

Smoking prevention technology

Tobacco-related health problems have long been considered a serious issue, and have been tackled from many angles. In modern Japan, the introduction of certain technology is at the forefront of one area of the problem — tobacco-related disease prevention in underage smokers.

In 2004, with the aim of preventing tobacco-related health problems, Japan accepted the World Health Organisation's proposed WHO Framework Convention on Tobacco Control. The convention was similarly ratified by Australia. Since signing the WHO convention, activities in Japan to prevent damage to the health of the public have increased. Simultaneously, active efforts to tackle these problems have had a corresponding effect on underage smoking. In Japan, when smokers purchase cigarettes, they can buy them from shops such as tobacco stores and convenience stores, or alternatively, and more frequently, from vending machines. Cigarette vending machines are common in Japan, with the number of machines standing at approximately 420,000, as of July 2009¹. Japan is one of few countries in the world that sells cigarettes from vending machines. With approximately 25% of the total adult population smoking tobacco², they are a convenient way to purchase cigarettes. This is particularly possible in Japan, where society is relatively peaceful and the possibility of theft from vending machines is therefore remote. While the Government has been working to promote public awareness of tobacco-related health problems, as well as taking passive smokers into account, for the time being it is unlikely that these efforts will go to the extent of abolishing cigarette vending machines.

In order to prevent tobacco sales to underage smokers, shop salespeople have a responsibility to check the identification of customers who appear to be underage. For the same purpose, new technology has been introduced in vending machines since 2008. Previously, as a countermeasure to underage smoking, vending machines stopped vending automatically after a certain time of night. However, with a view to creating a more thorough system, efforts to restrict sales to youths have taken advantage of new technology.

One of these measures is the 'taspo' (tobacco passport). Approximately the size of a credit card, the taspo acts as an identification card, carrying details such as the owner's name and date of birth. When buying tobacco, the taspo cardholder touches the card to a sensor on the vending machine. The machine reads the card and, only after confirming the age of the cardholder, allows the purchase. If someone over the legal smoking age is registered as living at a certain



Nationally wide-spread taspo stations offer various services on taspo card application.



At almost all time, taspo card is necessary when buying cigarettes from the vending machine.

address, they may apply for a taspo by mail. Alternatively, they can apply at one of the nationwide taspo stations that support applications.

By October 2009, one year after the introduction of taspo, approximately 9.5 million taspo cards had been issued³. Additionally, at the end of July 2009, an estimated 98% of cigarette vending machines have been modified to include taspo reading capabilities⁴. Aside from taspo, equivalent age verification technology using a driver's licence is also employed. Furthermore, vending machines equipped with facial age verification technology that measures the buyer's eye size and alignment, bone structure, and other features to estimate the customer's age are also being advanced. With these kinds of measures, the effort to prevent young people from smoking is reinforced.

While an important factor in dealing with the smoking issue is to change the way each smoker thinks about his habit, the introduction of this technology has proved useful in Japan. In the future, campaigns to restrict smoking will undoubtedly be assisted by the unique innovation and technology of Japan.

1, 3, 4 Information Courtesy of Tobacco Institute of Japan
2 Japan Tobacco Inc.(JT), *Japan Smoking Rate Survey*, 2009