# NHS' Pathology Department's Health and Safety Compliance

The NHS (national health service) is the nation's humanitarian aid provider. Within the NHS, the department responsible for analysing and testing samples from patients (pathology department) has to comply with the national health and safety requirements as is the rest of the organisation.

Like any laboratory or medical setting, a pathology department carries some potential risks for those working within it. Some of the common risks associated with working in a pathology department include:

Exposure to hazardous materials: Pathology laboratories handle a range of biological samples, including blood, urine, and tissues, which may be contaminated with infectious agents or hazardous chemicals.

Exposure to radiation: Some specialised pathology tests may involve the use of radioactive materials, which can pose a risk of radiation exposure to laboratory staff.

In order to avoid the listed hazards a pathology department is heavily regulated. Staff working within the department require training in dealing with biohazards and handling of other hazardous substances or materials.

In adherence to health and safety regulations, pathology departments must adopt a methodical and forward-thinking strategy for detecting and managing potential hazards in the workplace. This could entail performing risk assessments to pinpoint possible dangers and instituting measures to regulate or alleviate those risks. For instance, a pathology department might introduce measures like engineering controls (such as ventilation systems), administrative controls (like safety procedures), and personal protective equipment (including gloves, masks, and gowns) to shield staff from hazardous material exposure.

Additionally, pathology departments must supply suitable training and oversight to personnel, ensuring they comprehend and adhere to safety protocols and guidelines. The department ought to maintain written health and safety policies and procedures, subject to regular evaluation and modification when necessary.

## **Legal Compliance Requirements for Pathology Departments in the UK:**

To comply with the law, a pathology department may take a number of steps, including:

Conducting risk assessments: The department should identify potential hazards and assess the level of risk associated with those hazards. This will help the department determine appropriate measures to control or mitigate the risks.

Implementing appropriate controls: Based on the results of the risk assessments, the department should put in place appropriate measures to manage the risks. This may include engineering controls, administrative controls, and personal protective equipment.

Providing appropriate training: The department should provide training to employees on health and safety procedures and policies, as well as any legal requirements that apply to their work. This can help ensure that employees are aware of the risks associated with their work and understand how to work safely.

Keeping accurate records: The department should keep accurate records of all relevant data, including test results, patient information, and health and safety incidents. This can help ensure compliance with data protection and medical ethics laws.

Consistently evaluating and revising policies and procedures: It is crucial for the department to frequently assess and modify its policies and procedures so that they stay up to date and incorporate any alterations in legislation or industry best practices.

### Laws:

The Health and Safety act of 1974. This is a UK law that defines the overall obligations of employers and employees concerning health and safety in the workplace. The department should identify potential hazards and must provide adequate health and safety training to its employees, including pathologists, laboratory technicians, and support staff.

The Human Tissue Act of 2004. This act regulates the removal, storage, use, and disposal of human tissue for purposes such as research, diagnosis, and treatment. It sets out the legal framework for obtaining consent for the use of human tissue, establishes codes of practice for the handling of tissue, and creates regulatory authorities to oversee compliance with the law.

The 2002 Control of Substances Hazardous to Health (COSHH) Regulations mandate that employers safeguard employees from contact with dangerous substances, such as chemicals, biological agents, and other materials typically found in pathology laboratories. In accordance with the COSHH Regulations, pathology departments are required to carry out risk evaluations to pinpoint potential hazards and adopt suitable measures for controlling and managing those risks. This might involve utilising personal protective equipment, guaranteeing sufficient ventilation and confinement of hazardous materials, as well as offering comprehensive training and guidance to personnel regarding the secure handling of harmful substances.

The regulations also require pathology departments to maintain accurate records of hazardous substances used in the workplace, including information on their properties and potential risks, and to provide that information to employees upon request.

## Commitment to precautions and safety legislation:

Due to the pathology departments being part of a government organisation (NHS) laws are heavily enforced upon the organisation as a whole. Within the pathology departments of NHS hospitals there have not been any significant workplace accidents within the recent years implying that modern safety regulations are in place.

## Assessing the benefits and drawbacks of strict safety regulation:

The implementation of strict safety regulations in the pathology department of an NHS hospital is essential for ensuring patient safety and maintaining the high standards of healthcare. However, excessive regulations may lead to increased bureaucratic processes and hamper the efficiency of the department.

The pathology department in an NHS hospital is responsible for analysing patient samples to provide diagnostic information to physicians for accurate treatment. Any errors or mishandling of patient samples can have severe consequences on patient health and wellbeing. Therefore, implementing strict safety regulations within the department is crucial to minimise the risk of errors and ensure patient safety.

However, there is a fine line between implementing necessary safety regulations and excessive regulations that may hinder the efficiency of the department. Excessive regulations may result in bureaucratic processes, which may delay the testing and

treatment of patients. Moreover, it may lead to increased workload and stress for the healthcare workers, which may affect their productivity and, ultimately, patient care.

Therefore, a balanced approach to safety regulations must be taken within the pathology department of an NHS hospital. This approach should prioritise patient safety and maintain high standards of healthcare while ensuring that regulations do not hamper the efficiency of the department.

## How does the NHS' pathology department actually comply with legislation:

#### **Hazardous substances:**

Legislation: The Control of Substances Hazardous to Health (COSHH) regulations require employers to assess and control the risks associated with hazardous substances.

Measures: The pathology department follows COSHH guidelines to identify, handle, store, and dispose of hazardous substances such as chemicals, formalin, and biological agents. This includes providing appropriate training, safety equipment, and conducting risk assessments.

## **Biological hazards:**

Legislation: The Health and Safety at Work Act 1974 and the Control of Substances Hazardous to Health (COSHH) regulations address the risks associated with biological agents.

Measures: The department implements protocols for the safe handling, storage, and disposal of biological specimens, including blood, tissue samples, and infectious materials. It ensures adherence to standard precautions, proper use of personal protective equipment (PPE), and compliance with waste management guidelines.

## **Sharps injuries:**

Legislation: The Health and Safety at Work Act 1974 and the Sharps Instruments in Healthcare Regulations 2013 require employers to prevent injuries from sharps (e.g., needles, scalpels).

Measures: The department employs safe work practices, such as using sharps containers for disposal, implementing procedures to minimise the risk of needlestick injuries, and providing training on safe handling and disposal of sharps.

To conclude, the safety regulations currently in place within the pathology departments of NHS hospitals are more than sufficient and it is essential to mention that they are capable of maintaining the safety of health workers and patients. The safety regulations allow the health workers to conduct research at a reasonable pace along with maintaining the safety and validity in results.

# The American Red Cross' Blood Service division Health and Safety Compliance

The American Red Cross (ARC) is a humanitarian organisation focused on providing emergency aid, disaster relief, and education within the United States. A key division of the ARC is the Blood Services division, which is responsible for the collection, testing, and distribution of blood and blood products, as well as supporting medical research. Similar to the NHS's pathology department, the ARC's Blood Services division must adhere to strict health and safety standards and legal compliance.

Working in a Blood Services division, like in pathology departments, comes with potential hazards due to the nature of the work.

### Common risks associated with a blood services division include:

Exposure to hazardous materials: Handling blood and blood products may expose workers to infectious agents or dangerous chemicals.

Exposure to sharp injuries: The use of needles and other sharp tools during blood collection and processing heightens the risk of injuries and possible exposure to bloodborne pathogens.

To minimise these risks, the ARC's Blood Services division follows strict regulations and guidelines, training employees in biohazard management, prevention of sharps injuries, and proper use of personal protective equipment (PPE).

An approach to identifying and managing potential hazards is essential for the Blood Services division. This involves performing risk assessments, implementing engineering and administrative controls, and supplying appropriate PPE for staff. Regular updates and reviews of written health and safety policies and procedures are crucial for ensuring compliance and effectiveness.

## **Legal Compliance Requirements for the American Red Cross Blood Services:**

Conducting risk assessments: Identifying potential hazards and assessing risks to determine suitable control measures.

Implementing appropriate controls: Based on risk assessments, applying engineering controls, administrative controls, and PPE to manage risks.

Providing appropriate training: Ensuring employees undergo training on health and safety procedures, policies, and legal requirements related to their work.

Keeping accurate records: Maintaining records of pertinent data, including blood product information and safety incidents to ensure compliance with data protection and medical laws.

Regularly evaluating and revising policies and procedures: Making sure policies and procedures stay current and integrate changes in legislation or industry best practices.

#### Laws:

The Food, Drug, and Cosmetic Act: Oversees the safety and efficacy of medical products, including blood and blood components.

The Clinical Laboratory Improvement Amendments (CLIA): Regulates laboratory testing and mandates clinical laboratories to be certified before testing human specimens.

Bloodborne Pathogens Standard: An OSHA regulation protecting workers from exposure to bloodborne pathogens, such as hepatitis B, hepatitis C, and HIV.

### **Commitment to safety legislation:**

The ARC's Blood Services division is committed to following safety legislation to ensure the protection of donors, staff, and patients receiving blood products. Regular FDA inspections and adherence to AABB standards demonstrate the division's dedication to safety and regulatory compliance.

How does the American Red cross actually comply with legislation (Based on American laws which inforce similar conditions as the laws in the UK):

## **Bloodborne pathogens:**

Legislation: OSHA Bloodborne Pathogens Standard (29 CFR 1910.1030) sets requirements for protecting workers from exposure to bloodborne pathogens. Measures: The division follows OSHA guidelines to prevent and control exposure to bloodborne pathogens. This includes implementing infection control protocols, providing PPE and conducting regular training on handling blood and bodily fluids safely, and ensuring proper disposal of contaminated materials.

## **Needlestick injuries:**

Legislation: The Needlestick Safety and Prevention Act requires employers to adopt safer medical devices and implement sharps injury prevention programs. Measures: The division prioritises needlestick injury prevention through the use of safety-engineered devices, such as needle safety systems and sharps containers. They provide training on safe needle handling techniques, encourage reporting of incidents, and continuously evaluate and update their sharps injury prevention program.

### Chemical hazards:

Legislation: OSHA's Hazard Communication Standard (29 CFR 1910.1200) ensures employers communicate and train employees on the potential hazards of chemicals used in the workplace.

Measures: The division adheres to the Hazard Communication Standard by providing employees with access to safety data sheets (SDS) for chemicals used in blood collection and processing. They offer training on chemical handling, storage, and emergency procedures, and maintain proper labelling and signage for hazardous substances.

## Assessing the benefits and drawbacks of strict safety regulation:

Rigorous safety regulations in the Blood Services division are essential for guaranteeing the safety and quality of blood products. However, excessive regulations can lead to increased bureaucracy and decreased efficiency.

Benefits of strict safety regulation include reducing the risk of disease transmission, maintaining public trust, and safeguarding the health and safety of employees. Drawbacks can include higher costs, time-consuming compliance processes, and potential delays in blood product delivery.

A balanced approach to safety regulations should emphasise safety while ensuring that regulations do not impede the division's efficiency or ability to achieve its mission.

In conclusion, the safety regulations within the ARC's Blood Services division are sufficient and necessary for maintaining the safety of donors, employees, and patients. These regulations enable the division to carry out its operations while ensuring the safety and quality of blood products, contributing to the overall success of the American Red Cross as a vital humanitarian organisation. The Blood Services division must continue to adapt and evolve its safety regulations in response to new scientific knowledge, technological advancements, and changes in legislation. By maintaining a balanced approach to safety regulation and prioritising both safety and efficiency, the American Red Cross Blood Services division can continue to provide life-saving blood products and contribute to public health and safety.

Both the NHS' pathology department along with ARC's blood services share similarities when it comes to the field of work. As of that fact there are multiple common hazards that are shared between both divisions such as dealing with biohazards, chemicals and correct disposal of human blood and tissue. Both organisations do not follow the same laws due to the fact that they are located in different countries however, the laws that they are complying with are identical and provide the same safety to the workers as the laws of the other organisation. To conclude, due to the similarity of the organisations similar health and safety regulations are applied for both ARC's blood services and the NHS' pathology department.