Complications of Diabetes: Organs Involved

- **Brain**: Stroke
- **Eyes**: Diabetic retinopathy
- **Heart**: Coronary Artery Disease, Myocardial Infarction, Congestive Heart Failure
- **Stomach**: Gastroparesis
- **Pancreas**: Diabetic Ketoacidosis
- **Kidneys**: Onset polyuria, Diabetic nephropathy
- **Genitourinary tract**: Erectile dysfunction, Urinary tract infections
- **Peripheral nerves**: Peripheral neuropathy
- **Peripheral Vascular (arteries)**: Claudication
These timelines depict the rough progression of complications in *poorly controlled* type 1 and type 2 diabetes mellitus. Also indicated are the time points at which screening for certain complications is recommended.

**Type 1**

**Diagnosis:** Organs highlighted – Kidneys, Pancreas

- Polyuria/polydipsia can signal diabetes onset
- Diabetic ketoacidosis may be the presenting feature of diabetes

**5 years:** Organs highlighted – Eyes, Nerves, Peripheral Vascular (Arteries), Kidneys

- Microalbuminuria begins
- Annual foot exams, eye (including retinal) exams, and urine screening exams should begin

**10 years:** Organs highlighted – Eyes, Kidneys

- 60% of people with poorly controlled diabetes have retinopathy at this point
- Overt nephropathy may be present

**15 years:** Organs highlighted – Eyes, Cardiovascular

- Blindness resulting from diabetic retinopathy may occur
- Cardiovascular complications become symptomatic

**20 years:** Organs highlighted - Kidneys

- End-stage renal disease may occur after years of nephropathy

**Anytime:** Organs highlighted – Pancreas

- Diabetic ketoacidosis may occur, especially with infection or non-compliance with insulin regimen

**Life Expectancy:** Organs highlighted – n/a

- Due to the complications of the disorder, life expectancy is 7 to 10 years shorter for people with poorly controlled diabetes than for people without it.
Type 2

**Diagnosis:** Organs highlighted – Nerves, Peripheral Vascular, Eyes, Kidneys, Cardiovascular

- Many people with type 2 diabetes remain unaware that they have it for quite some time. Thus, organ damage may be present at the time of diagnosis.
- Peripheral neuropathy or claudication may be the presenting feature of type 2 diabetes
- Microalbuminuria may be present
- 50% have high blood pressure
- Annual foot exams, eye (including retinal) exams, and urine screening exams should begin

**10 years:** Organs highlighted – Genitourinary

- 50% of men with poorly controlled diabetes have erectile dysfunction at this point

**20 years:** Organs highlighted – Kidneys

- End-stage renal disease may occur after years of nephropathy

**Anytime:** Organs highlighted – Cardiovascular, Kidneys

- Nephropathy and cardiovascular complications may occur at any time

**Life Expectancy:** Organs highlighted – n/a

- Due to the complications of the disorder, life expectancy is 7 to 10 years shorter for people with poorly controlled diabetes than for people without it