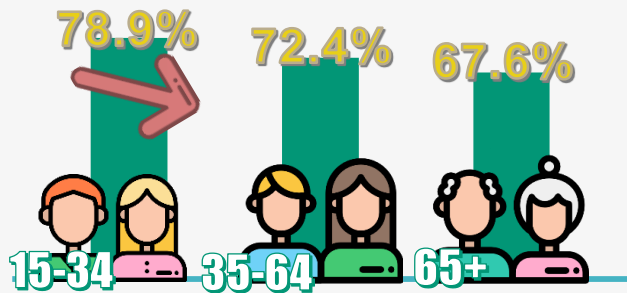


- Differences are statistically significant

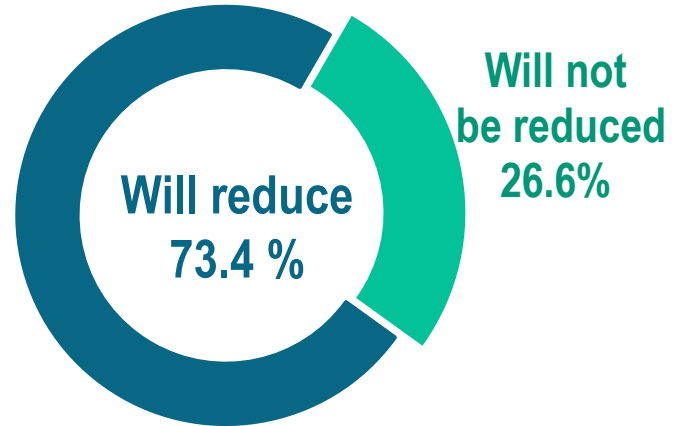
# Air Pollution would be REDUCED

if DVRC become pedestrianised

## Age groups



- Differences are statistically significant



Nearly three quarters (73.4%) of respondents thought that the air pollution would be reduced if DVRC become pedestrianised.

# Current Chronic Respiratory Conditions



**Chronic respiratory diseases (CRDs)** describe a range of diseases of the airways and the other structures of the lungs. They include asthma, respiratory allergies, chronic obstructive pulmonary disease (COPD), etc. Allergic rhinitis or “hay fever”, sleep apnea and pulmonary hypertension are other chronic respiratory conditions that affect the lives of millions worldwide.

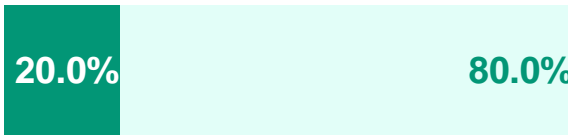
In 2017, chronic lower respiratory diseases was the **seventh leading cause of death** in Hong Kong.



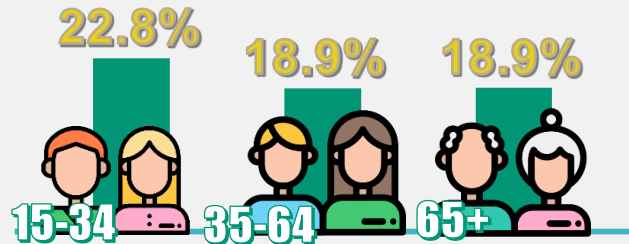
# Respiratory-related Illnesses and Air Quality

The potential health effects of air pollution range from subtle physiological changes inside the body to florid symptoms such as nose and throat irritation, shortness of breath, coughing and chest tightness.

About two-fifths of respondents stated that they ever had respiratory-related illnesses that can be related to pollution and bad air quality.



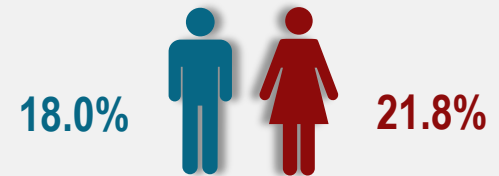
## Age groups



Slightly more young people (aged 15-34) than other age groups

- Differences are not statistically significant

## Gender groups



Slightly more female than male respondents

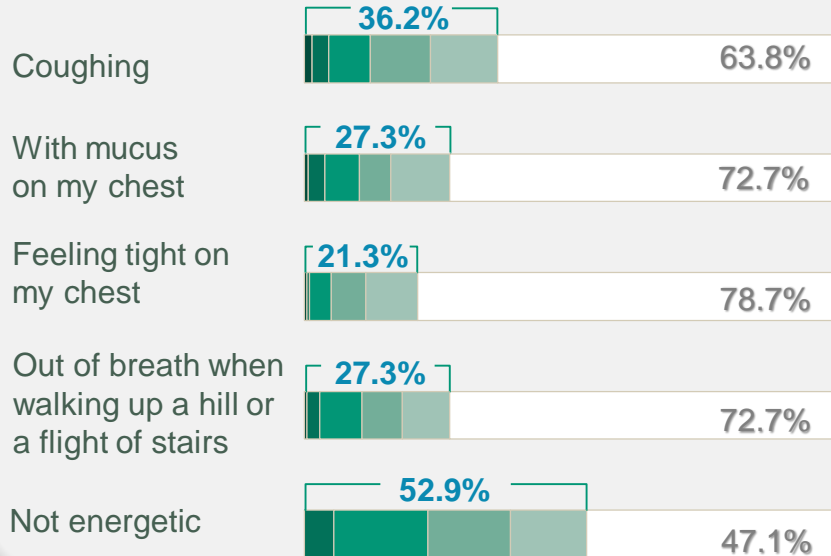
- Difference is not statistically significant

# Respiratory Conditions

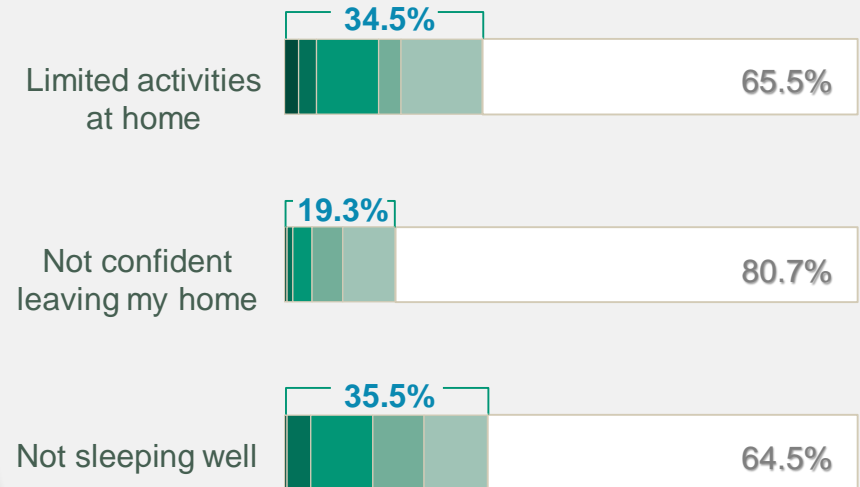
With reference of the past 4 weeks, respondents rated their respiratory conditions on a 6-point scale

5 4 3 2 1 0 (0 = no such conditions, 1 to 5 = had such conditions from minor to severe)

## Respiratory Conditions



## Because of my lung condition





# Awareness of Pollution Levels along DVRC

People suffering from chronic respiratory diseases will experience an increase in symptoms when exposed to air pollutants.

**Air pollution** is a major environmental risk to health.

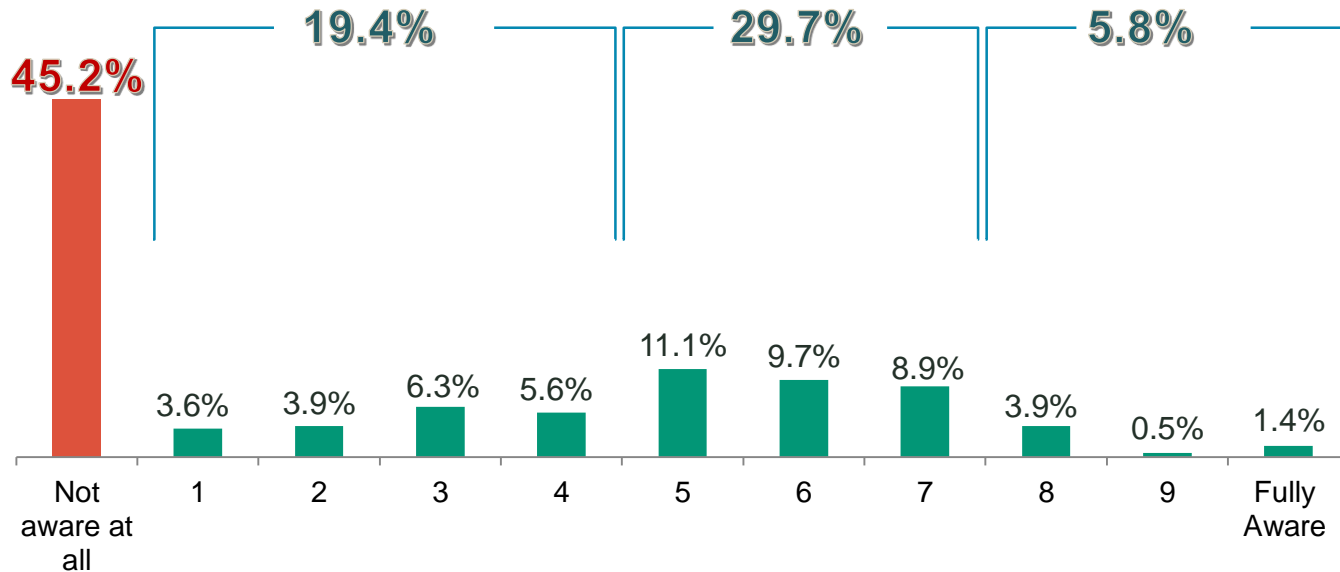
**Transportation** is a major source of outdoor air pollution.

# Awareness of the Air Pollution

along DVRC



The respondents were asked for the awareness of the air pollution along DVRC. For those who were aware of the air pollution, the extent of awareness was rated on a 10-point scale.





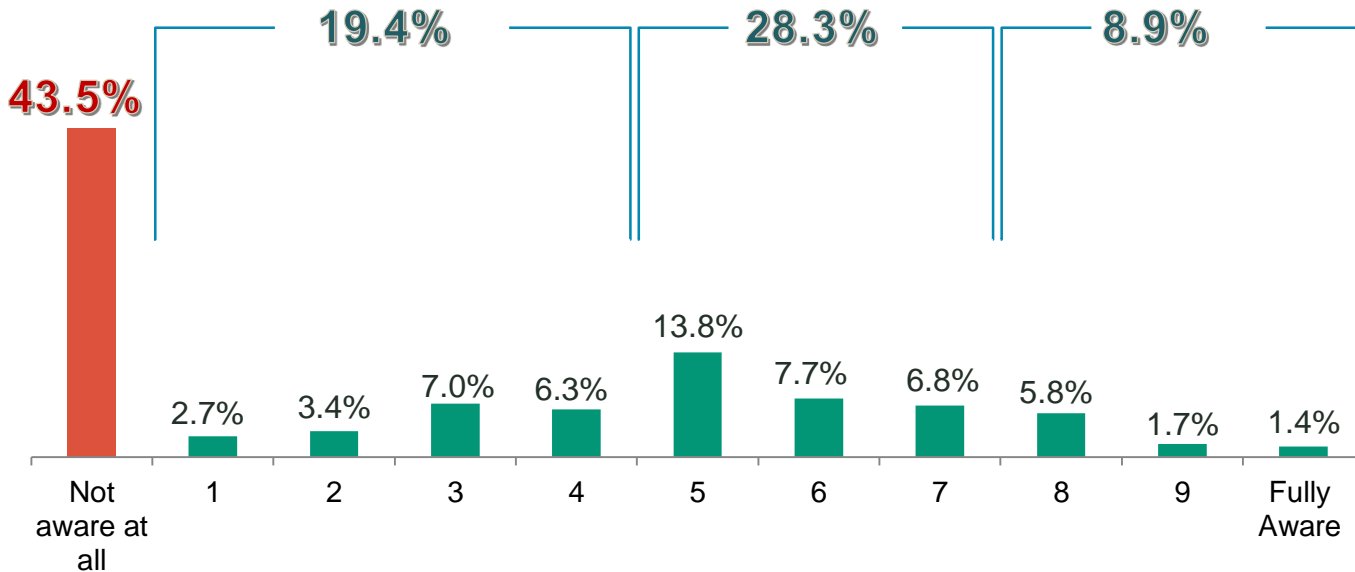
# Awareness of the pollution levels from traffic

*along DVRC can be dangerous to health*



The respondents were asked for the awareness of the pollution levels from traffic (including buses, private cars, etc.) along DVRC can be dangerous to one's health.

For those who were aware of the air pollution, the extent of awareness was rated on a 10-point scale.



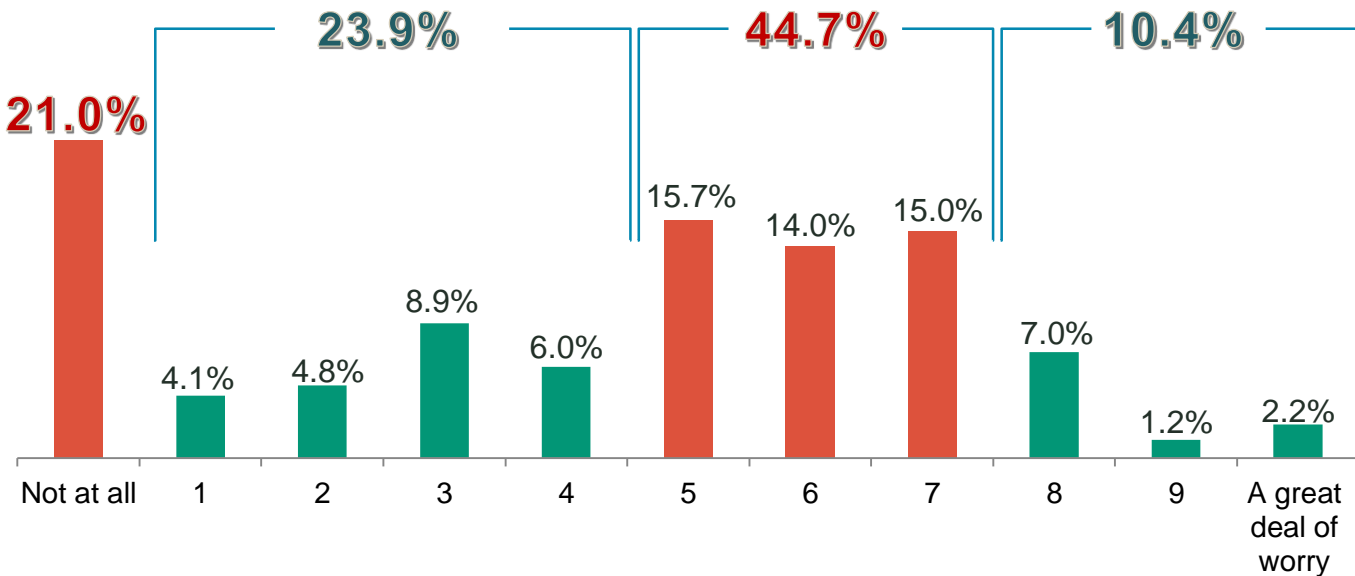
# Worried about the pollution levels

*along DVRC can be dangerous to health*



The respondents were asked whether they were worried about the pollution along DVRC.

For those who were worried, the extent of worry was rated on a 10-point scale.





The impact of air pollution on human health has been widely recognized.

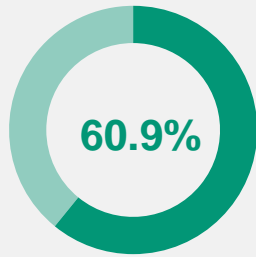
What are the extent of impacts on people who were walking along DVRC?

# The Extent of Impacts of Pollution along DVRC

# Encountered Situations along DVRC

The respondents were asked whether they had encountered the following situations along DVRC. For those who had experiences, the extent of impacts was rated on a 10-point scale.

## Affected by air pollution



60.9% of respondents had been affected by air pollution along DVRC.

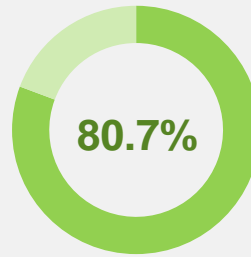
### The extent of impact:



1  
No impact  
at all

10  
A great  
impact

## Allergic symptoms (such as nasal sensitivity, sneezing and difficulty in breathing)



80.7% of respondents had ever had allergic symptoms when they walked along DVRC.

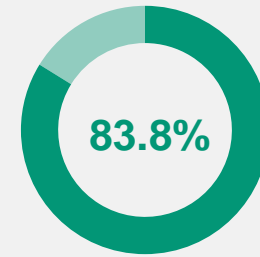
### The extent of impact:



1  
No impact  
at all

10  
A great  
impact

## Affected the quality of life



83.8% of respondents expressed that their quality of life was affected.

### The extent of impact:



1  
No impact  
at all

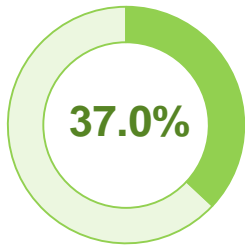
10  
A great  
impact



# Encountered Situations related to Walkability along DVRC

For those who had experiences, the extent of impacts was rated on a 10-point scale.

## Conflicts between pedestrians & vehicles



The extent of impact:

6.0

1  
No impact  
at all

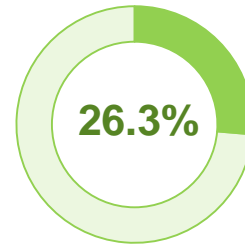
10  
A great  
impact



**Noteworthy**

About two-thirds of respondents (63.0%) had not encountered conflicts between pedestrians and vehicles along DVRC.

## Pedestrian path is too crowded



The extent of impact:

6.6

1  
No impact  
at all

10  
A great  
impact

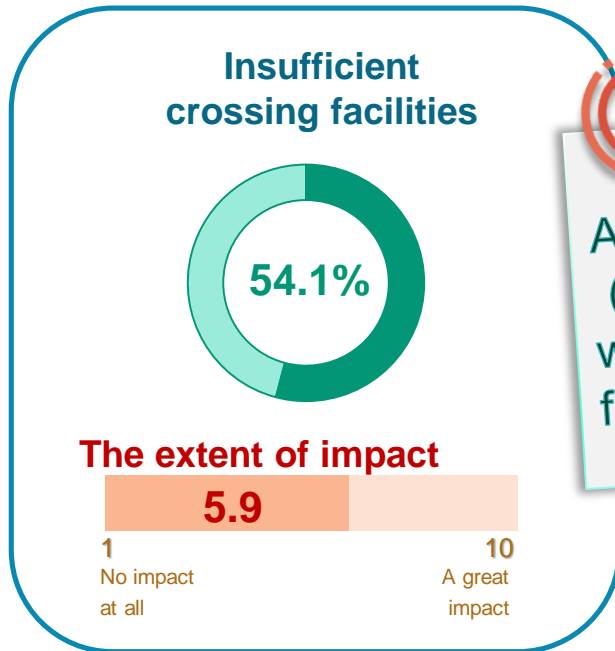


**Noteworthy**

About three quarter of respondents (73.7%) indicated that the pedestrian path was not crowded along DVRC.

# Encountered Situations related to Walkability along DVRC

For those who had experiences, the extent of impacts was rated on a 10-point scale.



## Noteworthy

About half of respondents (45.9%) indicated that there was sufficient crossing facilities along DVRC.

# Summary

## Advocate the concept of walkability to the public

The idea of cities being good for pedestrians has led to the spread of the concept of walkability. Its basic principle is to create public urban spaces for pedestrians.

The results indicated that only one in seven respondents understood the concept of walkability.

It is recommended that more campaigns with educational kits can be organized to the public

- (i) to implement the concept of walkability;
- (ii) to enhance connectivity in the area; and
- (iii) to foster a new culture of mobility.



# Summary

## **Raise the public awareness about air pollution along DVRC**

Though less than half of respondents expressed that they were not aware of the air pollution and pollution levels from traffic along DVRC, over three quarters of respondents were worried about the pollution along DVRC.

Over half of respondents encountered different situations along DVRC: they were affected by air pollution; they had allergic symptoms; and their quality of life was affected.

## **Improve the quality of the urban environment along DVRC**

Along DVRC, over one quarter of respondents expressed that they had conflicts between pedestrians and vehicles; there was insufficient crossing facilities and the pedestrian path was too crowded.

# Social Policy Research (SPR) Limited

November 2019

**For further information, please contact:**

Website: [www.spr.com.hk](http://www.spr.com.hk)

Email: [info@spr.com.hk](mailto:info@spr.com.hk)

Notes to readers:

This Research Report is solely prepared to summarize the results of the Survey on Walkability and Public Health which were collected from people walking along Des Voeux Road Central (DVRC) in October 2019. This Research Report is not to be used for any other purposes and/or by any other person or entity, except for the objectives stated. Our Research Report does not include any representation as to the quality or performance of any organizations' goods or services nor their fitness or suitability for any service user's intended purpose. Social Policy Research (SPR) Limited does not assume responsibility towards or accept liability to any other person for the contents of this Research Report. For the avoidance of doubt, all duties and liabilities (including without limitation, those arising from negligence or otherwise) to any third parties are specifically disclaimed.