According to the latest WHO report on global tobacco use, smoking prevalence in Indonesia is among the highest in the world, with 46.8 per cent of males and 3.1 per cent of females aged 10 and over classified as being current smokers (WHO, 2011). This makes the total number of smokers 62.8 million with 40 per cent of these smokers being from the low economic class.

Despite the fact that smoking is a major public health problem in Indonesia, responsible for over 200,000 deaths annually (Barber et al., 2008), Indonesia is the only country in the Asia Pacific region that has not signed or ratified the World Health Organization’s (WHO) Framework Convention on Tobacco Control1.

Since early 2000, Indonesian policy on smoking has started to focus on health. In 2003 (Government Regulation no. 19), the Government implemented a regulation that the health impact of smoking has to be written on every cigarette package. The exact wording of the health warning is: “smoking can cause cancer, heart attack, impotency, and difficulties related to pregnancy and foetus (merokok dapat menyebabkan kanker, serangan jantung, impotensi dan gangguan kehamilan dan janin)”. Ten per cent of the front cigarette cover package must be allocated to the health warning.

In Jakarta, the Jakarta Governor’s Regulation no. 88/2010 banned smoking in offices and in public areas. The regulation was followed by other cities regulations restricting smoking areas in public spaces and limiting cigarette advertising. The Ministry of Finance through regulation no. 181/PMK.001/2009 increased tax on cigarette. This was welcome by advocacy groups that supported efforts to prevent smoking due to its impact on health. Currently the Indonesian People’s Representative Council (DPR) is working on a draft law (RUU-PDPTTK 2011) concerning the negative impact of tobacco.

Centre for Health Research, University of Indonesia has conducted several surveys on smoking. One survey in 2011 found the prevalence of smoking among those aged 20 years and above in Jakarta and Sukabumi was 68 per cent among males and 8 per cent among females (Centre for Health Research, University of Indonesia, 2001). A survey on the impact of the written health warning on smoking found 90 per cent of smokers read the warning but 42.5 per cent did not believe that the health problems would affect them. Over a quarter of smokers stated they had started thinking about quitting but 25.5 per cent did not care one way or the other (Centre for Health Research, University of Indonesia, 2007).

The purpose of this policy background paper is to inform the policy debate on tobacco control measures through an overview of recent statistics on smoking patterns in Indonesia.

Gendered pattern of smoking

As the figure below shows, there are strong gender differences in stated smoking prevalence in Indonesia, with the habit being relatively rare among women.

The 2010 Greater Jakarta Transition to Adulthood Survey (20-34 years old, N=3006) showed that sex and education contribute significantly to smoking behaviour. Males are more likely to smoke and those with higher education are less likely to smoke (See Table 1 and Table 2). Of those smoking on a daily basis, the range of cigarettes smoked is between 1 and 60 with a mean of 10.9 cigarettes and of the occasional smokers, the daily consumption is between 1 and 24, with a mean of 3.3 cigarettes a day.

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Table 1. Male smoking patterns (weighted row percentages), Jakarta, Tangerang and Bekasi, 2011

| Age group** | Non-smoker | Smoker | | | | | |
|-------------|------------|--------|---|---|---|---|
|             | Never smoked | Past smoker | Current smoker-daily | Current smoker-occasional | Total % | Total N |
| 20-24       | 26          | 8       | 55   | 11   | 100    | 471 |
| 25-29       | 31          | 8       | 51   | 9    | 100    | 386 |
| 30-34       | 21          | 6       | 66   | 7    | 100    | 383 |
| Highest education level** | | | | | | |
| Primary school or less | 22          | 5       | 60   | 14   | 100    | 110 |
| Junior high school | 15          | 5       | 72   | 8    | 100    | 189 |
| Senior high school | 24          | 7       | 60   | 9    | 100    | 692 |
| Certificate | 39          | 8       | 38   | 14   | 100    | 90  |
| Bachelors   | 40          | 13      | 40   | 7    | 100    | 158 |
| Total       | 26          | 7       | 57   | 9    | 100    | 1,240 |

Source: The 2010 Greater Jakarta Transition to Adulthood Survey
Qualitative research has highlighted that smoking is accepted as being part of ‘normal’ male behaviour, and even as a symbol of masculinity (Ng et al., 2007). The idea that smoking enhances a man’s masculinity is also promoted actively in tobacco advertisements (Nichter et al., 2009). While male smoking is widely accepted in Indonesian society, female smoking is thought to be culturally inappropriate behaviour (Barraclough, 1999; Ng et al., 2007). Barraclough (1999) notes that, while the cultural views against female smoking can be thought of as discriminatory or stigmatising, they have been responsible for the current low level of smoking prevalence among women and as such have been a major source of health protection.

Although there is insufficient longitudinal data from nationally representative surveys to know with certainty whether female smoking prevalence is increasing, there is some evidence that the rate of smoking among adolescent girls is on the rise (Aditama et al., 2006). There are suggestions that the attitude that female smoking is culturally inappropriate are now softening particularly in more affluent urban settings (Barraclough, 1999). A recent analysis of tobacco advertisements in Indonesia also highlighted that since 2002 a number of advertisements for cigarette brands have featured young upscale women and messages that promoted the idea that smoking was now acceptable for the ‘modern’ woman. Consistent with this, Table 2 shows that higher educated women were more likely to be smokers than those with lower education.

Even if current smoking prevalence among women is relatively low, women and children are still exposed to the health risks posed by passive smoking from males smoking in the home or other enclosed environments (Barraclough, 1999). According to the Global Youth Tobacco survey of 2006, 6 out of 10 students aged 13-15 have one or more parents who smoke, and 65 per cent live in homes where others smoke in their presence (WHO, 2009). At a national level, analysis of the National Socio-Economic Survey of 2001 estimates that just under 50 per cent of the total population is exposed to passive smoke due to family members smoking at home (Ministry of Health, 2004).

### Age at initiation and youth smoking

The age at initiation of smoking in Indonesia is relatively young. The Global Youth Tobacco survey of 2006, found that among students aged 13-15, 24 per cent of all boys and 4 per cent of girls smoked. Among those who had ever tried smoking, around 1 in 3 boys and 1 in 4 girls had tried smoking for the first time before age 10 (WHO, 2009). According to the survey, access to and availability of cigarettes is easy, with 6 out of 10 young smokers aged 13-15 year indicating that they buy cigarettes in stores. Over time the trend in age smoking initiation has been declining to younger and younger ages. The average age at smoking initiation among smokers aged 15 years and over fell from 18.8 in 1995 to 18.3 in 2001 (Ministry of Health, 2004).

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**Table 2. Female smoking patterns (weighted row percentages), Jakarta, Tangerang and Bekasi, 2011**

<table>
<thead>
<tr>
<th>Age group</th>
<th>Non-smoker</th>
<th>Smoker</th>
<th>Current smoker</th>
<th>Current smoker - occasional</th>
<th>Total %</th>
<th>Total N</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Never smoked</td>
<td>Past smoker</td>
<td>daily</td>
<td>occasional</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20-24</td>
<td>90</td>
<td>5</td>
<td>2</td>
<td>2</td>
<td>100</td>
<td>471</td>
</tr>
<tr>
<td>25-29</td>
<td>92</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>100</td>
<td>572</td>
</tr>
<tr>
<td>30-34</td>
<td>91</td>
<td>6</td>
<td>3</td>
<td>2</td>
<td>100</td>
<td>654</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Highest education level**</th>
<th>Non-smoker</th>
<th>Smoker</th>
<th>Current smoker</th>
<th>Current smoker - occasional</th>
<th>Total %</th>
<th>Total N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary school or less</td>
<td>97</td>
<td>2</td>
<td>2</td>
<td>0.2</td>
<td>100</td>
<td>297</td>
</tr>
<tr>
<td>Junior high school</td>
<td>93</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>100</td>
<td>318</td>
</tr>
<tr>
<td>Senior high school</td>
<td>89</td>
<td>6</td>
<td>3</td>
<td>2</td>
<td>100</td>
<td>773</td>
</tr>
<tr>
<td>Certificate</td>
<td>92</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>100</td>
<td>169</td>
</tr>
<tr>
<td>Bachelors</td>
<td>86</td>
<td>6</td>
<td>5</td>
<td>2</td>
<td>100</td>
<td>195</td>
</tr>
</tbody>
</table>

**Total** | 91 | 5 | 3 | 2 | 100 | 1,753 |

*Source: The 2010 Greater Jakarta Transition to Adulthood Survey*
Young people who start to smoke may pick up a lifelong habit without properly understanding the health consequences of their behaviour. While the harmful effects of smoking are taught in schools there are still misconceptions about the dangers of smoking. For example, in a study of Javanese boys aged 13 to 17, Ng, Weinehall and Öhman (2007) found that while the boys could repeat the health warnings on cigarette packets, they also claimed that smoking just one to two packets a day was not harmful. They had no concepts of the nature of the risks or the long term workings of the dangers.

Consequences of smoking for society and individuals

Smoking has far reaching negative health and economic consequences for society and individuals. It is well known that tobacco is a major cause of death, killing up to half of all life time smokers (WHO, 2011). The healthcare costs attributed to tobacco-related illnesses are estimated to amount to 11 trillion IDR each year or 1.2 billion USD (Barber et al., 2008). At the individual level, smoking also poses a major economic cost. According to data from the 2005 SUSENAS, in households with smokers, 11.5 per cent of total monthly household expenditure is diverted to tobacco spending (Barber, et al., 2008). In poor families, the percentage of the household budget spent on tobacco is even larger.

Strategies for controlling tobacco

"Tobacco control in Indonesia will likely not move forward until the government evaluates and strengthens existing laws, considers passing new strong laws, and develops protocols for enforcing all laws. The Indonesian Government also should strongly consider accession to the WHO FCTC." (Aditama et al., 2006: 2). A range of policies are available to governments that wish to control tobacco use, including policies that influence the demand side and the supply side. Below are some of the policies available, many of which have already been identified by the Ministry of Health (2004).

Increasing Prices and Taxes

Increasing tobacco prices through higher taxation is thought to be one of the most effective tools to control the overall tobacco consumption (Barber et al., 2008). “Tobacco taxation forms a stable source of government spur a decline in smoking rates revenue, contributing 5.7 percent of Indonesia’s total government revenue in 2007. Given that tobacco prices and taxes are low, substantial potential exists for greater revenue generation” (Barber et al., 2008: 13). Furthermore since price elasticity of demand among youth is considerably greater than elasticity among adults, this means that youth are much more likely to quit or reduce tobacco consumption in response to an increase in price.

Public Awareness, Education, and Cessation Programs

Increased public awareness programs are important because they allow smokers to make informed choices of the full costs of smoking. Despite the well established link between smoking and lung cancer and other diseases, many smokers remain unaware of the dangers of smoking to themselves as well as to people around them who are exposed to second hand smoke (Barber, 2008). Some examples of public awareness, education and cessation program are listed below:

- School education programs
- Public education programs and counter advertising
- Availability of a range of cessation programs to support smokers that would like to quit.

Packaging and labelling

At the moment cigarette packets include a textual warning on the dangers of smoking. However much more can be done to increase the effectiveness of health warnings on packets including:

- Government regulation on size and type of health warning
- Prohibition of words ‘mild’ and ‘low’ in descriptions of tobacco products
- Stronger health warnings (including photographs of diseased lungs, lips, and other body parts).

Overall Banning on Advertisement, Promotion and Sponsorship

- Banning free and discount coupons for tobacco products
• Comprehensive ban on sponsorship of youth events
• Comprehensive ban on all electronic and print media
• Ban on outdoor advertising
• Restrictions on tobacco industry promotion of tobacco products to children and youth
• Criminal prosecution for sale of tobacco products to children and youth (all person under the voting age)

In addition to above measures, other steps identified by the Ministry of Health include:
• Banning sale of single cigarette sticks
• Tighter restrictions on smoking in public places
• Stricter controls on cigarette smuggling.

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The 2010 Greater Jakarta Transition to Adulthood Study Description:

This study on transition to adulthood is being conducted in Jakarta, Bekasi and Tangerang. This study is the first comprehensive survey on transition to adulthood conducted in Indonesia. The study is funded by the Australian Research Council, WHO, ADSRI-ANU and the ARI-NUS. The sampling involved a two-stage cluster sample using the probability proportional to size (PPS) method. In the first stage, 60 Kelurahan (District) were selected using PPS. In the second stage, five counties (Rukun Tetangga) were chosen within each selected Kelurahan by systematic random sampling. The 300 selected RT were then censused and mapped. The census collected information on the age, sex, marital status and relationship to head of household of all household members. From the census, a listing of all eligible respondents (aged 20-34) living in the Rukun Tetangga was compiled. Eleven eligible persons were then selected by simple random sampling from the eligible county population. This resulted in a sample of 3,006 young adults.

Two survey instruments were employed. The first questionnaire administered by a trained interviewer covered all demographic aspects of the respondents, including their parents and spouse (if the respondent is married): education, work and migration histories; income and economic status; working conditions; living arrangements, relationships and marriage; number of children, family planning practices and abortion; physical-mental health related issues and happiness; smoking and drinking; religiosity and affiliation to religious and or political organizations; gender norms, values of children and world views. The second self-administered questionnaire covered issues relating to sexual practices and behaviour, safe sex practices, STDs/HIV/AIDS knowledge, access to reproductive health services, and drug use. After completion, the respondent sealed this questionnaire in an envelope before returning it to the interviewer. The study also includes 100 in-depth interviews with randomly selected respondents from the survey.

This study will produce a series of policy briefs and if funding is made possible will be continued as a longitudinal panel study following the livelihood, demographic and career aspects of the respondents over 10 years. The same respondents will be interviewed once every three years.