Preexisting Diabetes in Pregnancy: The Clinical Pathway

Distilled from the 2026 Expert Consensus (College of French Gynecologists and Obstetricians & French Society of Diabetology).

Unified protocols for Type 1 and Type 2 Diabetes spanning preconception, antenatal care, delivery, and neonatal management.

Type 1 Diabetes (T1D)

Affects **0.2%** of pregnant women

Type 2 Diabetes (T2D)

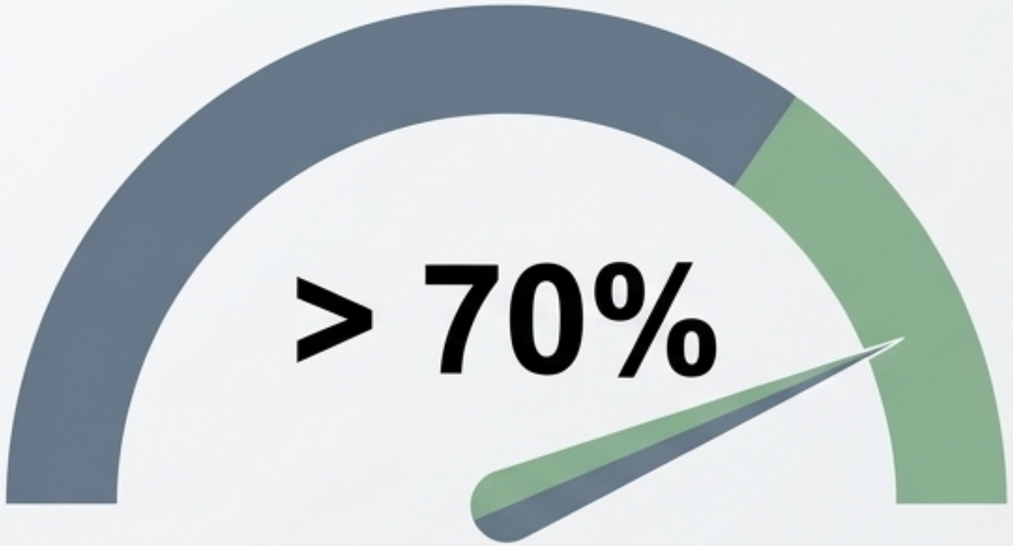
Affects **0.3%** of pregnant women

Core Clinical Principle

A shared medical goal of achieving **strict glycemic control** while **navigating distinct phenotypic risks** and therapeutic needs.

Preconception: Baseline Metabolic Requirements

HbA1c Target



Time in Range (TIR) Target

Target range: 0.70-1.80 g/L (3.9-10 mmol/L)

Technology Recommendations

Continuous Glucose Monitoring (CGM) is recommended for all T1D patients to achieve these targets. Automated Insulin Delivery (AID) implementation should be discussed as part of shared medical decision-making.

Preconception: Required Clinical Assessments

Universal Baseline (T1D & T2D)

- HbA1c Measurement
- Microangiopathic Impact Assessment
- Macroangiopathic Complication Assessment
- Cardiovascular Risk Factor Screening

Type 1 Specific

- TSH Measurement
- Obstructive Sleep Apnea (OSA) screening explicitly if obesity is present.

Type 2 Specific

- Obstructive Sleep Apnea (OSA) screening systematically during questioning.

General Counseling Must Include:

Weight loss (if applicable), physical activity, and dietary care. Women of childbearing age must be repeatedly advised on the importance of planned pregnancies.

Preconception: Medication Management Protocol

STOP - Discontinue Before Conception
- Statins
- Teratogenic antihypertensive treatments (replace with pregnancy-compatible alternatives)
- Non-approved antidiabetic treatments (for T2D)

ADJUST / CONTINUE - Optimize Therapy
- Smoking cessation advice and dedicated addiction specialist support
- T2D Therapy: Transition to Metformin and/or Insulin as necessary

START - Initiate Proactively
- Folic acid supplementation: 0.4mg per day

Antenatal Care: Strict Pregnancy Glycemic Targets

HbA1c Target

< 6.0%

With maximal minimization of hypoglycemia

Fasting Target

< 0.95 g/dL

(< 5.3 mmol/L)

Postprandial Target

< 1.20 g/dL

(< 6.7 mmol/L) at 2 hours post-meal

Time in Range (TIR) Target

Target Range: 0.63-1.40 g/dL (3.5-7.8 mmol/L)

Antenatal Care: Primary Therapies and Monitoring

Type 1 Diabetes

Monitoring:
CGM is universally recommended.

Therapy:
Insulin pump infusion device (IUD) is the recommended treatment modality during pregnancy.

Type 2 Diabetes

Monitoring:
CGM is recommended OR multiple daily capillary self-monitoring as part of individualized care.

Therapy:
Insulin therapy is recommended. Addition or continuation of Metformin is determined on a case-by-case basis (phenotype/glycemic control).

Mandatory Care Team Collaboration

Regular monitoring by a diabetes specialist and monthly obstetrician-gynecologist monitoring (in collaboration with a maternity ward), intensifying in the third trimester.

Antenatal Surveillance Calendar

First Trimester / Initial

Initial assessment of kidney function (screen for diabetic nephropathy). If diagnosed, monitor monthly.

Throughout Pregnancy

- Ophthalmological screening for Diabetic Retinopathy (DR) quarterly. (Increases to monthly if risk factors present).
- Blood pressure management (Target: < 140/90 mmHg).

36 - 37 Weeks

Obstetric Ultrasound: Required to assess fetal growth, guide delivery mode, and finalize gestational age at birth.

Interventions NOT Routinely Recommended

- Routine aspirin to prevent morbidity
- Fetal heart rate monitoring to predict fetal death

Antenatal Care: Acute Complication Management

Hypoglycemia Unawareness

Target: Identify patients lacking hypoglycemia perception.

Specific Risk: Alert women with T1D to the significantly increased risk of hypoglycemia during the first trimester. Adapt monitoring accordingly.

Diabetic Ketoacidosis Screening

Trigger 1 (Clinical): Nausea, vomiting, abdominal pain.

Trigger 2 (Threshold): Systematic capillary ketonemia measurement if blood glucose >= 2 g/dL (11 mmol/L).

Prenatal Corticosteroids

Follow non-diabetic indications, but require close maternal glucose monitoring and increased insulin doses in the days following administration.

Delivery: Timing and Mode Strategy

Delivery Consideration Window

Between 37 and 38+6 weeks of gestation

(Due to fetal mortality risk. Exact timing depends on comorbidities, glycemic control, and estimated weight.)

> 4,500g (Macrosomia)

Cesarean Section recommended (reduces risk of brachial plexus palsy and neonatal injuries).

Standard / IUGR

Vaginal delivery pathway depending on maternal status.

Mandatory Multidisciplinary Presence in Maternity Ward: Obstetrician-Gynecologist + Anesthesiologist + Pediatrician

Delivery: Intrapartum Glycemic Control

Primary Therapy

Rapid-acting insulin administered per advance specialist protocol via:

– Insulin pump / IUD
– Multiple injections
– OR Continuous IV infusion

Rescue Therapy

In the event of glycemic imbalance, continuous intravenous insulin therapy is the mandated rescue intervention.

Postpartum: Maternal Recovery Protocols

Type 1 Diabetes
Insulin Step-Down

Immediate reduction in insulin doses in the postpartum period.

Type 2 Diabetes
Medication Step-Down

Reintroduce oral or injectable antidiabetics. (Note: Metformin is the only acceptable oral drug if breastfeeding).

Universal Maternal Support & Planning

Lactation

Actively encourage and support breastfeeding in the delivery room.

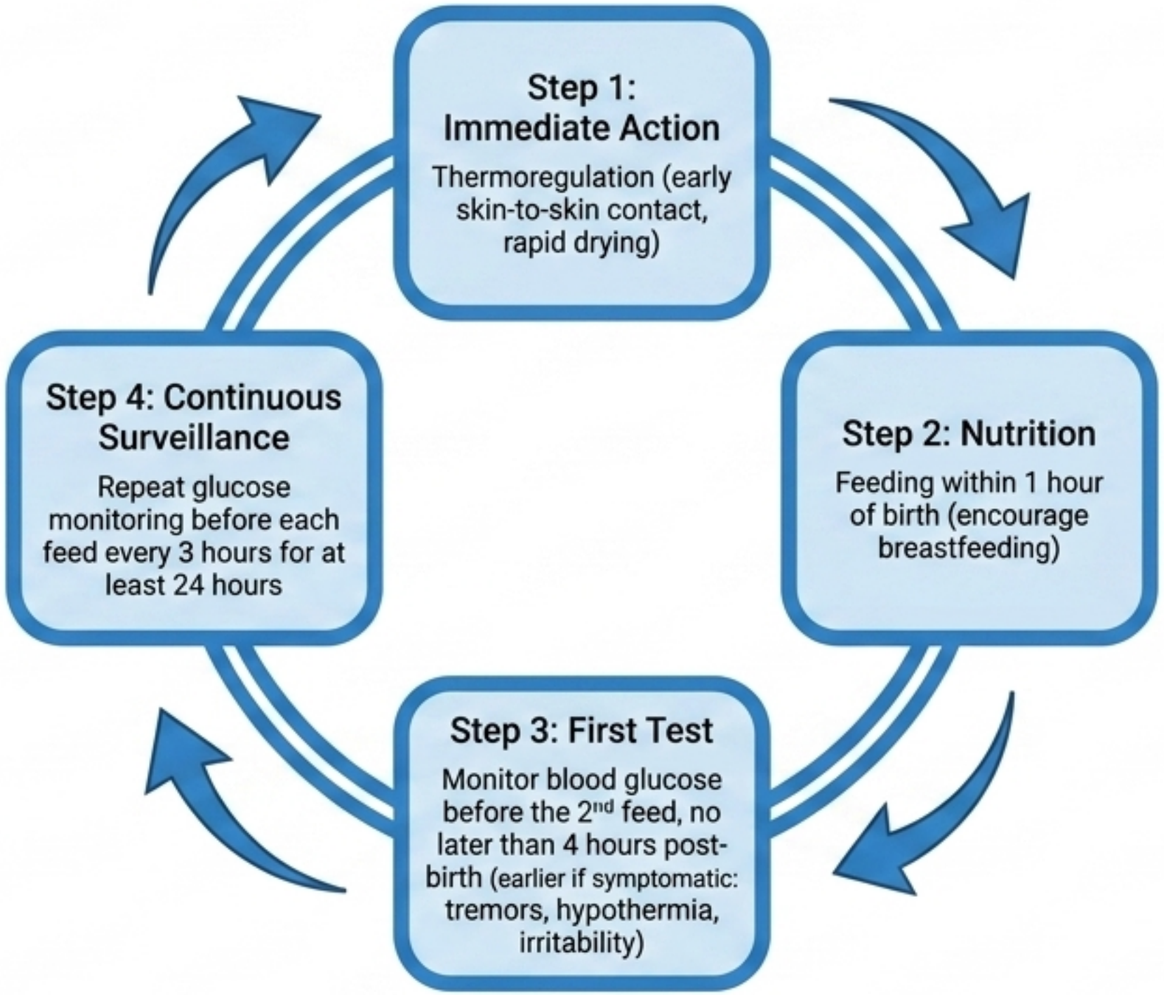
Contraception

Immediate postpartum options include Long-Acting Reversible Contraception (LARC - copper/hormonal IUD or implant) or microgestin-only pill.

Follow-up

Initial diabetologist consultation required within 6 months post-birth.

Neonatal Care: Hypoglycemia Prevention Loop



System Requirement

Every care team must have a specialized protocol. The medical record must explicitly log the preexisting diabetes context and specific type.

The Clinical Pathway: T1D vs. T2D Synthesis

	Type 1 Diabetes	Type 2 Diabetes
Preconception	TSH Screen, Routine CGM	OSA screen (routine questioning). Discontinue non-approved meds
Antenatal Target	TIR > 70%. Hypo unawareness alert (1st Tri)	TIR > 90%
Antenatal Therapy	Insulin Pump (IUD) + CGM universally recommended	Insulin +/- Metformin. CGM or Capillary monitoring
Postpartum	Immediate insulin dose reduction	Reintroduce meds (Metformin only if breastfeeding)

Guideline adherence ensures maternal and neonatal safety regardless of the starting phenotype.