LUMINARY GLOBAL FIELD MANUAL

Kemp USA Obstetrical Kit (OB Kit)

Standard Operating Procedure — Pre-Hospital Emergency Childbirth Management

Single-Use Disposable	Trained Responders Only	Pre-Hospital Use
Designed for one deployment only	Paramedics, EMTs, Fire-Rescue, Law Enforcement	When transport before birth is not feasible

SECTION 1

Mission Brief & Intended Use

1.1 Operational Context

This SOP governs the use of the Kemp USA Obstetrical Kit — a **single-use, disposable assembly** intended for the management of an imminent, unavoidable childbirth in a **pre-hospital environment**.

Its purpose is to facilitate a hygienic delivery and provide initial, non-invasive care to the mother and newborn when transport to a definitive medical facility prior to birth is not feasible.

1.2 Intended User

Designed for deployment by **trained emergency responders**, including Paramedics, EMTs, Fire-Rescue personnel, and Law Enforcement officers, operating under their respective agency protocols and medical direction.

> ⚠️ This kit is **not intended for use by untrained laypersons.**

1.3 Mission-Essential Task

→ Manage Field Delivery

Provide necessary sterile equipment to manage delivery with minimum contamination risk.

→ Newborn Protection

Provide initial thermal protection and airway support to the newborn.

→ Cord & Placenta Management

Properly manage the umbilical cord and placenta post-delivery until transfer of care.

SECTION 2

Equipment / Component Familiarization

All components are grouped by **operational purpose**. Familiarize yourself with each item before deployment.

2.1 PPE & Field Preparation

- **Gloves (1 pair, large):** Don immediately upon determining delivery is imminent.
- **Disposable apron (1):** Worn over uniform to protect from fluid contamination.
- **Drape, 40"×48" (1):** Creates clean field under mother's buttocks and legs.
- **Underpad, 17"×24" (1):** Placed on top of drape for maximum absorption of amniotic fluid and blood.

2.2 Delivery & Immediate Newborn Care

- **Towels, 13"×18" (3):** Mission-critical for drying and stimulating newborn. First towel for initial dry-down; subsequent towels for wrapping and warmth.
- **Gauze pads, 4"×4" (4):** Multi-purpose sterile pads for wiping newborn's face, traction on cord, or controlling minor maternal bleeding.
- **Bulb syringe (1):** For suctioning newborn airway *only* if obvious obstructions are present. Compress BEFORE inserting — MOUTH first, then NOSE.

2.3 Cord & Placenta Management

- **Umbilical cord clamps (2):** Applied after cord stops pulsating to occlude blood flow.
- **Disposable scalpel (1):** Transects cord between the two clamps. **High-risk procedure** — see Section 4.
- **Placenta bag (1):** Dedicated bag for safe containment of delivered placenta for hospital transport.
- **Twist ties (2):** Securely closes the placenta bag and biohazard waste bags.

2.4 Post-Delivery & Sanitation

- **OB napkin (1):** Large sanitary pad for the mother to manage post-delivery bleeding (lochia).
- **OB towelettes (2):** Antiseptic wipes for hand cleansing or perineal care for the mother per protocol.

SECTION 3

Standard Operating Procedure — Deployment

📍 **Scenario:** Unit dispatched to a motor vehicle accident on a remote highway. Patient: 34-year-old female, G3P2, 39 weeks gestation. Active labor with contractions 2 min apart. Crowning visible. Transport not possible before delivery.

PHASE 1

3.1 Preparation Phase

01

Confirm & Reassure

Confirm delivery is imminent and unavoidable. Reassure the patient and direct her to pant through contractions to control the delivery.

02

Open Kit & Don PPE

Open the OB Kit on a stable, clean surface. Don gloves and apron immediately.

03

Position the Mother

Position mother semi-reclined with knees flexed and apart. If on a gurney or floor, elevate hips with blankets if available.

04

Establish Clean Field

Place the **underpad** directly beneath the mother's buttocks. Unfold the large **drape** underneath to create the widest possible clean field.

PHASE 2

3.2 Delivery Phase

01

Control Crowning

As the baby's head crowns, apply gentle, steady pressure on the perineum with a gauze pad to prevent rapid tearing. **Do not hold the baby back.**

02

Guide Shoulder Delivery

Support the baby's head as it emerges. Guide it **downward** for the anterior shoulder, then **upward** to deliver the posterior shoulder.

03

Check for Nuchal Cord

As the head delivers, check if the cord is wrapped around the neck. If loose, slip it over the head. If tight and unreducible, clamp and cut immediately per local protocol.

04

Deliver & Note Time

Be prepared for a slippery delivery. Support the body with **both hands** as it delivers completely. **Note the exact time of birth.**

PHASE 3

3.3 Immediate Newborn Care

1 Dry & Stimulate

Place newborn on mother's abdomen or in arms, level with the perineum. Use the **first towel** to dry the infant vigorously — especially the head. This simultaneously dries, warms, and stimulates breathing.

2 Discard & Wrap

Discard the wet towel immediately. Wrap the newborn in a **second, dry towel** to maintain warmth.

3 Assess Breathing

If the newborn is crying — no airway intervention needed. If apneic or gasping with obvious secretions, use the bulb syringe.

Bulb Syringe Protocol

Step 1 — Compress

Fully compress the bulb **before** insertion.

Step 2 — Mouth First

Insert into the **MOUTH**, release to suction. Repeat as needed.

Step 3 — Nostrils

Repeat suction for each **NOSTRIL** separately.

⚠️ **Do NOT** perform routine or aggressive suctioning on a healthy, crying newborn.

PHASE 4

3.4 Cord & Placenta Management

1

Wait for Cessation

Allow cord to stop pulsating — typically **1–3 minutes**. This allows critical blood transfer to the infant.

2

Apply Clamp 1

Apply first cord clamp approximately **6–8 inches** from the infant's navel.

3

Apply Clamp 2

Apply second cord clamp approximately **2–3 inches** further away from the first (away from infant).

4

Cut the Cord

If authorized and trained: Cut the cord cleanly between the two clamps. Safeguard scalpel in a sharps container immediately.

5

Deliver Placenta

Do not pull on the cord. Allow placenta to deliver on its own (up to **30 minutes**). Guide into placenta bag and secure with twist tie.

PHASE 5

3.5 Post-Delivery Care & Transport

01

Apply OB Napkin

Place the OB napkin on the mother's perineum to absorb bleeding. Massage the uterine fundus (firm ball felt in abdomen) to encourage uterine contraction and reduce hemorrhage.

02

Maintain Warmth

Keep mother and baby warm. Promote skin-to-skin contact if tactically feasible.

03

Document & Transport

Prepare for immediate transport to the nearest appropriate facility. Document **time of birth**, **sex of infant**, and any complications encountered.

Documentation Checklist

🕐 Time of Birth

Exact time the infant fully delivered.

👶 Sex of Infant

Record as observed at delivery.

⚠️ Complications

Nuchal cord, meconium, apnea, hemorrhage, or any deviation from normal.

🏥 Transfer of Care

Receiving facility, time of transfer, and receiving provider.

SECTION 4

Critical Warnings, Limits & Safety

⚖️ 4.1 Scope of Practice

This kit is an **aid for trained personnel**, not a substitute for professional obstetric or neonatal care. All actions must conform to local medical direction and established protocols. Uncertified personnel must not perform any procedures beyond basic first aid.

🔪 4.2 Cutting the Umbilical Cord

Use of the scalpel is a **medical act** carrying significant risk of hemorrhage to the infant or mother and injury to the responder. It must **ONLY** be performed by personnel specifically trained and authorized. If not authorized, leave the cord intact and transport mother and baby together.

🫁 4.2 Airway Suctioning

Routine suctioning of a healthy, crying newborn is **not recommended** and can cause bradycardia — a dangerous drop in heart rate. The bulb syringe is for clearing **obvious obstructions** in a newborn with compromised breathing ONLY.

🚫 4.3 Equipment Limitations

This kit is designed for a normal, uncomplicated **cephalic (head-first) delivery only.** It is NOT equipped to manage:

- Breech birth
- Shoulder dystocia
- Postpartum hemorrhage
- Neonatal resuscitation requiring advanced airway or medications

🧤 4.4 Infection Control

All items are **single-use and sterile** in their packaging. Do not use any item if its packaging is compromised. Treat all body fluids as potentially infectious. All used kit components are considered **biohazardous waste** and must be disposed of according to protocol.

SECTION 5

Readiness, Inspection & Sustainment

5.1 Periodic Inspection

At the beginning of each shift or monthly, inspect outer packaging for integrity. Confirm seals are intact with no visible damage or moisture intrusion.

5.2 Expiration Dates

Inspect annually for component expiration dates. Sterile items (gauze, scalpel) carry expiry dates. If **any component is expired**, replace the entire kit. Use the expired kit for training only.

5.3 Storage

Store in a clean, dry, climate-controlled environment such as an ambulance compartment or medical jump bag. Avoid extreme temperatures and direct sunlight.

5.4 Post-Deployment Protocol

🔴 **SINGLE-USE KIT** — After any deployment, whether all items were used or not, the entire kit must be immediately removed from service.

01

Remove From Service

Take the used kit out of rotation immediately after any deployment.

02

Biohazard Disposal

Treat all used kit components as biohazardous waste. Dispose per agency policy.

03

Replace Kit

Requisition and install a new, sealed OB Kit before the unit returns to service.