



# ESP CASE DETECTION ALGORITHM

## Gestational Diabetes

Document Version 2.3

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### Modification History

Version	Date	Modification	By
2.3	4/23/2021	Added ICD10 codes to specification (was already coded in ESP algorithm plug-in)	DPM
2.2	10/11/2017	Added ESP Logo and MDPH branding	DPM
2.1	7/5/2017	Placed onto new algorithm template	DPM
2.0	11/16/2012		
1.0	6/22/2012	Initial draft	

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## 1. Overview

The purpose of this document is to describe the criteria used to identify Gestational Diabetes in MDPHnet data.

## 2. Criteria used to identify cases using ESP data

### I. CASE CRITERIA

Patient pregnant (see algorithm for pregnancy) AND one of the following

- OB Fasting glucose  $\geq 126$
- OGTT50 with single value  $\geq 190$
- OGTT75-intrapartum with  $\geq 1$  value above threshold
- OGTT100 with  $\geq 2$  values above threshold
- ICD-9 648.8x and (prescription containing the term “LANCETS” or “TEST STRIPS”) within 14 days AND no ICD9 250.x or ICD10 E10\*, E11\*, E12\*, E13\*, and E14\* prior to pregnancy start date

### II. ICD-9/ICD-10 CODES FOR CASE CRITERIA

Abnormal glucose during pregnancy	ICD-9	648.8x	Abnormal glucose tolerance of mother complicating pregnancy childbirth or the puerperium
Gestational diabetes mellitus	ICD-10	O24.4x	Gestational diabetes mellitus

### III. MEDICATIONS FOR CASE CRITERIA

#### Medications

- Prescription for one of the following medications during pregnancy (all pregnant women, not just those with GDM)
- Report results separately for each medication

Insulin
Metformin
Glyburide

### IV. LAB TESTS

#### 1. Fasting Glucose



Category	CPT-Comp	Component Name	Abstract Name <sup>1</sup>	Result
OGTT 50	82950—1378	OB GLUCOSE CHALLENGE, FASTING	ogtt50-fasting	≥126
OGTT 75	82951—2876	GLUCOSE FASTING PRE 75 GM	ogtt75-fasting	≥126
OGTT 75	82951-560	GLUCOSE, FASTING	ogtt75-fasting	≥126
OGTT 75	82951—2877	GLUCOSE FASTING	ogtt75-fasting	≥126
OGTT 100	82951—157	OB FASTING GLUCOSE	ogtt100-fasting	≥126
OGTT 100	DMA002—2877	GLUCOSE FASTING	ogtt100-fasting	≥126
OGTT 100	82951—2875	GLUCOSE FASTING PRE 100 GM	ogtt100-fasting	≥126

\*confirm that the component has been accurately used by assessing the reference high. The correct reference high for these tests will be between 90 and 99. Use the stated threshold rather than reference high, however, to determine if test is positive.

## 2. OGTT50

One of the following tests positive

Category	CPT-Comp	Component Name	Abstract Name	Result
OGTT 50	82950—161	OB GLUCOSE CHALLENGE, RANDOM	ogtt50-random	≥190
OGTT 50	82950--2848	GLUCOSE 1 HR POST CHAL.	ogtt50-1hr	≥190
OGTT 50	82950--2861	GLUCOSE 1 HR POST 50 GM	ogtt50-1hr	≥190
OGTT 50	82950--2896	GLUCOSE 1 HR POST 50 GM-N	ogtt50-1hr	≥190

Reference high vs stated threshold: stated threshold

## 3. OGTT75 - Intrapartum

Any one of the following values positive during pregnancy

Category	CPT-Comp	Component Name	Abstract Name	Result
OGTT 75	82951—2876	GLUCOSE FASTING PRE 75 GM	ogtt75-fasting	≥92
OGTT 75	82951—2877	GLUCOSE FASTING	ogtt75-fasting	≥92
OGTT 75	82951—2867	GLUCOSE ½ HR POST 75 GM	ogtt75-30min	≥200
OGTT 75	82951—2862	GLUCOSE 1 HR POST 75 GM	ogtt75-1hr	≥180
OGTT 75	82951—2857	GLUCOSE 1 ½ HR POST 75 GM	ogtt75-90min	≥180
OGTT 75	82951—2865	GLUCOSE 2 HR POST 75 GM	ogtt75-2hr	≥153

Reference high vs stated threshold: stated threshold

Any one of the following values positive during pregnancy

Category	CPT-Comp	Component Name	Abstract Name	Result
OGTT 75	82951-64	GLUCOSE FASTING, UR	ogtt75-fasting-urine	Positive
OGTT 75	82951-560	GLUCOSE, FASTING	ogtt75-fasting	≥92
OGTT 75	82951-563	GLUCOSE, 2 HR	ogtt75-2hr	≥153

Reference high vs stated threshold: stated threshold

## 4. OGTT75 – Postpartum – DM

Positive result on any one of the following

Category	CPT-Comp	Component Name	Abstract Name	Result
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<sup>1</sup> Different organizations may use different CPT-Comp identifiers for particular lab tests. To handle organization -specific differences, the GDM report is implemented using “abstract” test names and organization-specific tests are then associated (mapped) to the corresponding abstract test. It is often the case that several organization –specific tests map to the same abstract test.



OGTT 75	82951—2876	GLUCOSE FASTING PRE 75 GM	ogtt75-fasting	≥126
OGTT 75	82951—2877	GLUCOSE FASTING	ogtt75-fasting	≥126
OGTT 75	82951—2867	GLUCOSE 1/2 HR POST 75 GM	ogtt75-30min	≥200
OGTT 75	82951—2862	GLUCOSE 1 HR POST 75 GM	ogtt75-1hr	≥200
OGTT 75	82951—2857	GLUCOSE 1 1/2 HR POST 75 GM	ogtt75-90min	≥200
OGTT 75	82951—2865	GLUCOSE 2 HR POST 75 GM	ogtt75-2hr	≥200

Reference high vs stated threshold: stated threshold

Positive result on any one of the following:

Category	CPT-Comp	Component Name	Abstract Name	Result
OGTT 75	82951-560	GLUCOSE, FASTING	ogtt75-fasting	≥126
OGTT 75	82951-563	GLUCOSE, 2 HR	ogtt75-2hr	≥200

Reference high vs stated threshold: stated threshold

### 5. OGTT100

Two or more of the following values positive on the same encounter

Category	CPT-Comp	Component Name	Abstract Name	Result
OGTT 100	82951--64	URINE GLUCOSE FASTING	ogtt100-fasting-urine	Positive
OGTT 100	82951--157	OB FASTING GLUCOSE	ogtt100-fasting	≥95
OGTT 100	82951--158	OB GLUCOSE 1 HR	ogtt100-1hr	≥180
OGTT 100	82951--159	OB GLUCOSE 2 HR	ogtt100-2hr	≥155
OGTT 100	82951--160	OB 3-HR GLUCOSE	ogtt100-3hr	≥140

Reference high vs stated threshold: reference high

Two or more of the following values positive on the same encounter

Category	CPT-Comp	Component Name	Abstract Name	Result
OGTT 100	DMA002—2877	GLUCOSE FASTING	ogtt100-fasting	≥95
OGTT 100	DMA002—2866	GLUCOSE 1/2 HR POST 100 GM	ogtt100-30min	≥200
OGTT 100	DMA002—2859	GLUCOSE 1 HR POST 100 GM	ogtt100-1hr	≥180
OGTT 100	DMA002—2855	GLUCOSE 1 1/2 HR POST 100 GM	ogtt100-90min	≥180
OGTT 100	DMA002—2863	GLUCOSE 2 HR POST 100 GM	ogtt100-2hr	≥155

Reference high vs stated threshold: reference high

Two or more of the following values positive on the same encounter

Category	CPT-Comp	Component Name	Abstract Name	Result
OGTT 100	82951—2875	GLUCOSE FASTING PRE 100 GM	ogtt100-fasting	≥95
OGTT 100	82951—2866	GLUCOSE 1/2 HR POST 100 GM	ogtt100-30min	≥200
OGTT 100	82951—2859	GLUCOSE 1 HR POST 100 GM	ogtt100-1hr	≥180
OGTT 100	82951—2855	GLUCOSE 1 1/2 HR POST 100 GM	ogtt100-90min	≥180
OGTT 100	82951—2863	GLUCOSE 2 HR POST 100 GM	ogtt100-2hr	≥155
OGTT 100	82951—2868	GLUCOSE 3 HR POST 100 GM	ogtt100-3hr	≥140
OGTT 100	82951—2870	GLUCOSE 4 HR POST 100 GM	ogtt100-4hr	≥140
OGTT 100	82951—2873	GLUCOSE 5 HR POST 100 GM	ogtt100-5hr	≥140

Reference high vs stated threshold: reference high

### 6. OGTT75 – Postpartum – IFG

Category	CPT-Comp	Component Name	Abstract Name	Result
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OGTT 75	82951—2876	GLUCOSE FASTING PRE 75 GM	ogtt75-fasting	100-125
OGTT 75	82951—2877	GLUCOSE FASTING	ogtt75-fasting	100-125
OGTT 75	82951-560	GLUCOSE, FASTING	ogtt75-fasting	100-125

Reference high vs stated threshold: stated threshold

### 7. OGTT75 – Postpartum – IGT

Positive result on any one of the following

Category	CPT-Comp	Component Name	Abstract Name	Result
OGTT 75	82951—2867	GLUCOSE 1/2 HR POST 75 GM	ogtt75-30min	140-199
OGTT 75	82951—2862	GLUCOSE 1 HR POST 75 GM	ogtt75-1hr	140-199
OGTT 75	82951—2857	GLUCOSE 1 1/2 HR POST 75 GM	ogtt75-90min	140-199
OGTT 75	82951—2865	GLUCOSE 2 HR POST 75 GM	ogtt75-2hr	140-199

Reference high vs stated threshold: stated threshold

Positive result on any one of the following:

Category	CPT-Comp	Component Name	Abstract Name	Result
OGTT 75	82951-563	GLUCOSE, 2 HR	ogtt75-2hr	140-199

Reference high vs stated threshold: stated threshold