

## Standard Operating Procedure (SOP)

### BD Eclipse™ Safety Needle Use for Intra-Articular Joint Injections

#### 1. Purpose

This Standard Operating Procedure (SOP) provides guidance for the safe, effective, and consistent use of BD Eclipse™ safety hypodermic needles (21G, 23G, and 25G) in intra-articular joint injections. It ensures compliance with NHS England Sharps Safety Policy, COSHH Regulations, and MHRA guidance on safe use of medical devices.

#### 2. Scope

This SOP applies to all clinical staff performing intra-articular injections within NHS facilities or affiliated organisations. It covers preparation, administration, and disposal processes when using BD Eclipse™ safety-engineered needles.

#### 3. Responsibilities

All clinicians and healthcare workers are responsible for adhering to this SOP, completing relevant sharps safety training, and reporting any adverse incidents or near misses. Line managers must ensure compliance and maintain training records.

#### 4. Device Description

The BD Eclipse™ is a single-use, safety-engineered hypodermic needle featuring a pivoting protective shield designed to prevent needlestick injuries. The safety mechanism allows single-handed activation post-injection, with audible/tactile lock confirmation. Only compatible with Luer-Lock syringes. The BD Eclipse™ needle is available in 21G, 23G, and 25G gauges.

#### 5. Procedure

1. 1. Verify the correct gauge and packaging integrity before use.
2. 2. Attach the BD Eclipse™ needle to a Luer-Lock syringe using a twisting motion until firmly seated.
3. 3. Pull back the safety cover toward the syringe and remove the needle cap.
4. 4. Prepare the joint and perform aseptic technique according to local protocol.
5. 5. Insert needle to appropriate depth for intra-articular access, administer medication as prescribed.
6. 6. Immediately following injection, activate the safety shield using a one-handed technique by pushing the textured finger pad forward until an audible click is heard.
7. 7. Visually confirm the needle tip is fully covered and locked.
8. 8. Dispose of the used device immediately into an approved sharps container. Do not recap, bend, or detach the needle manually.

## 6. Risk Assessment and Mitigation

The following risks have been identified with BD Eclipse™ needle use and must be mitigated through training and compliance:

- Needlestick injury due to improper activation – mitigated by one-handed technique and visual confirmation.
- Needle disengagement if used with Luer-Slip syringes – use only with Luer-Lock syringes.
- Incomplete activation of the safety mechanism – ensure audible/tactile confirmation of lock.
- Exposure to biological material due to improper disposal – use designated sharps containers and avoid overfilling.
- Gauge-related clinical risks (e.g., tissue trauma or patient discomfort) – select appropriate gauge per joint size and viscosity of injectate.

## 7. Training and Competency

All staff performing intra-articular injections must complete BD Eclipse™ training (based on manufacturer IFU and NHS sharps policy). Competency should be assessed initially and refreshed annually. Training records must be maintained by the line manager or training coordinator.

## 8. Incident Reporting

All sharps injuries, near misses, or device malfunctions must be reported immediately in accordance with local incident reporting procedures and the NHS Serious Incident Framework. Post-exposure management should follow occupational health protocols.

## 9. References

- BD Eclipse™ Usage Guidelines Poster v2.0 and v3.0 (Becton, Dickinson and Company, 2023).
- MHRA Device Bulletin DB2006(05): Managing Medical Devices.
- NHS England Sharps Safety Policy (2022).
- Health and Safety (Sharp Instruments in Healthcare) Regulations 2013.
- COSHH Regulations 2002 (as amended).
- ISO 23908:2013 – Sharps injury protection requirements for hypodermic needles.

## 10. Document Control

Author: \_\_\_\_\_

Department: \_\_\_\_\_

Effective Date: \_\_\_\_\_

Review Date: \_\_\_\_\_

Version: 1.0