The health of Queensland’s Vietnam–born population 2010
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Summary

The health of the Queensland population has been extensively described in recent Queensland Chief Health Officer reports, *The Health of Queenslanders 2006* (1), *The Health of Queenslanders 2008: Prevention of Chronic Disease* (2) and *The Health of Queenslanders 2010* (3).

According to the 2006 Census, there were 13,088 Vietnam–born residents in Queensland. In the period 2001–2006, population growth of Queensland’s Vietnam–born residents was higher than that of Australia–born residents, 12.6 per cent and 7.2 per cent respectively.

In 2006, overall mortality was lower for Vietnam–born Queenslanders compared to the total Queensland population. The Vietnam–born population in Queensland was found to have lower standardised hospital separation ratios that were statistically significant compared to the total Queensland population (July 2006–June 2008). for:

- all causes
- total avoidable hospitalisations
- coronary heart disease
- diabetes complications
- chronic obstructive pulmonary disease (COPD)
- external causes (injury)
- musculoskeletal disease
- asthma
- all cancers (excluding non–melanocytic skin cancers.)

Communicable disease data by country of birth is not collected in Queensland hospitals and this lack of data may mask a significant health issue in the Vietnamese Queensland population. The National Hepatitis B Strategy identifies Vietnam–born Australians as a high risk population. Vietnam–born and China–born Australians are also identified as having the highest risk of cancer related to hepatitis compared to other Australians. Liver cancer, which can result from hepatitis B, was a leading cause of death in the Australian population born in South East Asia. Tuberculosis may be a health issue for the Vietnam–born Australian population, with higher hospitalisation rates among Asia–born immigrants reported at the national level as well as in New South Wales.

Risk factor information is extremely limited with small sample sizes in national surveys, or the lack of specific country of birth or ethnicity data making confident conclusions about risk difficult to reach.

Taking these findings together, it appears that the Vietnam–born population of Queensland is relatively healthy. Improvements in health status may best be focussed on hepatitis B and tuberculosis prevention and management.

The findings indicate a need for better data collection and analysis, and the need for population health surveys that specifically target culturally and linguistically diverse populations to better understand the health of Vietnam–born Queenslanders.
Queensland has a culturally diverse population and this trend is increasing. Thirty-three per cent of Queenslanders were born overseas, or have a parent who was born overseas. More than 270 languages are spoken in Queensland and almost eight per cent of Queenslanders speak a language other than English at home. Almost 50,000 people, or 1.2 per cent of the population, are either unable to speak English well, or not at all. This equates to, on average, one in three people being born overseas, or having a parent born overseas; one in five people being from a culturally and linguistically diverse background; and one in 10 being from a non-English speaking background.

This document profiles the health of Vietnam-born Queenslanders, comparing health status to that of all Queenslanders (the total Queensland population, including both Australian and overseas-born residents). It is one in a series of documents profiling the health status of Queensland's culturally and linguistically diverse communities.

Document structure

This document has seven sections.

Section one — Literature review presents a review of findings in national and international literature relating to the health of Vietnamese populations.

Section two — A profile of Queensland’s Vietnam-born population includes the age, sex and geographic distribution of the population.

Section three — Health and Vietnamese culture focuses on the culturally- and spiritually-based health beliefs and systems that are widely practiced by many Vietnamese Queenslanders.

Section four — Wellness and illness — the health status of Queenslanders born in Vietnam includes deaths (all causes and avoidable) and hospitalisations (all causes and avoidable).

Section five — Determinants of Vietnamese health and wellbeing includes both risky and protective behaviours, as well as some of the cultural and social determinants of health.

Section six — Hospitalisations principally reports on the national health priority areas including: cancer, cardiovascular disease, diabetes, respiratory disease and musculoskeletal disease.

Section seven — Key implications for Queensland Health outlines future directions for health service planning in Queensland in response to the findings.
1 Literature review

This literature review provides a synthesis of research on the health of Vietnam–born people living in Vietnam, Australia and internationally. The literature dates from 1998 to 2011. A manual internet search was conducted using Google Scholar to identify peer reviewed sources. A manual search of health websites was conducted including the World Health Organisation (WHO), the World Bank and the Australian Institute of Health and Welfare (AIHW). Search terms used included:

- Vietnam health status
- Vietnam migrant health
- Vietnam health indicators
- Vietnam–born migrant health
- Vietnam chronic disease
- Vietnam diabetes
- Vietnam cancer.

1.1 International literature

Wellness and illness, the health status of Vietnamese people today

According to the World Bank (2008), Vietnam has achieved levels in basic health indicators that are remarkably better than other developing countries with similar per capita incomes (4). A World Bank health project report suggests that during the early 1990s, significant improvements in health outcomes were achieved in Vietnam, with gains realised in most health status indicators (5). Life expectancy at birth increased and infant and maternal mortality rates declined (5). However, a resurgence in malnutrition, infectious diseases such as malaria and tuberculosis, and the emergence of new infectious diseases such as HIV/AIDS, Severe Acute Respiratory Syndrome (SARS) and avian Influenza are being observed in Vietnam (5). Diarrhoea and respiratory infections are also still major health problems in Vietnam (6).

Health outcomes in Vietnam

Chronic disease

Chronic diseases including heart disease, stroke, cancer, diabetes, and chronic respiratory diseases have emerged as a major health threat to the world’s population, particularly in many low and middle income countries such as Vietnam (7, 8). Social and economic changes have led to increasing major risk factors such as high blood pressure, tobacco use, physical inactivity, obesity and alcohol consumption, which have been associated with new cases of chronic diseases (7)(9)(10).

A study investigating chronic disease risk factors among rural Vietnamese adults reported that Vietnam is undergoing a rapid epidemiologic transition characterised by an increase in the prevalence of chronic diseases (7). Hospital admissions and deaths attributed to chronic diseases in Vietnam increased in the period 1986 to 2002. Chronic diseases in Vietnam were reported to be leading causes of deaths, accounting for 66 per cent of all deaths in 2002 (mainly coronary heart disease, cerebrovascular disease and chronic obstructive pulmonary disease) (11). This trend has continued, with WHO reporting in 2007 a change in disease pattern in the Vietnamese population, with an increasing trend toward non–communicable, chronic or lifestyle–related diseases such as cardiovascular disease, diabetes, cancer, HIV and mental illness (12).

Cancers

Data from cancer registries in Vietnam show that the prevalence of cancer in Vietnam is similar to those in other developing countries and lower than those of developed countries (13). The leading cancers in Vietnam are lung, liver, stomach, colon–rectum and nasopharynx in males, and breast, cervix, stomach, liver, colon–rectum and lung in females (6). The geographic distribution of cancer is not homogenous within Vietnam, with the most remarkable difference being in the prevalence of cervical cancer, which is four times more prevalent in the south than in the north of Vietnam (6).

Communicable diseases

Vietnam has experienced the effects of emerging and re–emerging communicable diseases such as avian influenza, HIV/AIDS, malaria, intestinal parasites, tuberculosis, SARS and pandemic influenza
Diarrhoea and respiratory infections also remain major health problems in Vietnam (6). Vietnam has been one of the countries most affected by avian influenza in humans, and has experienced significant outbreaks of SARS. The number of people infected with HIV/AIDS is also increasing rapidly (15). However one 2007 report stated that Vietnam has a low level of HIV infection in the adult population (16).

While Vietnam continues to struggle with communicable diseases, nutritional deprivation, and reproductive health risks, as stated above, non-communicable diseases are becoming even more prevalent and cause a heavy burden of morbidity and mortality (17).

Mental Health

While literature on the mental health of people born in Vietnam is limited, WHO reports that non-communicable diseases including mental disorders are sharply increasing in Vietnam (14). This is attributed to changing lifestyles, urbanisation and the aging of the population.

Vietnamese migrant populations

Most international studies on Vietnamese migrant populations come from the United States (US), Canada and Europe. The key themes in international studies are:

- Higher rates of some cancers—Cancer patterns differ among Vietnam-born and US-born people living in the USA (18). In a 2002 report, cancer incidence rates were compared for Vietnamese people living in the US (1988 – 1992) to rates for residents of Hanoi (1991 – 1993). Regardless of geographic region, lung and breast cancers were the most common among Vietnamese males and females respectively. Relative to white males, Vietnamese Americans experienced a smaller proportion of prostate and colon cancers but a much larger proportion of liver and stomach cancers. Furthermore, among Vietnamese women, cervical cancer showed the most striking difference in cancer burden by region, contributing to five per cent of the overall cancer burden in Hanoi and 15 per cent in Vietnamese Americans (18).

- Lower rates of obesity—The US Leading Health Indicators indicate variances in the health of Vietnam-born immigrants living in the US. A 2004 report stated that among both men and women, Vietnam-born immigrants were at the lowest risk of being overweight (19).

- Higher rates of mental health problems—The mental health of Vietnamese and South East Asian immigrants are well documented. In 2004 it was reported this may be due to the increased necessity to consider mental health needs, given their experience of war-induced trauma and significant stressors related to migrating to a foreign country (20). South East Asian immigrants are at risk of developing psychiatric illness due to their experience of leaving their native country and memories related to war (20, 21). The most commonly diagnosed mental health problems in South East Asian refugee patients are depression, somatisation and physical disorders, adjustment disorders, anxiety, and posttraumatic stress disorder (20). Migrants from Vietnam living in Germany have higher anxiety and depression values than Germans (22). A study examining the ethnic and gender differences in the levels and predictors of stress among Vietnamese, Cambodian and Laotian refugees found that for all three groups, refugee women reported a higher level of psychological distress than male refugees (21).

1.2. National literature

AIHW reports a significantly lower mortality ratio from lung cancer (0.69), colorectal cancer (0.43), coronary heart disease (0.36), cerebrovascular disease (0.82), influenza and pneumonia (0.40) (23). In 2008 the Australian Bureau of Statistics (ABS) reported variances in causes of death across populations. Liver cancer was the fourth leading cause of death in South East Asia–born and thirty-seventh for the Australia–born population (24). This finding is likely related to the very high prevalence of hepatitis B among the South East Asia–born Australian population. The National Hepatitis B Strategy 2010–13 identifies people from culturally and linguistically diverse (CALD) backgrounds as one of three priority populations. The strategy estimates that prevalence of hepatitis B among overseas–born Australians is generally consistent with prevalence in their countries of birth. Vietnam and China have the highest prevalence of hepatitis B (25). Vietnam–born and China–born Australians are also identified as having the highest risk of liver cancer related to hepatitis compared to other Australians (26, 27).

The New South Wales Population Health Survey reported differences in the health status of Vietnam–born people living in New South Wales (NSW), compared with NSW residents born in NSW and other selected countries (28). A significantly lower proportion of Vietnam–born people
had asthma, 2.6 per cent compared with 11.1 per cent of adults born in NSW. Overall, 48.5 per cent of NSW–born adults were overweight or obese, compared with 17.9 per cent of people born in Vietnam. Thirty–six per cent of NSW–born adults engaged in risky alcohol drinking compared with only 5 per cent of the Vietnam–born adult population. Results show that a significantly lower proportion of people born in Vietnam (13.6 per cent) were smokers at the time, compared with 21.6 per cent of NSW adults (28). It is important to note that 30 per cent of Vietnam–born males were smokers and 2.5 per cent of females smoked. The report identified smoking as the leading preventable cause of mortality and morbidity in NSW.

A 2005 report on diabetes in CALD populations in Australia reported a high prevalence of gestational diabetes mellitus (GDM) among Asian women, particularly those from Vietnam (10.6 per cent). This report identified ethnicity as a risk factor for GDM, with women from India, the Pacific Islands, Asia and the Middle East being at higher risk (29). Males born in South East Asia had a statistically significantly lower diabetes–related hospitalisation rate in 1999–2000 than Australian–born males.

AIHW reports that Asia–born immigrants are hospitalised more often for tuberculosis than the Australia–born population (30). In NSW, most cases of tuberculosis occurred among people born in South East Asia, Southern and Central Asia and North East Asia (28). In 2008, people born overseas accounted for 111 cases or 84 per cent of the total number of reported tuberculosis cases in Queensland (3).

1.3. Summary

The following summarises the findings from international and national literature:

• Vietnam’s health indicators are better than expected for a developing country.
• Vietnam is undergoing a rapid epidemiological transition characterised by an increase in the prevalence of chronic disease.
• While chronic disease is becoming more prevalent and responsible for significant morbidity and mortality in Vietnam, communicable diseases continue to be a health burden. These include avian influenza, HIV/AIDS, malaria, intestinal parasites, tuberculosis, SARS and pandemic influenza.
• The prevalence of cancer in Vietnam is similar to those in other developing countries and lower than those of developed countries.
• South East Asian immigrants are at risk of developing psychiatric illness due to their experience of migration and traumatic memories related to war.
• Vietnam–born Australians are estimated to have one of the highest prevalence of hepatitis B among all CALD populations living in Australia. Vietnam–born and Chinese–born Australians share the highest risk of cancer related to hepatitis compared to other Australians. Liver cancer was a leading cause of death in the Australian population born in South East Asia.
• Tuberculosis may be a health issue for the Vietnam–born Australian population, with higher hospitalisation rates among Asia–born immigrants reported at the national level as well as in NSW.
• Vietnam–born people in NSW have lower levels of common risk factors for chronic disease compared to the Austrian–born population.
2 A profile of Queensland’s Vietnam–born population

2.1 History of migration to Australia

Migration to Australia from Vietnam was low prior to the Vietnam War. Following the war and the takeover of South Vietnam by the Communist North Vietnamese in April 1975, refugees began resettling in Australia. The first significant wave of migrants followed the fall of Saigon in the mid–1970s. Many refugees fleeing to host countries arrived by boats in the 1980s, followed by survivors of “re–education” (concentration) camps from the late 1980s–1990s. After the war, the communist government took control of Vietnam and those who had already migrated were offered permanent residence in Australia. Refugees began to be admitted on humanitarian grounds, fleeing suffering and privation in their homeland. In 1982, the governments of Australia and Vietnam agreed on a migration program which emphasised family reunion. Two–thirds of those to arrive over the following years were women (31).

While many Vietnamese people originally arrived and settled in New South Wales and Victoria, the history of migration and settlement in Queensland followed a similar pattern to these states, with peaks following the fall of South Vietnam and the secondary period of family reunion from the early 1980s onwards.

2.2 Economic factors

Like all Australians, Vietnam–born Australians engage in a diverse range of employment, including professional, manufacturing and trade. However, as the first wave of Vietnamese migrants arrived as refugees and were subsequently largely employed in low–paid low–skilled occupations, 40 per cent of Vietnamese migrants were employed as manual labourers or machine operators in factory jobs at the time of the 1991 Census. This continued at the time of the 2006 Census. In 2006 the Vietnam–born population had a relatively low median income of $349 per week, compared with $431 for all overseas born, and $488 for all Australia–born people (32).

In 2006, Vietnamese–speakers in Queensland had similar rates of educational attainment to English–speaking Queenslanders; however, their unemployment rate was 8.5 per cent compared to 4.5 per cent among the English–speaking population (32). Of those employed, 29.4 per cent were located in the manufacturing industry, 13 per cent as machinery operators and drivers and 20.4 per cent as labourers. In Queensland, overall, 42.2 per cent of Vietnam–born Australians were in the lowest income bracket of $1–$399 per week. This socioeconomic profile may start to shift with the pattern of migration moving from refugee and humanitarian entry channels into migration based on accessing skilled employment or study opportunities. According to the Queensland Government Office of Economic and Statistical Research, as of June 2010, Vietnam is in the top ten source countries for international students and for 457 visa holders, which may be reflective of Vietnam’s growing middle class and economic and industrial shifts. However, based on current evidence, unemployment and underemployment have not shifted significantly since the first generation of Vietnamese people who arrived as refugees.

2.3 Languages spoken at home and religions practiced

Vietnamese is among the top four overseas languages spoken in Queensland and is continuing to grow. The Queensland population, who spoke Vietnamese at home at the time of the 2006 Census, was 17,140, representing a 20.5 per cent increase since 2001. Vietnamese–speakers had the lowest level of English language proficiency among all Queenslanders speaking a language other than English at home, with thirty five per cent reporting they did not speak English well or at all (33).

Religion has historically played a significant role in shaping Vietnamese culture. The earliest religions of Buddhism, Confucianism and Daoism embedded philosophies that supported a strong family–orientated culture. The Vietnam–born Australian population identified as Buddhist (58.6 per cent), Catholic (22.1 per cent) and no religion (11.3 per cent) (32). Polytheism is commonly practiced by Vietnamese people with many visiting temples and observing special holidays across spiritual beliefs and religions (34).
2.4 Age and sex distribution

There were 13,122* Vietnam–born persons living in Queensland compared to almost three million Australia–born people in 2006. The largest proportion of the Vietnam–born population was in the 25–44 years age group, which was the same as the largest proportion for Australia–born Queenslanders (Table 1). The Vietnam–born population of Queensland was a relatively young population in 2006, with more than 80 per cent of people aged 54 years or less.

Table 1: Australia–born and Vietnam–born Queensland population by age, 2006

<table>
<thead>
<tr>
<th>Age (5 yr group)</th>
<th>Australia Number of persons</th>
<th>Vietnam Number of persons</th>
</tr>
</thead>
<tbody>
<tr>
<td>0–4</td>
<td>234,761 (8.0%)</td>
<td>99 (0.8%)</td>
</tr>
<tr>
<td>5–14</td>
<td>479,870 (16.4%)</td>
<td>227 (1.7%)</td>
</tr>
<tr>
<td>15–24</td>
<td>433,952 (14.8%)</td>
<td>1,048 (8.0%)</td>
</tr>
<tr>
<td>25–44</td>
<td>799,555 (27.2%)</td>
<td>6,674 (5.0%)</td>
</tr>
<tr>
<td>45–54</td>
<td>376,474 (12.8%)</td>
<td>2,858 (21.8%)</td>
</tr>
<tr>
<td>55–64</td>
<td>293,391 (10.0%)</td>
<td>1,269 (9.7%)</td>
</tr>
<tr>
<td>65–74</td>
<td>170,627 (5.8%)</td>
<td>530 (4.0%)</td>
</tr>
<tr>
<td>75–84</td>
<td>109,872 (3.7%)</td>
<td>327 (2.5%)</td>
</tr>
<tr>
<td>85 and Over</td>
<td>36,754 (1.3%)</td>
<td>90 (0.7%)</td>
</tr>
<tr>
<td>Total</td>
<td>2,935,256</td>
<td>13,122</td>
</tr>
</tbody>
</table>

Source: ABS, 2006 Census

2.5 Population size and growth

Queensland’s Australia–born population grew by seven per cent in the period from 2001 to 2006. In comparison, the Vietnam–born population increased by 12 per cent during the same period (Table 2).


<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>2,738,370</td>
<td>2,935,266</td>
<td>7.2%</td>
</tr>
<tr>
<td>Vietnam</td>
<td>11,659</td>
<td>13,088*</td>
<td>12.6%</td>
</tr>
</tbody>
</table>

Source: ABS, 2006 Census (33)

2.6 Geographic distribution

Overseas–born Australians are more urbanised than the Australia–born population (60 per cent in major urban areas, and 25 per cent in other urban areas), and Vietnam–born Australians are among the most urbanised with 97 per cent urbanised (35). Vietnam–born Australians enjoy strong community networks and reside in areas with larger numbers of other Vietnam–born residents.

* For some demographic indicators the total population number may differ by a few. This is due to the application of randomisation formulas by ABS.
In 2006, the largest populations of Vietnam–born residents were located in Metro South (9861), Metro North (1152) and Darling Downs–West Moreton (1079) Health Service Districts. The largest numbers of Vietnamese–speaking residents (main language spoken in the home) resided in Metro South (13 385), Darling Downs–West Moreton (1625) and Metro North (1083).

2.7 Ancestry

At the 2006 Census, there were 15 813 Queenslanders who identified their ancestry as Vietnamese. Of those with Vietnamese ancestry, 61.5 per cent were born in Vietnam and 33.4 per cent were born in Australia. Other countries of birth for those with Vietnamese ancestry include; Malaysia, New Zealand, Indonesia, Thailand, Cambodia, Philippines, Hong Kong and New Caledonia (33). This report focuses only on those born in Vietnam, not those with Vietnamese ancestry, which would be a much larger and diverse group.

2.8 Year of arrival

Between 1971 and 1990 there was a large increase in the number of Vietnamese migrants arriving in Australia. In Queensland there has been steady growth in the Vietnamese population since its initial years of arrival, recording a 19.6 per cent increase for the period 1996–2006.

<table>
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<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Vietnam</td>
<td>0.6</td>
<td>18.5</td>
<td>41.6</td>
<td>22.2</td>
<td>8.0</td>
<td>2.1</td>
<td>13 086</td>
</tr>
</tbody>
</table>

(Percentage in age group of each birthplace—total expressed as a number)
Source: ABS, 2006 Census
3 Health and Vietnamese culture

The purpose of this section is to outline some key features of the dominant spiritual and cultural health beliefs, traditions, and practices that originally existed in Vietnam and which may be upheld and practised by Vietnamese Australians living in Queensland.

There is a great deal of diversity within the Queensland Vietnamese population in terms of socioeconomic status, religion, age, ethnic origins, identity and culture. Some of the concepts of health and Vietnamese culture outlined in this section might not be applicable to all Vietnam–born Queenslanders.

There are resources available to help health care professionals accommodate cultural and spiritual beliefs in the health care setting. These may include considerations of:

- specific dietary needs
- grooming and dress
- palliative care
- end–of–life practices and decision–making
- the role of family and gender in doctor–patient communication
- observance of important religious traditions, rituals, and celebrations.


3.1 Vietnamese health beliefs

Vietnamese people's health beliefs have been strongly influenced by Chinese and French cultures, Confucianism, Buddhism, and explanations of illness based on the principles of balance and universal harmony of two opposite elements am (yin) and duong (yang). Am is the female principle and is associated with cold, the breath, the right side, and even numbers while duong is the male principle and is associated with heat, the blood, the left side and odd numbers. This belief system is reflected in behaviours and food choices that are thought to impact on the balance of am and duong and extends to the context of 'hot' and 'cold' food (36). Foods that classify as 'hot' such as mango, lychee, longan, jackfruit and garlic are believed to create excess heat in the body causing ailments including nosebleeds, acne and dermatological issues (36). They are only to be eaten in moderation, especially during hot seasons (37). Alternatively, over–consumption of 'cold' foods such as bamboo shoots, black beans, duck and eel are thought to induce problems including diarrhoea and abdominal upset (38). These foods are usually avoided when ill or immediately after childbirth (37). Some foods are also believed to have medicinal properties — bitter melon and celery are believed to control high blood pressure, artichoke tea protects the liver against toxins, while cumquat with honey can relieve a mild sore throat (38).

Among first–generation Vietnamese migrants in particular, there is a belief that Western medicine is 'hot' and can destroy red blood cells. Therefore, it is safer to seek traditional medicine for minor ailments because it is less harmful to the body and causes less side–effects (37). However, for serious illness Western medicine is preferred as it is believed to be more effective (37). Vietnamese Australians may use traditional remedies, including medicines, in conjunction with Australian medical treatments (39). It is common to use two types of medicine to treat a disease in Vietnam, and some Vietnamese Australians may consider prescribed and traditional medicines to be compatible. Many Vietnamese Australians may be reluctant to inform their doctors about their use of traditional medicines because of fear of disapproval (39).

Family members are also highly involved in the care of Vietnamese patients (40). Health is highly prioritised, family–orientated and is perceived to be not just about physical and mental wellbeing, but also spiritual and social connections (40). Traditionally, there is a strong connection with extended family members who are responsible for providing support, assistance and guidance (37). Family members act in the interests of the entire family and refrain from actions that may harm the family's reputation (37). For example, negative actions that cause one to 'lose face' will...
subsequently reflect badly on the reputation of the entire family. Therefore, there are large expectations to support and prioritise family (37). Elders play an important role in the Vietnamese family, and there may be a great deal of respect afforded to the wisdom of elders and older relatives (37). Elders are responsible for providing guidance and direction to those who are younger. In turn, younger relatives are expected to respect the wishes of their elders, as well as care for them as they age (37).

In the traditional Vietnamese belief system, the principle of universal order, which includes harmony between all human relationships is maintained (36). Harmonious social relationships are important and there is a strong value on being polite, self-controlled and calm. Extreme emotions such as anger, excitement and turmoil are generally hidden (36). Direct eye contact during communication is considered disrespectful (36). Vietnamese people tend to bear pain and disability in silence and generally attribute illness to their age or being 'a part of life', as opposed to something that can be controlled (36). Doctors are highly respected and there is a cultural tendency to not want to be a burden by complaining about pain or discomfort (41). Vietnamese people are more likely to request temporary relief medication as opposed to seeking specialist treatments, scans or diagnoses (36).

A 2003 Brisbane-based study on Vietnamese adult women found that respondents experienced a number of health care access barriers preventing timely treatment such as (36):

- lack of health literacy
- lack of knowledge of the Australian health care system
- low English proficiency
- inability to communicate health concepts and problems
- financial pressure due to low socioeconomic status
- limited access to transportation.

Patients from a Vietnamese background value their doctor’s opinions and are reluctant to question or openly disagree with their decisions (36). Therefore, there is an unfamiliarity with being actively involved in decision-making processes about health or the provision of services (41). For example, a respondent from a Brisbane-based study reported being confused when offered several different methods of treatment and chose the treatment that was convenient for the doctor (41). This study also discovered a lack of understanding about health care among Vietnamese women who were unsure of how to access mainstream services and were unaware of preventative screening tests (41). They were also more likely to seek a Vietnamese doctor to gain health information and were unlikely to independently make appointments for health check-ups or comply with a full course of medication if their illness stabilised (41).
4 Wellness and illness, the health status of Queenslanders born in Vietnam

4.1 Self–reported health and quality of life

The 2007 National Health Survey reports information relating to self–reported health status and quality of life at a national level. These data are not routinely available by country of birth, as analysis is limited by small numbers of overseas–born participants (42). However, a 2008 report by the Chief Health Officer of New South Wales (incorporating survey data of approximately 44 000 New South Wales residents), notes that overall 80.4 per cent of New South Wales adults rated their health positively compared to 68.3 per cent of New South Wales adults born in Vietnam (28). This difference was statistically significant.

4.2 Life expectancy

The life expectancy of the Queensland population in 2008 (including Australia and overseas–born) was 78.9 years for males and 83.7 years for females (3). The relatively small number of Vietnam–born Queenslanders prevents meaningful life expectancy calculations from being made.

4.3 Infant mortality and health

During the period 2006–07 there were 750 infants born to women who recorded Vietnam as their country of birth (43). The number of perinatal deaths (stillbirths and deaths to infants in the first 28 days of life) was less than five, preventing any further reporting due to the potential risk of identification. The perinatal mortality rate was low for infants born to Vietnam–born mothers compared to all Queensland mothers; a difference which was statistically significant.

For the same period (2006 and 2007), of the 750 births recorded to Vietnam–born mothers, 45 occurred before 37 weeks gestation and were therefore classified as pre–term births (43). The rate of pre–term birth was significantly lower for Vietnam–born mothers (60 per 1000 births) when compared to all Queensland mothers (88.7 per 1000 births).

4.4 Deaths – all causes and avoidable

Almost two thirds of all deaths of Queenslanders aged less than 75 years in 2006–2007 were considered to have been potentially avoidable under nationally agreed criteria (3). In 2006, the all causes standardised mortality ratio for the Vietnam–born population of Queensland was 64.5 per cent, which was significantly lower than all Queensland (Figure 1). There was no difference in the standardised mortality ratio for total avoidable conditions for Vietnam–born Queenslanders compared to the total Queensland population.

![Figure 1: All causes standardised mortality ratio Vietnam–born and all Queensland persons, 2006](Source: Causes of Death, ABS)
### 4.5 Hospital separations — all causes and avoidable

Hospitals are a vital and highly visible part of the health system. A hospital separation is an episode of care which can be a total hospital stay or a portion of a hospital stay ending in a change of status (for example from acute care to rehabilitation). Hospital separations are often used to compare levels of illness in populations but should be interpreted with caution as they also reflect access to hospitals, the need for repeated admissions and current medical practise of treating an illness or injury. All these factors can vary over time and between geographic areas (3). Hospital separation data were sourced from the Queensland Hospital Admitted Patient Data Collection.

Figure 2 presents the standardised hospital separation ratio for all causes (July 2006 to June 2008), Vietnam–born Queenslanders compared to all Queenslanders. The ratio was significantly lower for Vietnam–born Queenslanders.

![Figure 2: All causes standardised hospital separation ratio Vietnam–born and all Queensland persons July 2006 to June 2008](Source: Queensland Hospital Admitted Patient Data Collection)

The standardised hospital separation ratio for the same period for total avoidable separations is presented in Figure 3. Vietnam–born Queenslanders had a ratio almost half of the ratio for all Queenslanders.

![Figure 3: Total avoidable standardised hospital separation ratio Vietnam–born and all Queensland persons July 2006 to June 2008](Source: Queensland Hospital Admitted Patient Data Collection)
5 Determinants of Vietnamese health and wellbeing

Determinants of health and wellbeing refer to the factors that influence the health status of populations and individuals. There are many determinants that can impact on an individual’s health status and health behaviours. AIHW has developed a conceptual framework for understanding the determinants of health (Figure 4) (44). As depicted in the framework, upstream factors include broad features of society such as culture and social cohesion, environmental factors, socioeconomic characteristics and knowledge, attitudes and beliefs can impact on health behaviours which include physical activity. The results of these influences are also bi-directional, so some of the factors that are further downstream such as biomedical factors can also have an impact on physical activity.

These determinants are complex, and can help to explain some of the disparities in health status and health behaviours relating to individuals from the Vietnamese community in Queensland relative to the non-Vietnamese Queensland population.

Figure 4: Conceptual framework for the determinants of health
(Source: Figure 4.1 AIHW, 2008a)

WHO recognises marginalisation and experiences of racism as linked to the social determinants of health (45). Migration itself is understood to be a significant stressor and the mode in which migrants enter the country is also a predictor of their capacity to manage their health, access and navigate the health system. The Australian Government Compendium of Social Inclusion Indicators recognises that a refugee background, in particular, is an indicator of poorer health outcomes. The Compendium found that households with low-English proficiency were more vulnerable to persistent poverty as well as social exclusion which are also strongly linked to poor health literacy and health outcomes (46). The experiences of racism, and both the real or perceived threat of verbal and physical racist abuse, have been shown to be a potential determinant of poor health and wellbeing (35).

In addition to the experience of emerging and growing migrant communities, the literature clearly indicates that young Australians with mixed ancestry and parents from culturally and linguistically diverse backgrounds are vulnerable to experiencing stressors and difficulties negotiating intercultural and intergenerational demands and expectations. The desire to ‘fit in’ to mainstream Australian culture may override parental expectations to maintain cultural practices and traditions. This may cause conflict and distress for migrant families (40).
5.1 Risk factors and health behaviours

Overview
Public health literature has extensively documented the key lifestyle risk factors that contribute to the incidence and prevalence of disease and death. Factors such as tobacco smoking, excessive alcohol consumption, poor diet and nutrition, physical inactivity as well as biological predispositions including low birth weight, high blood pressure, overweight and obesity, and poor blood glucose control are all attributable to chronic disease. Multiple risk factors increase the likelihood of poor health outcomes. Data is presented on three leading risk factors.

Smoking
Tobacco smoking is a leading risk factor for chronic disease in Queensland and remains a leading cause of preventable death and health inequality.

Information on smoking by Vietnam–born Queenslanders is not available and only limited interstate data is available. The National Drug Strategy Household Survey (NDSHS) collects information relating to tobacco, alcohol and illicit drug use across Australia. Overall, 16.6 per cent of participants reported being daily smokers. The sample size of Vietnam–born participants was too small for meaningful statistical analysis.

The New South Wales Health Population Survey found that, for the period 2002–05, 13.6 per cent of the 175 Vietnamese people surveyed were daily or occasional smokers. However, sex specificity is important to consider as the New South Wales Health Population Survey found that 30 per cent of Vietnam–born men reported smoking, compared to 2.5 per cent of women born in Vietnam.

Alcohol
Alcohol is the most commonly used drug in Australia with high levels of alcohol consumption known to increase the risk of acute and chronic illness, negative social impacts and premature death. While there are no data on alcohol consumption among the Vietnam–born population of Queensland, there is limited interstate data available.

In the 2007 NDSHS, 10.3 per cent of all participants reported alcohol consumption considered risky or high risk of harm to their long–term health. Of Australia–born participants answering this question, 11 per cent (17 178) reported alcohol consumption which put them at risk or high risk of harm to their long–term health. The sample size of Vietnam–born participants was too small for meaningful statistical analysis.

In the New South Wales population health survey involving 175 Vietnamese participants, 9.8 per cent of Vietnam–born people reported risky alcohol consumption. Of those who reported risky drinking, 1.7 per cent were women, and 8.1 per cent were men.

Physical inactivity
In 2010, about half of Queensland adults were participating in sufficient physical activity for health benefit. Physical inactivity contributes to an increased risk of cardiovascular disease, overweight, high blood pressure, type 2 diabetes and some types of cancer. Regular physical activity reduces the risks of many chronic diseases, particularly cardiovascular disease and type 2 diabetes.

Rates of participation in physical activity are lower in individuals from non–English speaking backgrounds compared to the Australia–born population. The 2006 General Social Survey indicated that individuals who were born in a non–English speaking country had a participation rate in sport and physical activity of 37.9 per cent. Those born in main English speaking countries had a participation rate of 65.4 per cent, born in proficient English speaking countries 56.6 per cent and born in Australia 63.9 per cent.

In Queensland the participation rate was 31.6 per cent for individuals born in a country not proficient in English, 71.3 per cent for individuals born in a main English speaking country, 63.9 per cent...

\[\] Data are not available by specific country of birth for some risk factors.

\[\] Defined as participation in sport or recreation in the last 12 months
cent for individuals born in a country proficient in spoken English, and 64.5 per cent for individuals born in Australia.

5.2 Protective factors

Breastfeeding
Infants and children depend on good nutrition for normal growth and development. The benefits of such nutrition last throughout life and directly influence a range of childhood conditions including overweight and obesity and dental disease. Good nutrition in infancy and childhood can also prevent diet-related diseases in later life (50).

During 2006, 358 infants were born to Vietnam-born mothers in Queensland hospitals and of these, 207 infants (57.8 per cent) were being exclusively breastfed at discharge following birth (43). This is significantly less than exclusive breastfeeding rates by Australia-born mothers (83.3 per cent). No country of birth breastfeeding data is available at six months of age; however, Queensland rates at 2006 were known to be 57 per cent, which fell well below the national objective of 80 per cent.

Cancer screening
Cancer screening uses tests to identify the early stages of cancer before symptoms are present. Currently, national screening programs are in place for breast cancer, cervical cancer and bowel cancer (3).

The Department of Health and Aging, reports that a number of barriers may affect participation, particularly in CALD populations. These barriers include:
- language
- cultural and religious beliefs
- lack of awareness of screening programs
- lack of understanding and knowledge of preventive health
- culturally inappropriate services
- embarrassment and fear
- family obligations
- transport
- finance.

Participation rates in these screening services by individual country of birth are not available. However, it is noted that hospitalisations for Vietnam-born women are higher for cervical cancer (30).

Immunisation
Childhood immunisation
A number of communicable diseases are vaccine preventable through immunisation. Childhood immunisation prevents a range of diseases including measles, polio, pertussis, chickenpox, hepatitis B, meningococcal, pneumococcal and rotavirus diseases (3). Free vaccines are provided to Queensland children under the National Immunisation Program.

In June 2010 the target vaccination coverage rate of 90 per cent fully immunised was achieved in Queensland for all cohorts (3).

Data are not available to provide vaccination rates by country of birth.
6 Hospitalisations

6.1 Cancer

Cancer is the name used for a cluster of diseases in which the main characteristic is the development of abnormal cells which spread rapidly within the human body and is the leading cause of the burden of disease and injury in Queensland (2). Prostate, lung, colorectal and melanoma cancers accounted for 63 per cent of new cases for males in 2007. Breast, lung, colorectal, melanoma and cervical cancer accounted for 61 per cent of new female cancers.

Figure 5 presents the standardised hospital separation ratio for all cancers (excluding non–melanocytic skin cancers) for the period July 2006 to June 2008, comparing Vietnam–born Queenslanders to all Queenslanders. The Vietnam–born population had a ratio significantly lower than that of all Queenslanders.

![Bar graph showing standardised hospital separation ratio for all cancers](image)

**Figure 5**: All cancers (excluding non–melanocytic skin cancers C44) standardised hospital separation ratio Vietnam–born and all Queensland persons, July 2006 to June 2008
(Source: Queensland Hospital Admitted Patient Data Collection)

6.2 Cardiovascular disease

Cardiovascular disease refers to any disease of the heart and blood vessels and is the leading cause of death in Queensland (3).

**Coronary heart disease (heart attack and angina)**
The standardised hospital separation ratio for coronary heart disease (July 2006 to June 2008) of Vietnam–born Queenslanders compared to all Queenslanders is presented at Figure 6. Vietnam–born Queenslanders had a ratio two–thirds lower than the ratio for all Queenslanders.
Stroke

Stroke, or cerebrovascular disease, occurs when the blood vessels supplying part of the brain become blocked or burst. Figure 7 presents the standardised hospital separation ratio for stroke for Vietnam–born and all Queenslanders, for the period July 2006 to June 2008. There was no difference in the ratio.

Diabetes

Diabetes mellitus (diabetes) is a chronic metabolic condition in which the body produces inadequate insulin or is unable to use properly the insulin it produces, resulting in improper control of blood glucose. (3)

The standardised hospital separation ratio for diabetes (July 2006 to June 2008) for Vietnam–born Queenslanders, compared to all Queenslanders, is presented in Figure 8. There was no difference in the ratio.
For the same period, Vietnam-born Queenslanders had a hospital separation ratio significantly lower than all Queenslanders for diabetes complications. Figure 9 presents the standardised hospital separation ratio for diabetes complications excluding renal dialysis (July 2006 to June 2008).

Coding for diabetes, particularly diabetes complications, has varied from year to year over the past decade and this limits the reliability of data for this disease. Data for diabetes complications should be interpreted with caution.(3)

### 6.4 Mental health

Mental health problems and mental disorders refer to the spectrum of cognitive, emotional and behavioural disorders that interfere with the lives and productivity of people (1). An individual’s mental health is derived from their genetic makeup and general life circumstances including their social, economic and environmental situation.

A mental disorder is a diagnosable illness and differs from mental health problems in duration and severity. Mental disorders of concern to public health concern include depression, anxiety and substance use disorders. Mental disorders represent an immense psychological, social and economic burden to society, and also increase the risk of physical illness (51).
Data relating to mental health by specific country of birth is not available for Queensland. However, in a 2008 New South Wales Chief Health Officer Report, limited country of birth specific data was published (28). This data suggests that there was no difference between Vietnam-born Australians and the Australia-born in the level of psychological distress reported.

6.5 Respiratory disease

Respiratory diseases are numerous and varied, are the third largest cause of death in Queensland and the seventh largest cause of hospitalisation (3). The two major chronic respiratory diseases that contribute the greatest burden are asthma and chronic obstructive pulmonary disease (3).

Asthma

The most notable respiratory disease is asthma which is a chronic respiratory disease characterised by recurrent attacks of episodes of wheezing, chest tightness and shortness of breath due to widespread narrowing of the airways and obstruction to airflow. There is no cure for asthma partly due to the lack of complete understanding of the causes of the disease (52). Asthma is a leading cause of disease burden in children and young people.

Figure 10 presents the standardised hospital separation ratio for asthma for Vietnam-born Queenslanders compared to all Queenslanders for the period July 2006 to June 2008. Vietnam-born Queenslanders had a significantly lower ratio than that of all Queenslanders.

Chronic obstructive pulmonary disease

Chronic obstructive pulmonary disease (COPD) is a serious and progressive disease which involves destruction of lung tissue and narrowing of the air passages, causing chronic shortness of breath. The main form of COPD is emphysema (2).

Figure 11 presents the standardised hospital separation ratio for COPD for Vietnam-born Queenslanders compared to all Queenslanders. For the period July 2006 to June 2008, Vietnam-born Queenslanders had a ratio of 21.9 per cent.
Injuries accounted for 7.1 per cent of the total burden of premature death and disability in Queensland in 2007. Road traffic injuries and falls were responsible for the largest proportion of unintentional injuries and suicide and self inflicted injuries were the leading cause of intentional injury. (3)

Over the past 10 years in Queensland, there have been major reductions in the rate of death for a number of injury types. However, data are not available by specific country of birth. These reductions occurred for important causes of death for (53):

- young children (drowning, burns and scalds)
- young people (transport)
- working age adults (homicide)
- older people (falls)
- people of all ages (transport).

Injuries in this category are preventable, and the strategies to prevent them are as wide ranging and diverse as their causes.

Figure 12 presents the standardised hospital separation ratio for external causes for the period July 2006 to June 2008 for Vietnam–born Queenslanders compared to all Queenslanders. It was almost half the ratio for all Queenslanders.
6.7 Musculoskeletal disease

Musculoskeletal conditions include arthritis and other joint problems and disorders of the bones, muscles and their attachments to each other. Arthritis and musculoskeletal conditions are the world’s most common cause of severe long term pain and physical disability (54).

In 2004–05, one in three Queenslanders reported having a musculoskeletal condition of at least six months duration, with 16 per cent of Queenslanders reporting arthritis (55). The prevalence of arthritis was higher in females (18 per cent) than males (14 per cent) (55). The prevalence of arthritis increases with age.

Approximately 633 000 Queenslanders (17 per cent of the population) reported a long term back problem in 2004–05. Back pain prevalence begins to increase in the teenage years and peaks in the middle years. In 2005, 17 per cent of Australians presenting to a GP did so for arthritis with osteoarthritis the most common complaint (56). Back complaints were also a common cause of GP contact, accounting for about eight per cent of GP presentations in 2005 (56). Arthritis and back pain were often identified as co–morbid conditions when people presented to a GP for other chronic conditions (57).

Figure 13 presents the standardised hospital separation ratio for musculoskeletal disease for the period July 2006 to June 2008 for Vietnam–born Queenslanders compared to all Queenslanders. The ratio was about one quarter of the all Queensland ratio.

6.8 Communicable diseases

In Queensland, infectious and parasitic diseases account for a low level of the burden of disease. This is due to current levels of investment in communicable disease surveillance and control.

Prevention (including vaccination), screening, treatment, control and monitoring of a range of communicable diseases is undertaken in Queensland. Communicable diseases include:

- mumps
- measles
- rubella
- hepatitis
- pertussis
- tetanus
- influenza
- sexually transmissible diseases
- food borne illnesses
- vector (such as mosquito) borne diseases
- tuberculosis
- diseases transmitted by animals (zoonotic diseases).
Current data collection standards do not include country of birth as a mandatory field. Therefore it is not possible to report communicable diseases by country of birth. However, the National Hepatitis B Strategy 2010–13 identifies the Vietnamese population as a high risk group (25). Vietnam–born and China–born Australians are also identified as having the highest risk of liver cancer related to hepatitis compared to other Australians (26, 27).
7 Key implications for Queensland Health

The health picture of the Vietnam–born population of Queensland is incomplete because prevalence and incidence data are largely unavailable for most health conditions as are CALD population surveys on risk and protective factors. This population has lower hospitalisations for all causes, avoidable conditions, coronary heart disease, diabetes complications, chronic obstructive pulmonary disease (COPD), external causes (injury), musculoskeletal disease, asthma and all cancers (excluding non–melanocytic skin cancers). This could suggest a healthier population, but could also suggest low hospital service access.

Communicable disease data by country of birth is not collected in Queensland hospitals and this lack of data may mask a significant health issue in the Vietnamese Queensland population. This is in relation to hepatitis and tuberculosis:

- The National Hepatitis B Strategy identifies Vietnam–born as a high risk population. Vietnam–born and China–born Australians are identified as having the highest risk of cancer related to hepatitis compared to other Australians. Liver cancer, which can result from hepatitis B, was a leading cause of death in the Australian population born in South East Asia.

- Tuberculosis may be a health issue for the Vietnam–born Australian population, with higher hospitalisation rates among Asia-born immigrants reported at the national level as well as in New South Wales.

Risk factor information is extremely limited with small sample sizes in national surveys, or the lack of specific country of birth or ethnicity data making confident conclusions about risk difficult to reach.

Taking these findings together, it appears that the Vietnam–born population of Queensland is relatively healthy. Improvements in health status may best be focussed on hepatitis B and tuberculosis prevention and management.

Improved data collection, analysis, dissemination, and use of data on specific culturally and linguistically diverse populations in Queensland is required to enable the same level of analysis that can be applied to Australia–born Queenslanders’ health.
Appendix 1 Data and methodology

All data sources are cited. For further information contact the Director, Queensland Health Multicultural Services.

Unless otherwise indicated all data refer to the total population (0–85+ years).

Australian Bureau of Statistics (ABS) data are used with permission from the ABS. Copyright in ABS data vests with the Commonwealth of Australia.

Hospital separation data were derived from the Queensland Hospital Admitted Patient Data Collection, including private and public hospitals. All disease specific hospital separations were derived using the principal diagnosis of inpatient episodes of care. All separations were coded using the International Classification of Diseases version 10 Clinical Modification (ICD–10–CM) using standard code sets (58).

Death, cancer incidence and hospitalisation ratios for all diseases and conditions are reported as age standardised ratios. Standardisation minimises the differences in age composition among populations and facilitates comparisons among populations. In direct standardisation, the proportional age distribution of the standard population is applied to the ratio to obtain age standardised ratios which minimise or remove the distorting effects of age. In indirect standardisation, the age distribution of the standard population is used to obtain expected counts, total number of expected counts and subsequently standardised ratios (standardised mortality ratio or standardised separation ratio etc).
Reference list


