



# Chronic Disease in Preconception Care

## Key Messages

- Chronic diseases are increasingly common among individuals of reproductive age.
- Poor disease control prior to conception is associated with increased risks of pregnancy loss, congenital anomalies, preeclampsia, preterm birth, and fetal growth restriction.
- Many pregnancies are unplanned and early fetal development occurs before pregnancy recognition.
- Preconception care provides an opportunity to optimize disease control, review medications, and coordinate care before pregnancy occurs.

## Clinical Pearl

Stabilizing chronic illness prior to conception significantly improves maternal and fetal outcomes.

## CORE CLINICAL PRINCIPLES

Providers can support safer pregnancy planning by:

- Identifying chronic conditions early
- Reviewing medication safety
- Optimizing disease control before pregnancy
- Coordinating specialist care when needed
- Discussing reproductive goals and pregnancy timing
- Providing patient-centred counselling and shared decision-making

## *Practice Tip*

*Ask routinely:*

“Would you like to become pregnant in the next year?”

This helps guide medication review and care planning.

## **Routine Screening for Chronic Disease**

Chronic disease assessment should be integrated into routine care for people of reproductive age.

*Screening may include:*

- Chronic medical conditions
- Medication review
- Cardiometabolic risk factors
- Mental health screening
- Lifestyle behaviours
- Access barriers to care

*Screening should be:*

- Routine
- Non-judgmental
- Repeated over time
- Independent of pregnancy intention

## **Medication Safety**

Medication review is a key component of preconception care.

*Providers should review:*

- Prescription medications
- Over-the-counter medications
- Supplements and herbal products
- Potential teratogenic risks

Medication adjustments should occur before pregnancy whenever possible.

## CLINICAL QUICK-READ BY CONDITION

### Why This Matters

#### Diabetes

*Poor glycemic control before pregnancy increases the risk of:*

- Congenital anomalies
- Pregnancy loss
- Hypertensive disorders of pregnancy
- Fetal growth abnormalities

*What to Assess Before Pregnancy*

- Glycemic control
- Diabetes complications
- Medication regimen
- Nutrition and lifestyle
- Cardiovascular risk

*Priority Preconception Actions*

- Optimize glycemic control prior to conception
- Screen for retinopathy and nephropathy
- Provide nutrition counselling
- Develop a long-term diabetes management plan

*Medication Considerations*

Some diabetes medications may require adjustment before pregnancy.

#### Clinical Pearl

Good glycemic control prior to conception significantly reduces congenital anomaly risk.

## Hypertension

*Chronic hypertension increases risks of:*

- Preeclampsia
- Placental complications
- Preterm birth
- Fetal growth restriction

*What to Assess Before Pregnancy*

- Blood pressure control
- Cardiovascular risk factors
- Medication regimen
- Lifestyle behaviours

*Priority Preconception Actions*

- Achieve stable blood pressure control
- Assess cardiovascular risk
- Encourage lifestyle interventions
- Plan ongoing monitoring

*Medication Considerations*

ACE inhibitors and ARBs are generally contraindicated in pregnancy and should be reviewed before conception.

## Clinical Pearl

Medication review prior to pregnancy helps prevent early fetal exposure to contraindicated drugs.

## Thyroid Disorders

*Thyroid disorders can affect:*

- Fertility
- Pregnancy loss
- Fetal brain development
- Pregnancy complications

*What to Assess Before Pregnancy*

- Thyroid function
- Medication dosing
- Monitoring plan

*Priority Preconception Actions*

- Achieve euthyroid status prior to conception
- Adjust thyroid medication if needed
- Establish a monitoring plan for pregnancy

*Medication Considerations*

Thyroid hormone requirements often increase early in pregnancy.

### Clinical Pearl

Adequate thyroid hormone in early pregnancy supports fetal neurological development.

## Epilepsy

Both seizures and antiseizure medications can influence pregnancy outcomes.

*Potential risks include:*

- Maternal injury
- Congenital anomalies
- Preterm birth

*What to Assess Before Pregnancy*

- Seizure frequency and control
- Medication regimen
- Folic acid supplementation

*Priority Preconception Actions*

- Achieve stable seizure control
- Coordinate care with neurology
- Initiate appropriate folic acid supplementation

*Medication Considerations*

Some antiseizure medications carry higher teratogenic risk.

## Clinical Pearl

Adequate thyroid hormone in early pregnancy supports fetal neurological development.

## Asthma

*Poorly controlled asthma during pregnancy increases risks of:*

- Preterm birth
- Low birth weight
- Hypertensive disorders of pregnancy

*What to Assess Before Pregnancy*

- Asthma severity and symptom control
- Medication adherence
- Environmental triggers
- Smoking status

*Priority Preconception Actions*

- Optimize asthma control
- Review inhaler technique
- Address smoking and environmental triggers

*Medication Considerations*

Most asthma medications are safer than uncontrolled asthma.

## Clinical Pearl

Maintaining asthma control during pregnancy is safer than stopping medications.

## **Autoimmune and Inflammatory Diseases**

(e.g., lupus, rheumatoid arthritis, inflammatory bowel disease)

*Active disease at conception increases risks of:*

- Pregnancy loss
- Preeclampsia
- Preterm birth
- Fetal growth restriction

*What to Assess Before Pregnancy*

- Disease activity
- Organ involvement
- Medication safety

*Priority Preconception Actions*

- Aim for remission or low disease activity
- Coordinate specialist care
- Review medication safety

*Medication Considerations*

Some immunosuppressive medications are contraindicated in pregnancy.

## **Clinical Pearl**

Pregnancy outcomes are best when conception occurs during disease remission.

## Obesity and Metabolic Health

*Obesity and metabolic disease increase risks of:*

- Gestational diabetes
- Hypertensive disorders
- Cesarean birth
- Long-term metabolic risk for offspring

*What to Assess Before Pregnancy*

- BMI and metabolic risk
- Blood pressure
- Diabetes risk
- Lifestyle behaviours

*Priority Preconception Actions*

- Encourage healthy nutrition, physical activity and supportive lifestyle changes
- Screen for metabolic conditions
- Provide supportive counselling

*Medication Considerations*

Review medications used for metabolic conditions prior to pregnancy.

## Clinical Pearl

Even modest improvements in metabolic health before pregnancy can reduce pregnancy risk.

## Practical Actions During Routine Visits

*Providers can integrate preconception care into routine visits by:*

- Asking about reproductive goals
- Screening for chronic disease
- Reviewing medications
- Supporting lifestyle changes
- Coordinating specialist referrals
- Providing preconception counselling

Small, consistent interventions across routine visits can significantly improve pregnancy outcomes.