

# [Essentials of risk assessment and management](https://assignbuster.com/essentials-of-risk-assessment-and-management/)

Healthcare associated infections are infections that are acquired in hospital or any other healthcare setting. Healthcare associated infections (HAI’s) have an enormous effect on patient recovery and are estimated to cost NHS Scotland £180 million per year (The Scottish Government 2007). Infection control is based on common sense and on safe practice and can be implemented at a minimal cost. A large part of the hospital population are older adults and the increase in age play a huge part of the risk factor for infection (Gould and Brooker 2008). The risk of infection is particularly high where contact with healthcare staff and equipment occurs often and other patients may act as a source of infection (Wilson 2006). It is the intention of this essay to explain the importance of infection control in practice and the pathway of this will follow the five-step model of risk assessment (Health and Safety Executive 2006), which includes looking for the hazards, identifying who may be harmed and how, evaluating the risk, recording the findings and reflecting the importance of infection control.

The first step of the risk assessment model is to look for hazards and identify how infection control might spread within this environment. Many infections occur due to poor infection control within the hospital ward. Micro-organisms which are on and around a patient are inadvertently transferred to a vulnerable site on the same or another patient. Patients receiving healthcare are at increased risk of acquiring infection due to invasive procedures, devices or conditions that impair normal defences against infection. In addition, the healthcare environment provides plenty of opportunities for micro-organisms to transfer between patients and for antimicrobial resistant strains to emerge and spread (Wilson 2006). “ An infection can develop if the links in the chain of infection are not interrupted” (Kozier 2008 p. 225). The chain of infection being the causative agent, reservoir, portal of exit, mode of transmission, portal of entry and susceptible host. There are four main categories of micro-organisms, these being bacteria, viral, fungal and protozoa.

The second step of the risk model is to identify who may be harmed and in accordance with The Nursing and Midwifery Council (2008) code of conduct, nurses must respect people’s right to confidentiality. Therefore for the purpose of this essay the patient discussed is referred to as Mr. A, and any personal or identifiable information has also been altered so as to protect his privacy and dignity which are also enshrined in the Nursing and Midwifery Council (2008) code of conduct. Mr. A. was placed in a general medical ward within a large general hospital. The ward had a variety of medical complaints including diabetes, gastrointestinal disorders, stroke and alcohol liver disease. Mr. A. was an 81 year old man who already had vascular dementia but was admitted with increased confusion. He had a significant weight loss and his mobility was greatly reduced. Mr. A’s fluid intake was low and his diet was poor. Micro-organisms exist everywhere open to the outside and most are harmless and in fact beneficial to the essential functioning of the body. The extent to which any micro-organism is capable of producing an infection depends on the ability of the micro-organism to enter the body, the susceptibility of the host and the ability of being able to live in the host’s body (Kozier 2008).

People are the most common source of infection and in reference to Mr. A., he was particularly susceptible due to his reduction of food intake. His skin was suffering due to dehydration and undernourishment and being unable to keep the skin healthy does not promote its ability to repel micro-organisms. An adequate diet also helps to keep the immune system functioning well thus resisting any infections. Encouraging fluids helps to flush out the bladder and remove any micro-organisms that could cause infection (Kozier 2008). Having established where micro-organisms are found, the next step is to discover where they are transmitted from and in Mr. A’s condition where his immune system is low, micro-organisms could leave the body through the respiratory tract or gastrointestinal tract, for example, excretions from faeces or bodily fluids, droplets from coughing or scales or flakes of skin.

Kozier (2008) indicates that a method of transmission is required when a micro-organism leaves its source and this may be by direct transmission, indirect transmission or airborne transmission. Infection may spread through the hospital environment by means of direct transmission from person to person, as in touch or from mucous membranes by sneezing and coughing. Indirect transmission maybe from an infectious agent like handkerchiefs, flannels, surgical instruments, wound dressings, bedding or other vehicles of transmission as in water, blood, food, and serum. Airborne transmission may involve droplets or dust and usually enter the patient through the respiratory tract (Kozier 2008).

Before a person can become infected, micro-organisms must entry the body and the skin is a great barrier to infectious agents. As Mr. A’s skin was in poor condition, any break in the skin can serve as a portal of entry. Very often micro-organisms enter the body of the host by the same route they used to leave the source (Kozier 2008). The susceptible host is a person who is at risk of infection and Mr. A. was more likely or not to acquire an infection due to an number of factors including age, diet and mobility.

The most effective way of breaking the chain of infection is through frequent and thorough hand hygiene before and after contact with patients, body fluids and the near-patient environment. Other important considerations include high standards of basic hygiene and environmental cleanliness and the use of personal protective equipment (P. P. E.), that is disposable gloves and aprons. Ensure clinical equipment and personal items such as flannels and wash-bowls are clean and dry (Wilson 2006).

Evaluating the risk is the third step in the model of risk assessment and according to the Royal College of Nursing (2008) “ Any infection acquired while in hospital receiving healthcare can lead to distress, disruption, disablement or even death for a patient” (Royal College of Nursing 2008 p. 2). As with Mr. A., various activities can be undertaken to minimise the spread of infection. This must include a good knowledge of ways in which to reduce micro-organisms including correct cleaning and sterilising. Infection control training and regular updates should be made available as necessary (Nunkoo and Pickles 2008). Micro-organisms multiply in moist places and dirty dressings, damp and soiled linen are ideal places for this to happen. Urine and faeces also contain micro-organisms. Covering mouths and noses when sneezing and covering open wounds can limit the amount of micro-organisms that escape from the respiratory tract. All patients including Mr. A., may carry potentially infectious micro-organisms that can be transmitted to others, therefore the use of the proper protective equipment is important and hand washing crucial.

Wiseman (2006) suggests that although hand-washing is the most single element for preventing infection, it will not be successful unless proper decontamination of the equipment and environment is not done properly. Mr. A., may have less resistance to another persons micro-organisms than his own and any invasive procedures may penetrate the body’s natural barriers to micro-organisms. Open wounds are particularly vulnerable to infection and patients and nursing staff are at risk of being infected by needle-stick injuries. A number of factors to avoid the susceptibility to infection include an impairment to the bodies natural defences therefore eating a balanced diet with plenty fluids will help to maintain and build the integrity of the patient’s skin and body tissues.

The fourth step of the model is to record the findings and risk assessments should be made to identify procedures likely to involve a risk of infection to either Mr. A., other patients or nursing staff. Malnutrition Universal Screening Tool (MUST) is a nutritional assessment tool used to identify patients at risk of malnutrition. It is based on the body mass index (BMI), unintentional weight loss and the effect of the illness on the nutritional state of the patient (Kozier 2008). Nurses performed a nutritional screening on Mr. A., using this tool and depending on the results then may refer to him to the dietician for further assessment. The MUST tool is acceptable and reliable to healthcare professionals.

Another risk assessment tool that may be used to identify the integrity of the skin and the risk of infection is the Waterlow risk assessment scale. This is the most common pressure ulcer risk assessment tool developed in 1984 by Judy Waterlow (Kozier 2008). Nurses use their clinical judgement to decide whether or not Mr. A., is at risk of developing pressure ulcers by checking his general skin condition, elasticity or areas of oedema. The Waterlow tool uses a simplistic scoring system which predicts potential problem areas of skin that may break-down and therefore be prone to infection. In addition to these risk assessment tools, policies and procedures should be in place at the workplace to enable staff to follow protocols and be aware of what actions to take regarding infection control, accidents or hazards (Wilson 2006).

The fifth and final step in the model is to review and summarise the importance of infection control in healthcare. From the evidence presented in this essay it can be argued that infection prevention and control are the responsibility of all healthcare staff. To minimise the risks of healthcare associated infections for patients and staff effective communications are needed between patients, staff and visitors. Appointing a cleanliness champion is the easiest way for clinical areas to maintain standards. This person can organise training and updates where necessary Florence Nightingale famously said that a ‘ hospital should do no harm to its patient’ and this is still true to this day for modern healthcare (Royal College of Nursing 2008). Good infection control in healthcare settings is still basic common sense and can prevent grave consequences for the patient.

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