



**INFECTION PREVENTION
IN THE WORKPLACE**

A Manager's Guide

FOREWARD

This guide is designed to help managers and those responsible for health and safety in the workplace, to implement effective workplace infection control programs. These programs help to reduce the financial impact that infectious diseases such as the Influenza (flu) can have.

Every year, up to **7.5 million Canadians will get the flu² and become sick**. The direct cost of all workplace absenteeism is estimated at 2.4% of gross annual payroll⁶. In 2012, the Conference Board of Canada estimated this cost at \$16.6 billion to the Canadian economy⁶.

Indirect costs include lost productivity, replacement workers and a reduction in customer satisfaction⁵. Combining both direct and indirect costs significantly increases the financial impact of absenteeism on Canadian businesses.

The Centers for Disease Control and Prevention recommend flu vaccine as the “first and most important step in protecting against flu viruses”⁴. **Even though the flu vaccine is readily available, 60% of the population is not protected³**.

83% of working adults continue to work while sick². **This results in a 5%-10% decline in productivity⁷** and increases the spread of infection.

According to health authorities, **up to 80% of germs are spread by our hands** and transmission can happen either through personal contact or by touching contaminated surfaces. As a result, presenteeism has adverse effects beyond productivity as only 34% of males and 56% of females wash their hands⁸.

Employers can effectively reduce absenteeism and improve the presenteeism challenge by implementing an infection control program that includes hand hygiene best practice and educational support.

Educational tools to help minimize business disruption, protect employee health, limit impact on the community and reduce overall flu-associated costs are available through various health authorities. Skin care programs that include cleansing washroom products, alcohol hand sanitizers, moisturizing creams along with educational and audit support are recommended.

The savings associated with infection prevention programs can be significant for Canadian businesses and should become an essential part of a proactive strategy.

CONTENTS

02

FORWARD

03

CONTENTS

04

INTRODUCTION

05

PROBLEM

06-07

SOLUTION

08-09

RECOMMENDATIONS

10-12

A SKIN CARE SYSTEM

13

CONCLUSION

14

REFERENCES

15

ABOUT SC JOHNSON
PROFESSIONAL™

INTRODUCTION

Influenza is ranked among the top 10 infectious diseases affecting Canadians¹. Every year, up to 7.5 million Canadians will get the flu² and become sick.

The Centers for Disease Control and Prevention (CDC) recommends vaccination as the most important step in protecting against the flu. Despite this fact, 60% of the population on average is not protected³.

According to one recent study, 83% of working adults will continue to work while sick². The flu virus spreads to other employees by airborne droplets inhaled through the lungs or from touching contaminated objects⁴.

As a result, seasonal flu has a significant impact on employers and the general public. Direct medical costs, for example, are estimated in the US at \$10.4 billion annually and \$16.3 billion in indirect costs⁵. The economic cost of absenteeism and the impact of presenteeism on the workplace is the problem. The solution is to improve hand hygiene compliance through education. Additional recommendations are made to implement an infection control in the workplace program to reduce overall costs and improve employee health.

Recommendations made in this guide speak directly to typical commercial workplaces such as offices and exclude health care and food environments. This guide does not include recommended standards to reduce hospital-acquired infections and foodborne illness.



PROBLEM

Seasonal influenza is a respiratory infection that starts in late fall and runs through early spring. Influenza is most active during winter months. **Typical symptoms will include headaches, chills, cough, fever, loss of appetite, fatigue, sneezing, and throat irritation.** Most people recover from the flu within a week to ten days, but seniors, children or adults (with other illnesses) are at greater risk of additional complications.

People can spread the flu virus one day before getting sick and five to seven days after. As a result, most people pass the flu to someone else before they even know they are sick, as well as during the illness period. According to the CDC, **“Most experts think the flu viruses are spread mainly by droplets made when people with flu cough, sneeze or talk”**⁴. The virus can enter the body through the mouth, nose or lungs.

COST OF ABSENTEEISM

Absenteeism as a result of the flu has a significant impact on productivity and can affect both large and small companies. The direct cost of absenteeism is estimated at 2.4% of gross annual payroll⁶ based on the salary associated with the number of days lost.

In 2012, the Conference Board of Canada estimated this cost at \$16.6 billion to the Canadian economy⁶. Indirect costs are difficult to measure and can include lost productivity, replacement workers and a reduction in customer satisfaction⁶. Combining both direct and indirect costs significantly increases the financial impact of absenteeism.

VACCINATION CHALLENGES

The CDC recommends a flu vaccine as the “first and most important step in protecting against flu viruses”⁴. There are many different strains of the virus every year and the flu vaccine, “protects against the three viruses that research indicates will be most common”⁴. Even though the flu vaccine is readily available, it is estimated that 60% of the population is not protected³.

EACH INFECTED EMPLOYEE IS ESTIMATED TO MISS UP TO SIX DAYS OF WORK AND MAY REQUIRE AS MUCH AS TWO WEEKS TO MAKE A FULL RECOVERY¹¹.

IMPACT OF PRESENTEEISM

Presenteeism also has adverse effects beyond just productivity as only 34% of males and 56% of females wash their hands⁸. The flu virus easily spreads to co-workers through contaminated hands and surfaces. Surfaces include common everyday items such as a door handle, stair handrail or elevator button.

In a study of day care centres and domestic homes, influenza was measured at 53% of the day care center surfaces and 59% of the home surfaces¹⁰. Telephone receivers were found to be the most contaminated (80%) in the study, and other surfaces included refrigerators, skin faucets, light switches, microwaves, TV remotes, and door handles.

83% OF WORKING ADULTS WILL CONTINUE TO WORK WHILE SICK². IF EMPLOYEES COME TO WORK SICK, THEIR PRODUCTIVITY IS ESTIMATED TO DECLINE BY 5%-10%⁷.



**HANDS PLAY AN IMPORTANT
ROLE IN THE TRANSFER OF
INFECTIOUS DISEASES IN OUR
PUBLIC AND PRIVATE LIVES.**

SOLUTION

The World Health Organization (WHO) advised our hands spread up to 80% of germs. Infectious disease transmission happens through personal contact or by touching contaminated surfaces.

In addition to flu vaccination, the CDC recommends that people take everyday precautions to help prevent the spread of germs such as washing hands with soap and water for at least 20-seconds. Additionally, an alcohol-based hand sanitizer should be used when soap and water are not available or to improve efficacy.

Workplace, skin care programs should include cleansing washroom products, alcohol hand sanitizers, moisturizing creams along with educational and audit support. One study that assessed the impact of hand hygiene education along with alcohol hand sanitizer showed students missed 43% less school/work days, as a result¹².

TABLE 1: FACTORS INFLUENCING COMPLIANCE WITH HAND HYGIENE

MATERIAL FACTORS



Convenient and accessible hand hygiene facilities



Products that do not cause skin irritation



Products that are esthetically acceptable

BEHAVIOR & SOCIAL FACTORS



Perceived danger



Perceived benefit



Concern for third party opinion (i.e. peer pressure)



Gender



Educational background

SOLUTION

IMPROVED HAND HYGIENE COMPLIANCE

Hand hygiene compliance in the administrative workplace is typically very low compared to healthcare and food safety environments. Worldwide studies show that hands are washed with soap and water only 20% of the time¹³.

Alcohol hand sanitizers have been proven to show a “reducing influence on the number of episodes of illness”¹⁴. Sanitizers are a proven cost efficient method as part of an infection control program.

In order to improve hand hygiene compliance, it is essential to understand what motivates behavior as this may vary from person to person. Table 1 outlines the main factors that influence hand hygiene compliance.

HAND HYGIENE EDUCATION

According to the Provincial Infectious Diseases Advisory Committee (PIDAC), education and awareness is an effective hand hygiene motivator. Educational posters help remind employees about hand hygiene importance and reinforce proper technique to improve efficacy.

Additionally, an infection control program should include both hand washing and alcohol-based hand sanitizers conveniently located for easy access.

Dry, rough and cracked skin is difficult to clean and to sanitize and damaged skin more likely harbors increased numbers of pathogen¹⁵.

In addition people with dry skin tend to avoid hand washing as they fear it will cause the skin to dry out even more. Hand sanitizers may cause a burning sensation on cracked skin. Therefore restorative/moisturizing creams should also be used, especially during winter months to help prevent dry skin and encourage hand hygiene compliance.



There are a number of tools for employers to help promote infection prevention during flu season. Planning helps to minimize disruption to business, protect employee health and limit negative community impact³.

Toolkits typically include tips to **encourage vaccination, hand hygiene best practice, guidelines to help identify the flu and everyday precautions to prevent the spread of germs.**



RECOMMENDATIONS

Employee engagement can be improved through education, provisions for appropriate hand hygiene facilities and by addressing any behavioral challenges that may affect hand hygiene compliance.

Employers can utilize educational tools to help minimize business disruption, protect employee health and limit negative impact on the community. Available on the CDC website, (<http://www.cdc.gov/flu/business/index.htm>) these toolkits include tips to encourage vaccination, prevent the spread of infection, along with hand hygiene best practice guidelines.

Additionally, skin care programs that include cleansing washroom products, alcohol hand sanitizers, moisturizing creams as well as educational and audit support are recommended.

EMPLOYERS SHOULD:

- ✓ Promote general hygiene and hand hygiene in particular, in the workplace.
- ✓ Position hand sanitizers at entry points (e.g. reception) into the workplace for employees, customers and visitors and meeting rooms.
- ✓ Provide appropriate facilities for hand washing in washrooms and hand sanitizing away from washrooms.
- ✓ Give clear advice to employees about what to do if they have flu like symptoms.
- ✓ Give clear advice to employees who have children or other family members they care for, who may have influenza (including H1N1 swine flu).
- ✓ Set up free vaccine clinics for employees.
- ✓ Set up pandemic action teams.
- ✓ Create business contingency plans.

RECOMMENDATIONS

EMPLOYEES SHOULD:

Keep up to date with public health advice:



Check websites such as the CDC, WHO and Public Health Agency of Canada as they will be updated regularly as information becomes available.



Ask your employer for advice to help prevent the spread of germs in your workplace.

Take everyday actions to stay healthy



Sneeze or cough in to sleeve/elbow, or cover your nose and mouth with a tissue. Throw the tissue in the garbage after you use it.



Wash your hands often with soap and water, especially after you cough or sneeze and when visiting the bathroom.



Alcohol-based hand sanitizers should be used where there is no convenient access to hand washing facilities e.g. at your desk or work station and when on-the-move.



Avoid touching your eyes, nose or mouth to help prevent the spread of germs.



Try to avoid close contact with sick people.



Follow public health advice regarding school closures, avoiding crowds and other social distancing measures.



Health authorities recommend you stay at home if you are sick for 7 days after your symptoms begin or until you have been symptom-free for 24 hours, whichever is longer. This is to avoid infecting others and spreading the virus further.



A SKIN CARE SYSTEM

To protect and care for skin in a commercial environment a specific skin care system should be adopted which comprises a complementary range of skin care products and support activities to overcome obstacles and encourage employee motivation to comply with a rigorous skin safety philosophy.

3 STEP SKIN CARE PRODUCT SYSTEM



CLEANSE

Appropriate, mild hand cleansers to meet the specific cleaning needs and preferences of each workplace and lavatory environment.



SANITIZE

Products that can be used without water to kill germs and provide a higher level of hand hygiene. Ideal for use outside the washroom e.g. at the work point, reception area, cafeterias and public areas.



RESTORE

After-work reconditioning creams to help maintain healthy skin and avoid dryness. Good skin condition is an important element in ensuring good hand hygiene practice.



A SKIN CARE MANAGEMENT SYSTEM WILL BE **SPECIFIC TO EVERY COMPANY.**

A SKIN CARE SYSTEM

2 STEP SUPPORT ACTIVITIES



EDUCATE

The provision of education, training and awareness materials to encourage good hand hygiene practice.



AUDIT

Conducting 'pre and post' audits to help establish and maintain the effectiveness of the Deb Commercial Skin Safety Regimen.

A Skin Care Management System will be specific to every company. However, the principles can be applied across all business sectors and industries alike. The system takes into account a variety of factors looking at a complete, holistic approach to the effects on skin from the working environment.

Products should always be sourced from a reputable company who offer advice and guidance on the use of their products. The installation of specially designed, sealed cartridge dispensers for use with soaps, skin cleansers and creams is strongly recommended.

These dispensers provide the most hygienic skin care system, by reducing to a minimum the risk of cross-infection that can occur if a number of people extract the product from an open or communal container. In addition, dispensers ensure the correct amount of product is used, minimize waste and optimize cost in use; they can also be permanently sited where they are needed the most.

A SKIN CARE SYSTEM

It is important that products are not only effective (and supported with test data where appropriate) but that they are also pleasant to use, as this encourages compliance, a critical element to help prevent the spread of infection.

EDUCATE

Developing a Skin Care Management System is so much more than simply putting the right products in the right places. The system only works when it has the 'buy in' from the whole workforce. Management and Health and Safety Officers have the responsibility to ensure all staff are sufficiently aware and trained to understand the need for a skin care program and how to apply it. Compliance is the absolute key to success.

The workforce needs to be informed of the dangers of ignoring skin safety. Visibility of the system needs to be high. It must be simple and attractive for the workforce to engage in the Skin Care Management System. This is where choosing the right products, with the right back up service, is vital. Systems which incorporate colour coding for different skin care steps help to reinforce the different products and aide product selection.

Training sessions, instructional multimedia programs, safety signs, personal issue cards and posters are an effective way of getting the workforce to 'buy into' and support the concept of a Skin Care Management System.

AUDIT

Once a Skin Care Management System has been introduced, it is also necessary that its effectiveness is monitored and reviewed. This could take the form of regular, recorded one-to-one reviews with staff, if considered necessary, to evaluate their skin condition and compliance with the 'system'. Records should be kept and reviews should take into account changes in work practices and any changes in an individual's circumstance.

For large organizations, skin care manufacturers may provide an annual audit service, **to ensure that all skin care dispensers are working effectively and to review opportunities to improve compliance through dispenser placement and products review.**





CONCLUSION

“”

**SEASONAL INFLUENZA HAS A
SIGNIFICANT IMPACT ON CANADIAN
BUSINESSES IN TERMS OF BOTH DIRECT
AND INDIRECT COSTS.**

Though vaccination rates and hand hygiene compliance remains low in most workplaces, employers can effectively reduce absenteeism and improve the presenteeism by implementing an infection control program that includes hand hygiene best practice and educational support.

The savings associated with infection prevention programs as measured by reduced absenteeism and improved productivity can be significant when implemented as part of a proactive strategy.

REFERENCES

(¹Kwong, 2012, p. 9) (²Leung, 2011, p.1) (³CDC, 2009, p. 3) (⁴CDC, 2010) (⁵Duncan, 2012, p. 1) (⁶Stewart, 2013, p. 8) (⁷Smith, 1993, p. 306) (⁸Jumaa, 2005, p. 9) (⁹Bloomfield, 2007, p. 39) (¹⁰Keech, 2008, p. 26) (¹¹White, 2001, p. 1) (¹²WHO, 2000, p. 74) (¹³Hubner, 2010, p.1) (¹⁴CDC, 2001)

Bloomfield, S. (2007). The Effectiveness of Hand Hygiene Procedures in Reducing the Risk of Infections in Home and Community Settings Including Hand washing and Alcohol-Based Hand Sanitizers, 27-58

Centers for Disease Control and Prevention (2009). Final Estimates for 2009-2010 Seasonal Influenza and Influenza A (H1N1) 2009 Monovalent Vaccination Coverage, 3

Centers for Disease Control and Prevention (CDC), Flu & You (2010), Retrieved from http://www.cdc.gov/flu/pdf/freeresources/family/FluandYou_press.pdf

Centers of Disease Control and Prevention (CDC), Hygiene of the Skin: When is Clean Too Clean? (2001), Retrieved from http://wwwnc.cdc.gov/eid/article/7/2/70-0225_article

Cooper, C., Dewe, P. (2008). Well-Being - Absenteeism, Presenteeism, Costs, and Challenges, 522-524

Cummings, K. (2010). Hand Hygiene Noncompliance and the cost of Hospital-Acquired Methicillin-Resistant Staphylococcus aureus Infection, 357-364

Duncan, I. (2012). Planning Influenza Vaccination Programs: A Cost-Benefit Model, 1-11

Hubner, N. (2010). Effectiveness of Alcohol-Based Hand Disinfectants in a Public Administration: Impact on Health and Work Performance Related to Acute Respiratory Symptoms, 1-8

Jumaa, P. (2004). Hand Hygiene: Simple and Complex, 1-14

Keech, M. (2008). The Impact of Influenza on Working Days Lost: A Review of Literature, 911-924

Kwong, J. (2012). The Impact of Infection on Population Health: Results of the Ontario Burden of Infectious Diseases Study, 9

Leung, W. (2011). Going to Work Sick is Bad for Business, The Global & Mail, 1-3

Molinari, N. (2007). The Annual Impact of Seasonal Influenza in the US: Measuring Disease Burden and Costs, 5086-5092

Pittet, D. (2001). Improving Adherence to Hand Hygiene Practice: A Multidisciplinary Approach, 234-240

Smith, A. (1993). Effect of Influenza B Virus Infection on Human Performance, 760-761

Stewart, N. (2013). Absenteeism Trends in Canadian Organizations, 1-10

Thompson, S. (2013). The Healthy Workplace Project: Results of a Hygiene-Based Approach to Employee Wellness, 1-3

White, C. (2001). The Effect of Hand Hygiene on Illness Rate Among Students in University Residence Halls, 1-16

This guide was written by Patrick Boshell, Marketing Director Canada, email: patrick.boshell@debcanada.com and published by Deb Group Ltd. (c) 2015 Deb Group Ltd.

ABOUT SC JOHNSON PROFESSIONAL™

SC Johnson Professional® is part of SC Johnson, a family company dedicated to innovative, high-quality products, excellence in the workplace and a long-term commitment to the environment and the communities in which it operates. Based in the USA, the company is one of the world's leading manufacturers of household cleaning products and products for home storage, air care, pest control and shoe care, as well as professional products. The company has a long history in the professional market, in which it started operating in the 1930s.



SC Johnson Professional® provides expert skin care, cleaning and hygiene solutions for industrial, institutional and healthcare users. This incorporates the Deb range of specialist occupational skin care products along with well-known SC Johnson brands and innovative professional cleaning and hygiene products.

The SC Johnson Professional® purpose is to bring innovative, quality products and services to professional markets with outstanding performance that respect the environment, create efficiencies, reduce inventories, simplify training and provide a positive user experience. This is built on a deep understanding of customer needs and a vision for “**rethinking the professional experience**” with the user in mind.



SC Johnson Professional

1 Webster Street
Brantford,
ON N3T 5R1

Main Office: 1 519 443 8697
marketing.debcanada@debgroup.com
