INFECTION CONTROL FOR LODGING AND FOOD SERVICE ESTABLISHMENTS

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wish to thank all those people I had an opportunity to learn from and work with to make this concept a reality.

Preface

This book is designed to alert lodging and food service personnel to the potential impact of infectious diseases, the risk of cross-contamination, and the need for infection-control programs throughout the hospitality industry.

The effects of Legionnaires' disease and Hepatitis A within the hospitality industry are well documented. The possible risks posed by other diseases, including AIDS, are less well known. An infection-control program is not only a wise policy from the standpoint of avoiding health risks, but can also be an effective marketing strategy for those individual properties or corporations that seize the initiative.

The primary objectives of this book are:

- To make hospitality personnel and management aware of cross-infection risk factors that currently exist and to emphasize that these factors will increase as more and more people present themselves in lodging and food service facilities.
- 2. To provide a marketing tool for the ability to allay public fears regarding risk of disease transmission in lodging and food service establishments.
- To describe a simple, easy-to-implement, cost-effective program of infection control that can be utilized by housekeeping and food service personnel.

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4. To provide generic product information which will assist purchasing personnel in making product evaluations.

To offer a learning aid that can be used by newly hired housekeeping and food service personnel, as well as by management.

The information presented in this book is based on that offered in educational programs offered by the J.D. Group as a means of reducing the risk of contagious disease to the public and hospitality industry employees.

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Introduction

The food service industry has experienced a phenomenal number of disease-related outbreaks. It is nationally recognized that only five to ten percent of food-related illnesses are reported to local environmental agencies and that the real number of illnesses is at least 25 times that reported. The Food and Drug Administration (FDA) feels greater efforts should be made to determine the incidences of all diarrheal and food-borne diarrheal disease.

In the hospitality industry, the process of eliminating diseasecausing organisms is often taken for granted. If high-level disinfection were practiced, the situations suggested here probably would not have occurred or could have been greatly reduced:

- 5,200 Exposed to Hepatitis A from Infected Food Handler
- Continued Salmonella Outbreaks Baffle Health Officials
- 81 Million Americans Exposed Annually to Foodborne Illness Resulting in 7,000 to 8,000 Deaths per year
- 200 Stricken by Contaminated Salad Items in Louisville
- Trench Mouth Reported from Contaminated Glassware

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- Fresh Fruits and Vegetables Could be Contaminated with Disease-causing Viruses and Bacteria
- Six Cases of Typhoid, One Case of Salmonella: Shrimp Salad Common to All Victims
- Delaware Shore Dinner Left 150 Ill
- 500 Hit by Salmonella
- Legionnaires Cases Average Two per Week
- Scabies Found on Bedspreads

All of the above outbreaks caused major problems for the people infected and the businesses cited as the source of infection. The consumer is limited to only a few infection-control procedures which will greatly reduce the risk of disease. In a restaurant, wipe off your utensils with a napkin, examine glassware closely, watch how it is carried, be sure your table is free from dirt and food particles, and avoid accepting a meal that has been obviously coughed or sneezed on by a server.

In a hotel or motel room, avoid direct contact with the bedspread, blanket, or head board. Do not touch the telephone mouthpiece with your tongue or lips. Wear foot protection even in the shower.

The hotel, motel, and restaurant establishments one uses for business or pleasure may harbor infectious diseases. Today, the microbiological community is at the most active level of generating new diseases in history. AIDS, Legionnaires, Herpes I and II, and strains of hepatitis are all relatively new diseases within the last 15 years. AIDS is devastating and getting a lot of publicity, but there are still many unanswered questions about the transmission of the virus. Some medical researchers predict a cure will never be found. The common cold is also a viral infection and no cure, after 75 years of research, exists. Hepatitis B is more prevalent than AIDS but gets less media attention. Only after a major disease outbreak occurs is the

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public informed. Nobody wants to be caught in the wrong place, at the wrong time, and suffer the consequences.

The American Legionnaires Convention in 1976 resulted in loss of lives and the identification of a new bacteria. Legionnaires is still found in evaporative cooling towers, shower heads, and soil. This disease, if not diagnosed and treated, is also fatal.

The diseases present in our environment are transmitted primarily by people or by touching a contaminated surface or object and then rubbing your eye or other natural openings. The public telephone is handled by so many different people it is no wonder that business travelers end up with sore throats or runny noses.

Disease transmission is very likely in hotels, motels, and restaurants, because very few housekeepers, food service workers, or guests wear protective barriers or practice effective personal hygiene. Barriers include disposable gloves and paper towels which can be used to handle glassware or to turn off faucets. Personal hygiene means more than a morning shower or bath; hygiene concerns hair care, hand care, toilet habits, clothing, and so on. Also, most of the chemicals used for sanitizing and disinfecting are either inactive against certain bacteria and viruses or are not used according to the manufacturers' directions. Sanitize and disinfect are two words that are thought to mean the same thing. However, the food service industry defines sanitize as "free from disease-causing organisms." The microbiological definition of sanitize means only to reduce to a safe level the number of microorganisms. A safe level is a vague number, based on the number of microorganisms necessary to cause infections and the resistance of the host. Since everybody's resistance levels are different, some people are more susceptible to catching disease.

Defining the terms incorrectly is not the main reason for confusion in the industry. Sanitation products with Environmental Protection Agency (EPA) registration are generally low-

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to intermediate-level products and would not satisfy the Centers for Disease Control guidelines for health care industry disinfectants. Some *disinfectants* or *sanitizers* only kill Staphylococcus, Salmonella, or Pseudomonas. Certain others kill two out of three bacteria.

There are three levels of disinfection:

- Low-limited level (must kill one gram-negative organism)
- Intermediate-moderate level (must kill two organisms: Staphylococcus and Salmonella)
- High or hospital level (must kill three organisms: Staphylococcus, Salmonella, and Pseudomonas, plus Tuberculosis, pathogenic fungus, and certain specific viruses)

Most household disinfectants are the low to moderate level. This is acceptable in the home, because there is less likelihood of major disease transmission occurrences. However, in businesses serving the public, more attention to disinfection and high-level products should be used.

Microorganisms come in all shapes and sizes; some cause infections easily and others require large quantities or lengthy exposure to transmit a disease.

In today's hustle and bustle, we often tend to overlook the little things and go forward with the *nothing will ever happen to me* attitude. We should be aware of how to reduce the potential spread of infectious diseases. Hotels, motels, and restaurants should be training their employees on how to break the cycle of contamination and how to use high-level disinfection products to supplement cleaning routines. Obviously, with the continued outbreaks of Salmonella, Hepatitis A, and other food-related infections, the industry's standard for sanitation must not be a complete system. Sanitation and personal hygiene

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are very important, and all hotels, motels, and restaurants emphasize these areas. But do their staffs understand infection control or use high-level disinfection products? Customers paying to enjoy the food and surroundings are entitled to know what is being done to eliminate, or at least greatly reduce, the risk of cross-infection. Here is a list of diseases you can be exposed to in a hotel and/or restaurant:

The common cold
Influenza (flu)
Tuberculosis
Herpes
Staphylococcus infections
Streptococcus infections
Hepatitis
Athletes' foot
Legionnaires
Salmonella
Trench mouth
Intestinal flu
Mononucleosis

Even the virus AIDS has been reported by one researcher to survive outside the host on a surface and to withstand 130° F temperatures for a prolonged period (see Chapter 1). (Transmission of the AIDS virus, however, is still believed to occur primarily through sexual activity and sharing contaminated needles.)

In this book we discuss how these microorganisms can infect you. Consider the following objects found in hotel and motel rooms: sink, toilet, shower/tub, bedspreads, mattress and/or mattress cover, air conditioning system, carpets, furniture, drinking glasses, and telephone. If these surfaces are not effectively disinfected, eliminating any microorganisms that could cause disease, you are at potential risk. Your housekeeper

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may be an *asymptomatic* (definition: illness or disease present without symptoms or signs of its presence) disease carrier. The previous guest may have had Tuberculosis. Consider that according to microbiologists, 20 percent or more of the population carry some type of infection. Disease-causing microorganisms are found in body fluids, blood, saliva, semen, phlegm, nasal aerosol, body waste, animal waste, *fomites* (definition: any item or object other than food that can propel microorganisms), contaminated food, and contaminated environmental surfaces. The microorganisms continue to mutate, form resistances, and strive for survival just like humans.

A traveler staying in a motel, who had the habit of lounging on top of the bedspread in his underwear, developed a rash and itching shortly after returning home. Upon visiting a doctor, he learned he had picked up scabies, a small parasitic organism that can survive on uncleaned surfaces like bedspreads.

Now, think about your favorite restaurant. The risk to you as a customer comes from contaminated silverware due to inadequate cleaning or sanitizing, contaminated glassware or dinnerware due to exposure from organisms from the hands of employees, air-borne organisms propelled by air-conditioning systems, food contamination from exposure to contaminated environmental surfaces, and/or just the lack of hand washing or barrier protection by food service employees.

I will never eat out again! You do not have to go to that extreme. Hopefully, your favorite eatery practices effective sanitation and personal hygiene or even uses high-level disinfection products to reduce your risk of infection. Examine closely your glassware, silverware, and dinnerware. Wipe your utensils with a napkin or tissue. Watch the way your glasses are carried (from the bottom, not the top), and be sure that nobody sneezes or coughs in your food. Be cautious of restaurants that serve buffet style hors d'oeuvres in the open or use noncooled salad bars. The restaurant can not be responsible for the eating