

Focus China



HYGIENE MATTERS REPORT 2010
IN-DEPTH ANALYSIS



Focus China

This is a summary and in-depth analysis of the Chinese results of the SCA Hygiene Matters Report 2010. The four main themes in the report, and in this analysis, are:

Everyday life in the wake of the pandemic - page 4

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Societies' response to hygiene challenges - page 8

Hygiene and health information of tomorrow - page 10

About the report

Each year SCA conducts an international web-based survey of people's attitudes and behaviours regarding hygiene and health and how these relate to other current issues and trends. This most recent survey is about how globalization is influencing health and hygiene around the world, and focuses on the issues of pandemics, urbanization, the school environment and information gathering.

The survey was initiated by SCA and carried out by United Minds, a business intelligence consulting firm, with the assistance of Cint, a research company. The survey encompassed nine countries: Australia, China, France, Germany, Mexico, China, Sweden, the United Kingdom and the United States. Approximately 500 people were surveyed in each country to achieve a nationally representative distribution between men and women and between different age categories. The survey compiled answers from 5,084 respondents and was conducted in September 2009.

Please note that the Internet penetration varies between the various countries surveyed. Also, there are differences within some countries, e.g. between urban and rural areas.

Improved hygiene and personal care standards for everyone!

SCA wants to make a difference. As the world's third largest hygiene company, we have unique insights into consumers' wants and needs. By raising the awareness surrounding hygiene and personal care issues on a global basis among decision makers, experts and the general public, we hope to create a better-informed public debate – and improved standards. The Hygiene Matters report 2010 helps us do just that.

Hygiene affects us all – all the time, no matter where we live. Many of us are privileged enough to be able to take high hygiene and personal-care standards for granted – while a much larger number of people around the world still lack the many everyday benefits that products and solutions such as ours bring. But despite higher standards in industrialized countries, people's health is affected by inadequate hygiene procedures there as well.

To shed more light on all this, the Hygiene Matters report looks into people's attitudes concerning hygiene and personal care in nine countries. Globalization makes life and business both more challenging and less complex. On one hand, viruses such as swine flu can spread more easily in today's interconnected world. Here, hygiene in public spaces plays a crucial role, an area addressed in this year's report.

On the other hand, as a result of the size of the product portfolio and the insight-innovation capabilities a global company like SCA has access to, globalization enables us to develop and distribute our hygiene and personal-care products and solutions in close to 100 countries.

For SCA, Hygiene Matters is much more than a report published annually – it is a never-ending series of thought and work processes. To make you become an even more active participant in the on-going development in our focus areas, we now also welcome you to www.hygienematters.com.



Jan Johansson
President and CEO, SCA Group

Everyday life in the wake of the pandemic

In 2009, humanity was affected by a pandemic for the first time in more than 40 years. The reason for this was a new mutation of the influenza virus (H1N1), better known as swine flu.

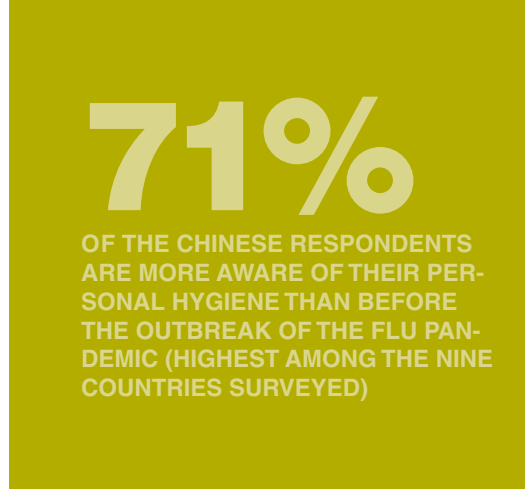
SCA's international survey of hygiene attitudes and behaviours shows in a number of ways how this dramatic situation affected not only the people of Mexico, where the first cases were reported, but also the rest of the world, including China.

Increased hygiene awareness

The effects of the flu pandemic and the hygiene recommendations issued changed people's behavior and increased the demand for improved hygiene in public environments. SCA's international survey shows that on average three quarters of all people in the countries surveyed – from Mexico to China to Australia – now think about hygiene more often and on more occasions. Among Chinese, personal hygiene - as supposed to the hygiene of other people and in public environments - is the area that people are more aware of now compared to before the outbreak of the epidemic.

Furthermore, the fact that people's own hygiene and that of others has begun to be questioned shows that more people have realized that it is we humans that carry bacteria and viruses and who either directly or indirectly spread infections.

Overall, concern has increased about public toilets. They are symbols of public health and hygiene so it is in this area that peoples' concerns about hygiene have increased the most. Similarly, awareness has increased about other public places that experience a large flow of people.



WORRY CHANGES BEHAVIORS
SCA HYGIENE REPORT 2010

CHINA

1. Nine out of ten Chinese now wash their hands more frequently
2. Seven out of ten Chinese clean their homes more often
3. Six out of ten Chinese shower/wash more often
4. Five out of ten Chinese use more antibacterial soap and fluids more often

TOTAL NINE COUNTRIES

1. Eight out of ten people now wash their hands more frequently
2. Three out of ten people clean their homes more often
3. Three out of ten people shower/wash more often
4. Five out of ten people use more antibacterial soap and fluids more often

** Percentage of people who have made changes to their personal hygiene habits*

93%

OF THE CHINESE RESPONDENTS THINK ABOUT HYGIENE MORE OFTEN AND AT MORE OCCASIONS TODAY THAN BEFORE THE OUTBREAK OF THE FLU PANDEMIC

Worry changes behaviors

The consequences of the influenza situation have differed from country to country. SCA's international survey shows that hygiene awareness has increased among Chinese. For instance, nine out of ten Chinese think about hygiene more often and at more occasions today than before the flu pandemic.

The survey also shows that in general, women and highly educated people are more likely to have reacted to the flu pandemic, resulting in greater awareness and changes in behavior. More highly educated respondents also appear to be more concerned about hygiene in general – both personal hygiene and that of others – and they have also reduced social activities and travel.

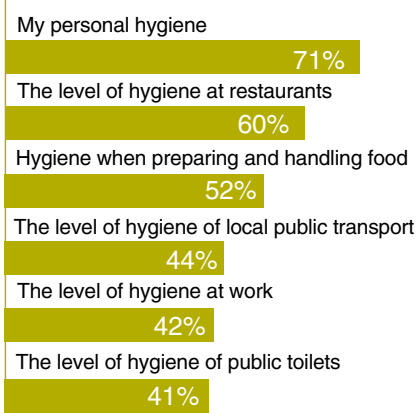
Overall, it is age that appears to be the factor that has the greatest effect on individuals' level of concern. Young people are more concerned than old people, while older people are concerned less and on fewer occasions, and are less likely to change their behaviors.

Have you changed how you travel lately?

Swine flu has also affected travel according to the survey, and the long-term effects for the tourist industry remain to be seen. It is quite likely that we will see a greater focus on hygiene and health issues from travel companies in order to assure consumers of the quality of their services.

The flu pandemic has raised awareness of hygiene around the world. Areas where people's awareness has increased the most

CHINESE RESPONDENTS



Question: In which areas would you say that you are now more aware of hygiene issues than before the outbreak of the epidemic?

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CHINESE RESPONDENTS

The 2009 flu pandemic had the following affects on travel among the Chinese:

- 50 % are no longer traveling to certain places
- 39 % are traveling less now than before
- 30 % of the Chinese do not travel abroad following the flu outbreak compared with before
- 30 % are traveling less by certain forms of transport

Hygiene in the school environment

Most people would agree that the school environment is important for children's learning and health. Their social lives and everyday reality is affected by the environment in which they spend many of their waking hours. The sanitation and hygiene levels in schools are therefore important. For instance, inadequate toilet standards is a problem that could have significant consequences. SCA's international survey shows that there is a great demand for improvement.

Impacts children's learning capacity

A number of studies have shown that hygiene in schools is important for both children's health and how happy they are at school, which consequently affects children's ability to learn and develop. This is also indicated by the answers given by people from all over the world in SCA's international survey. In China, 56 percent of respondents agree that poor standards of hygiene at schools affect children's well-being, thus impacting their learning capacity negatively.

School's responsibility

Nine out of ten Chinese believe that one of a schools' most important areas of responsibility is to ensure that a good standard of hygiene is maintained. This view is deeply embedded in certain countries. The survey shows that many people believe that schools and nurseries still have a lot to do to achieve an acceptable level of hygiene. Almost half (46 percent) of the respondents in the nine countries believe, for example, that the hygiene standards of school toilets are too low. In China the figure is 56 percent.

The issue of schools is also one of the top priorities in terms of those areas where respondents in the countries surveyed think hygiene needs to be improved most. After public toilets, no other area is considered



86%

OF THE CHINESE RESPONDENTS THINK THAT ONE OF SCHOOLS' MOST IMPORTANT AREAS OF RESPONSIBILITY IS TO MAINTAIN A GOOD STANDARD OF HYGIENE



56%

OF THE CHINESE RESPONDENTS THINK THAT POOR STANDARDS OF HYGIENE AT SCHOOLS IMPACT CHILDREN'S ABILITY TO ACHIEVE THEIR POTENTIAL

to be in more need of improvements in hygiene standards. However, this issue is related to how much children learn about hygiene. About 70 percent of Chinese agree that children do not learn enough about the importance of hygiene at daycare and school.

Avoiding cross contamination

Hygiene in schools and nurseries is not just a matter of children’s health. A child that gets ill at school often passes the infection on to siblings and parents, leading to a chain reaction. Parents of sick children will often then go to work, where they can infect colleagues. SCA’s survey shows that this is something that most people understand.

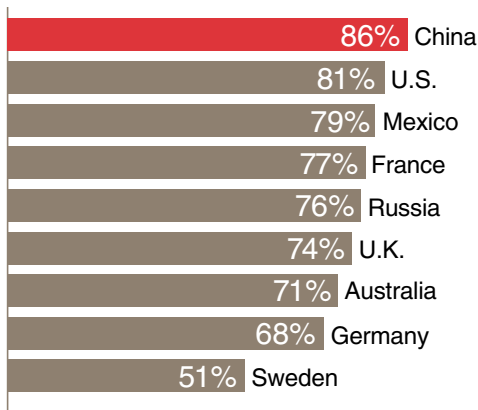
People in countries who have in recent years been affected by, for example, severe influenza viruses, such as China and Mexico, show a higher level of concern than

people in other countries. This sentiment is mirrored in the survey results. For example, parents in China and Mexico are more likely to keep their children home from daycare and school when the ‘flu is going around (China - 30 percent, Mexico - 32 percent).

70%

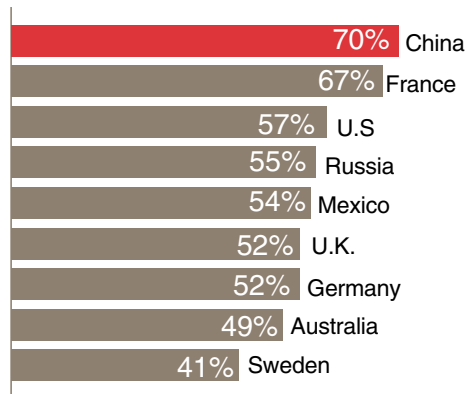
OF THE CHINESE RESPONDENTS THINK THAT CHILDREN DO NOT LEARN ENOUGH ABOUT THE IMPORTANCE OF HYGIENE AT DAYCARE AND SCHOOL

One of schools’ most important areas of responsibility is to maintain a high hygiene standard



Question: Which of the following statements do you agree with?
 One of the most important responsibilities of a school/daycare centre is to maintain high standards of hygiene.

Children and young people do not learn enough about the importance of hygiene and health at school



Question: Which of the following statements do you agree with?
 Children and young people do not learn enough about the importance of hygiene and health at daycare and school.

NOTE: ^{1,2)} You’re in Trouble if You Want to Go to the Loo – a report on the school work environment. Sweden’s Child Ombudsman, BR2006:01 (2006).
³⁾ Bog Standard Campaign - better school toilets for pupils. Bog Standard (2009).

Societies' response to hygiene challenges

Hygiene is becoming an increasingly important issue in our societies, both on a political and personal level. SCA's international survey shows that improvements that political representatives take responsibility for, and what effects this may have for public health, are important issues and something that people around the world want elected decision makers to deal with.

Major improvement programs in China

Currently, 2.6 billion people globally lack access to adequate sanitation. Diseases resulting from poor sanitation and hygiene may have serious consequences. Within this context, China is making improvements on several fronts. One focus area is the improved access to sanitation for about 460 million rural Chinese people with inadequate access to sanitation. The Central Government plans to increase sanitation coverage to 65 percent by 2010, and to 75 percent by 2015. This major improvement program involves the construction of millions of toilets every year.⁴

In addition, in 2009 the Chinese government rolled out a 123 billion dollar health reform in order to restructure the country's healthcare system. This reform promises to bring 90 percent of China's 1.3 billion people under a primary medical insurance scheme that provides a better public health system, "basic medicines", networks of improved local clinics, and better services in public hospitals.⁵

Increased urbanization – greater demands for improvements

By the year 2050 it is estimated that 75 percent of the world's population will live in cities⁶. Even by 2015 the UN estimates that the number of mega

NOTE: ⁴ China: Rising to meet the Sanitation Demand of 460 million rural people, IRC (2009).
⁵ Paddock, Catharine, China plans 120 Billion Dollar Health Reform by 2011. Medical News Today (2009).
⁶ The Endless City – The Urban Age Project by LSE's and Deutsche Bank's Alfred Herrhausen Society (2007).
⁷ Th. Brinkhoff: "The Principal Agglomerations of the World", (2009-02-27).



99%

OF THE CHINESE RESPONDENTS WOULD LIKE TO HAVE CLEARER AND STRICTER HYGIENE RULES IN DENSELY POPULATED AREAS



FOCUS CHINA

cities – cities with over 10 million inhabitants (such as Mexico City [22.9 million] Beijing [13.2], Shanghai [17.9] and Guangzhou [15.3] in China)⁷ – in the world will have risen from 23 to 36. This will further increase the pressure on some of the Earth’s most populated areas.

Hygiene in big cities

Hygiene in cities is an issue that concerns participants in SCA’s international survey. Should there be tougher regulations and laws about hygiene in cities, where so many people live in such close proximity? Definitely, most people (87 percent worldwide) agree that some form of special regulations are necessary. In China, this figure is as high as 99 percent.

Hygiene and politics

As with many other political issues, there is an ongoing debate about where resources should be used most effectively. An analysis of the answers to this year’s international survey by SCA shows that the majority of people want to see hygiene higher up the political agenda. Six out of ten believe that politicians and the media should pay more attention to hygiene issues.

The greatest pressure is on authorities in China and Mexico, where 85 and 75 percent of people, respectively, want the issues of hygiene to be higher up the political agenda. Possibly, these results reflect the fact

that these two countries have had recent experiences with severe influenza viruses.

Whose responsibility – the society or the individual?

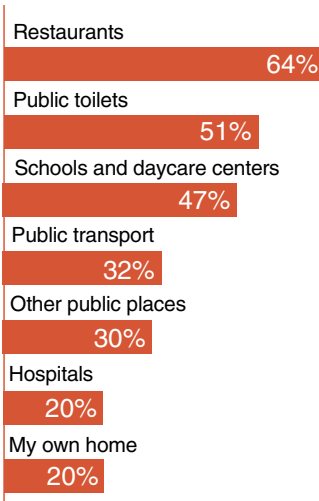
Where should the greatest responsibility lie with regard to hygiene – with society and public authorities or with private individuals?

There is a notable difference in attitudes among countries. On one hand, there are those who believe in the ability and responsibility of individuals to improve hygiene standards. On the other hand, there are those who believe that rules and laws are the best means of changing and improving hygiene standards in society. In China, Mexico and Russia, the majority of people would like to see more and clearer legislation and rules on the issue of hygiene (in densely populated areas), as this is considered to be the most effective way to bring about change.

In most countries, the factor deemed most important is improving standards of hygiene in public toilets. In China, more than 50 percent agree with that. However, Chinese believe that improving the hygiene standard in restaurants is even more important (64 percent).

Areas of society where standards of hygiene need to be improved

CHINESE RESPONDENTS

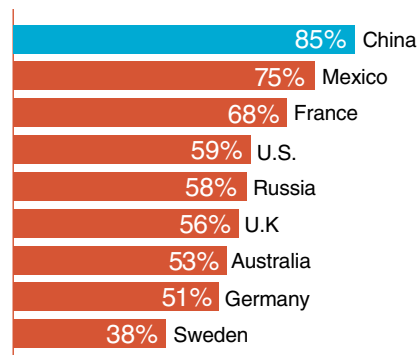


Question: In which areas of society do standards of hygiene mainly need to be improved?

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Countries where politicians face most pressure to make the issue of hygiene more of a priority



Question: Do you think that hygiene issues should be given greater priority in society, e.g. by politicians and the media?

Hygiene and health information of tomorrow

The Internet is expanding people's access to hygiene and health information, and the number of lifestyle-related websites, providing information about physical as well as mental wellness, increases rapidly. This makes people better informed, while it at the same time also opens up for misinterpretation. This development could over time change the relationship between patients and healthcare providers - as a result of how you as a patient turn to the Internet both before and after contact with health providers.

Internet's effect on hygiene and health information

It is no exaggeration to say that the Internet, and the changes in behavior that this has generated among recipients of healthcare, has led to a paradigm shift. For instance, the study shows that a substantial majority (70 percent) of the Chinese respondents view the Internet as their first-hand choice for information search, when finding out more about hygiene and health-related issues.

Doctors are encountering increasingly informed patients. Of those questioned in SCA's international survey, 28 percent have found information on the Internet before visiting the doctor; among Chinese it is 46 percent. Overall, some 15 percent had even established their own diagnosis before seeking medical treatment; among Chinese it is 28 percent. This puts new demands on doctors.

Also, doctors can be fairly certain that the advice they give will be checked and compared several times on the Internet after the patient's visit, since the survey shows that almost half (44 percent) of those questioned have used the Internet to check and add to the information they have received from their doctor's visit. Among Chinese it is 64 percent.

Skepticism over the quality online

Globally, the Internet is a colossal source of information and it is often difficult to know where to look for the information required. And that the



64%

OF THE CHINESE RESPONDENTS HAVE USED THE INTERNET TO SUPPLEMENT THE INFORMATION RECEIVED FROM HEALTH CARE PROVIDERS



information is absolutely accurate. People need to watch out for errors, disinformation and misunderstandings⁸.

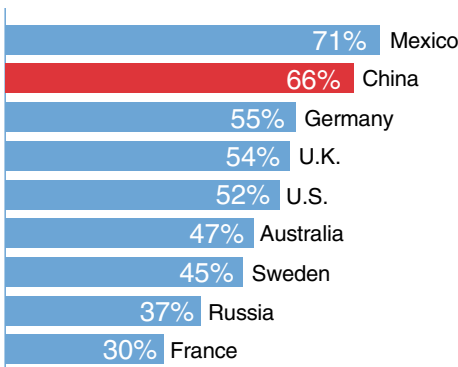
More information not always a good thing

The increased flow of information also has another downside. With more and more online sources of information available to the public, and with non-experts searching for information about sometimes complex issues relating to hygiene and health, it can often be difficult to sort the information and judge the quality of its sources. SCA's international survey shows that over one fifth (22 percent) of those surveyed think that it is actually more difficult now to decide what is right and wrong from the information available. In China, this figure is 19 percent.

“As a source of information the Internet has been something of a double-edged sword during a health crisis such as swine flu. It is encouraging to see that people all over the world want to become informed and educate themselves about the symptoms and treatment, but the Internet should never replace treatment by trained healthcare staff.”

Dr. Allison Aiello, expert on infectious diseases, Assistant Professor of Epidemiology at the University of Michigan School of Public Health, and member of the Tork Green Hygiene Council

Countries where the availability of Internet-based information about hygiene and health has resulted in the largest positive change



Question: There are now more sources of information than ever about hygiene, health and illnesses. How are you affected by this?

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If you need information about hygiene issues (your personal hygiene, health issues, etc.), what is your first port of call?

CHINESE RESPONDENTS

- 1. Official sources on the Internet (healthcare services websites, etc) 47 %
- 2. Other sources on the Internet (blogs, forums, other websites, etc.) 23 %
- 3. TV & radio 13 %
- 4. Healthcare providers 8 %
- 5. Magazines and newspapers 5 %
- 6. Family and friends 3 %
- 7. Books 1 %

NOTE: ⁸ Deshpande, Amol and R. Jadad, Alejandro, Trying to measure the Quality of Health Information on the Internet: Is It Time to Move On? The Journal of Rheumatology 2009; 36:1 (2009).

Hygiene Matters Report 2010: Focus China

Through the Hygiene Matters series of reports, SCA, the world's third-largest hygiene company, aims to increase awareness of hygiene and health issues among decision makers, experts and the general public. At the same time, the report contributes to a more informed public debate that strengthens the possibility of an improved standard of hygiene and health for more people around the world.

This in-depth analysis of the Chinese results of the 2010 Hygiene Matters Report, as one of nine countries surveyed, shows that:

- 91 % of Chinese respondents wash their hands more frequently now than before the outbreak of the so-called swine-flu pandemic
- 93 % of Chinese respondents think about hygiene more often and at more occasions today than before the outbreak of the flu pandemic
- 86 % of Chinese respondents think that one of schools' most important areas of responsibility is to maintain a good standard of hygiene
- 99 % of Chinese respondents would like to have clearer and stricter hygiene rules in densely populated areas

SCA's hygiene brands on the Chinese market are TENA, Tork and Tempo. Also, Vinda is SCA's joint-venture partner in China. Vinda is one of the largest players in China's tissue market.



SCA is a global hygiene and paper company that develops and produces personal-care products, tissue, packaging solutions, publication papers and solid-wood products. Sales are conducted in some 100 countries. SCA has many well-known brands, including the global brands TENA and Tork. Sales in 2009 amounted to SEK 111 billion (EUR 10.5 billion). SCA has approximately 50,000 employees.



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