COVID-19 is a novel coronavirus that can cause several symptoms, including fever, coughing, shortness of breath and difficulty breathing. Individuals over 60 years of age and those with pre-existing medical conditions, including diabetes, are at the highest risk for complications. Recent studies have shown that of those hospitalized for severe disease, 22.2% to 26.9% reported living with diabetes. Diabetes and high glucose levels are associated with increased complications, respiratory failure and mortality in hospitalized patients with COVID-19. Because people with diabetes may also have other comorbidities such as organ failure and cardiovascular disease, it is imperative they follow specific COVID-19 precautions and prevention guidance from the Centers for Disease Control and Prevention (CDC), the World Health Organization (WHO) and their endocrinologist or health care providers.

**A. PREVENTION measures**

I. **PRACTICE GOOD HEALTH HABITS:**
   - Avoid others who are sick. Separate yourself from all individuals by six (6) feet.
   - Frequently wash hands with soap and water or use alcohol-based hand sanitizer. Wash your hands for 20 seconds after touching anything that has come into your home.
   - Avoid touching your eyes, nose and mouth.
   - Cover coughs and sneezes with a tissue.
   - Disinfect surfaces around your home and/or office regularly.
   - Avoid shaking hands, hugging and kissing.
   - Avoid large gatherings.
   - If you become ill, stay home, call your doctor’s office to discuss symptoms. Go to a healthcare facility only if directed by your physician or if you are seriously ill.
   - Wipe down door handles and taps daily.
   - Open your post carefully, as you will need to wash your hands after touching it. The other option is to leave your post for 24 hours, which is how long the virus stays on paper. However, we would still recommend washing your hands.
   - Either wipe down the outside of all boxes of food etc delivered to your home or let them sit for 24 hours in a corner out of harm’s way.
   - Do not allow anyone into your home unless it is an emergency or concerns your health. If you have family living nearby, you could (or they could) put a chair or bench outside one of your windows and let grandchildren speak to you through an open window (or on the phone) but ensure a distance of six feet. If you have a neighbor or friend close by this is also an option.
   - If you must go out for food shopping etc, then use a thick scarf if you do not have a mask. If it is possible, get shopping delivered. Make sure to wear gloves that can be washed or use disposable gloves when handling a shopping trolley or basket.
   - If you are over 70 then respect the advice about cocooning. It is difficult but necessary and will reduce your chances of contracting the virus.

II. **SOCIAL LIFE in ISOLATION:**
1. **Practice social distancing:** practice the social distancing at this time:
   - only leaving the house when it’s absolutely necessary, and leaving about six feet between you and strangers.
   - The virus spreads fairly easily — through infected surfaces (think doorknobs and faucets) as well as from droplets from other infected people coughing and sneezing.

Follow the CDC guidelines:
- Call your doctor,
- stay home,
- limit contact with people and animals,
- wash your hands well with soap and water for a full 20 seconds and often (just make sure to dry them carefully so there’s no residue on your fingers before you prick your finger when checking blood glucose).

- Maintain contact with family and friends by telephone or email – physical isolation doesn’t have to be social isolation!
- Don’t hesitate to ask for the support you need for shopping, getting prescriptions filled, or other errands.
- Maintain contact with family and friends by phone, email, WhatsApp, Viber, Skype, Zoom or Facetime – **Physical isolation does not have to be social isolation!**
- Ask family member or friend to instruct you on how to put any of the apps on to your phone

**If you find you are anxious or bored you might try some of the following:**

- Dig out those books or articles you have put aside and never had the time to read.
- Write those letters to family or friends that you kept meaning to do.
- Organize your family photos, naming who is in them!
- Write or type up your family tree or incidences that you found amusing in your lifetime.
- If you physically can do so without causing pain or putting yourself at risk of an injury or fracture, you could do some spring cleaning of your wardrobes and kitchen cabinets. Ideally, items should be placed between the hip and eye level. Anyone at high risk to fracture or who has already broken bones in their back mustn’t attempt this.
- Use the internet to find sites offering meditation or mindfulness. There are also lots of apps on your phone or computer that can be diverting. We will send out a list of these separately.
- Exercise can also help to reduce stress levels. Again, there is lots of free stuff on the internet.
- Keep updated on what is happening but also take time away from the news. Avoid too much social media.

**III. How to Stay Safe from Coronavirus if You Have Diabetes (Endocrinology Web):**

Stock up on a few weeks of medical supplies and insulin

This might include:
- extra bottled water (which is necessary in the case of increased blood sugar levels),
- rubbing alcohol,
- ketone strips,
- glucagon,
- foods like Jell-O and hard candies for when you’re too ill to eat but need a bit of sugar.
- make sure you have enough medication available to manage your diabetes.

2. **Make a virtual medical plan in case you are quarantined**
   - If you’re using insulin, you’ll need at least the week ahead’s supply,
   - you’ll need to know how to adjust your insulin doses to maintain healthy blood sugar levels.
   - have your sliding scale for insulin written by your provider
   - If you’re quarantining yourself or planning to, it’s a smart decision to get your refills arranged with your local pharmacy and to be in regular communication with your healthcare provider. Even better? Check with your doctor to see if they can provide virtual visits or other digital check-ins, as well.

3. **No vaccinations at this time**

4. **Have an emergency contact on speed dial**
   - have a friend, family member, or trusted neighbor on a proverbial speed-dial so that they can bring you groceries or call your doctor in case you’re unwell. They should be someone who understands your history of diabetes and can help you if you need it.
B. TREATMENT

IV. IF YOU HAVE DIABETES AND HAVE CONTRACTED COVID-19

It is important to continue a normal schedule of medication. But there are important steps to take to avoid complications:

- Monitor your blood sugar and ketones more than usual. This is highly important if you are not eating or drinking much, or if you are taking medication to address symptoms such as fever and muscle aches.
- It may be necessary to take extra insulin to bring down higher blood glucose levels.
- Be on the lookout for ketones, as very high levels could lead to diabetic ketoacidosis (DKA), a dangerous condition that demands immediate medical attention, and can be fatal if left untreated. If you are vomiting, or have moderate or large ketones or symptoms of DKA, contact your healthcare provider immediately and seek emergency assistance.
- Poor glycemic control is a risk factor for serious infections and adverse outcomes. However, the reverse is also true and the risk of infection, including bacterial pneumonia, can be reduced through good glycaemic control. The problem is that infections cause loss of glycaemic control, and treatment of hyperglycaemia is difficult during intercurrent disease with fever, unstable food intake and use of drugs like glucocorticoids in patients with respiratory problems. To maintain optimal glycaemic control requires more frequent blood glucose monitoring and continuous change in antidiabetic treatment after the measured glucose levels.

IMPORTANT INFORMATION IF YOU’VE CONTRACTED COVID-19

- Stop SGLT2 for OUTpatients with COVID 19
- Drink lots of fluids. If you are having trouble keeping water down, have small sips every 15 minutes or so throughout the day to avoid dehydration.
- If you are experiencing a low (blood sugar below 70 mg/dl or your target range), eat 15 grams of simple carbs that are easy to digest like honey, jam, Jell-O, hard candy, popsicles, juice or regular soda, and re-check your blood sugar in 15 minutes to make sure your levels are rising. Check your blood sugar extra times throughout the day and night (generally, every 2-3 hours; if using a CGM, monitor frequently).
- Be aware that some CGM sensors (Dexcom G5, Medtronic Enlite, and Guardian) are impacted by Acetaminophen (Tylenol). Check with finger sticks to ensure accuracy.
- Wash your hands and clean your injection/infusion and finger-stick sites with soap and water or rubbing alcohol.
IN PATIENTS WITH TYPE 2 DIABETES, metformin and SGLT-2 inhibitors with moderate to severe illness should be stopped. Dipeptidyl peptidase 4 (DPP-4) inhibitors and also linagliptin can be used in patients with impaired kidney function without risk of hypoglycaemia. Sulphonylureas may induce hypoglycaemia in patients with low calorie intake. The long-acting GLP-1 receptor agonist which reduces appetite in sparse-eating patients and with a half-life of 1 week cannot be stopped from day to day. IN many patients with type 2 diabetes, insulin treatment will be preferred and need to be initiated, which is complicated because of the limited time for instruction and titration of insulin. Patients already treated with basal insulin will need fast-acting bolus insulin to correct hyperglycaemia. Hospitals have experience and algorithms for the treatment of patients during intercurrent disease, but the time involved for treating labile glycaemic control is a major problem in situations where time is short.

IN PATIENTS WITH TYPE 1 DIABETES treated with basal bolus or insulin pump therapy, the insulin doses should be titrated using frequent glucose and ketone monitoring to avoid hypoglycaemia in patients with reduced food intake, and adding correctional bolus of fast-acting insulin to avoid severe hyperglycaemia and ketoacidosis.

C. MEDICATIONS – BE PREPARED

TAKE STOCK OF SUPPLIES:
Contact your pharmacy if your medications can be mailed home.
Morsani Pharmacy plus (13330 USF Laurel Dr) can provide medications and/or supply by mail;

STATE-LEVEL EMERGENCY ORDERS AND PRESCRIPTION REFILL WAIVERS

STATE EMERGENCY PRESCRIPTION REFILL RULES & HELPFUL RESOURCES for FLORIDA
On Monday, March 9, 2020, Governor Ron DeSantis declared a State of for the entire state of Florida in response to the recent COVID-19 emergency. Under the State of Emergency, a pharmacist, in his or her professional judgment, may be able to refill prescriptions early. In accordance with Section 465.0275, Florida Statutes, pharmacists may dispense up to a 30-day supply of maintenance medication for a chronic condition provided that:

1. The medication is essential to the maintenance of life or to the continuation of therapy in a chronic condition;
2. In the pharmacist’s professional judgment, the interruption of therapy might reasonably produce undesirable health consequences or may cause physical or mental discomfort;
3. The dispensing pharmacist creates a written order containing all of the prescription information required by this chapter and chapters 499 and 893 and signs that order; and
4. The dispensing pharmacist notifies the prescriber of the emergency dispensing within a reasonable time after such dispensing.

COVID-19 Hotline - FLORIDA
1-866-779-6121 or email COVID-19@flhealth.gov

5. Department of Public Health – Facebook - Twitter
7. Board of Pharmacy

PRESCRIPTION COSTS:

If you are struggling to pay for insulin and diabetes medication, DDRC have consolidated resources so that you can find help, fast. Get immediate help from your insulin manufacturer, find low (or no) cost options near you, consider drug discount programs and databases.

GET IMMEDIATE HELP FROM YOUR INSULIN MANUFACTURER

There are three insulin manufacturers who offer immediate assistance and long-term resources. This is the fastest way to get help. Be sure to have all of your information ready before you call. Available options are based on your income, insurance, and the type of insulin you need.

In order to find the right support for you, when you call, you may be asked for the following information:

- Basic contact information
- Date of birth
- Income (note: there are supports for all income levels)
- If you have an active prescription at a pharmacy
- Cost of insulin for monthly supply and/or amount of deductible
- Method of insulin administration (via/pen, pump, syringe, inhaled)
- Dosage
- How much insulin you have on-hand
- Type of insurance (private, commercial, Medicare, Medicaid)
- Whether you are a U.S. resident (required)

Find out who your manufacturer is by checking the company logo on your insulin vial or pen, and call using the numbers provided below.

A customer service representative will confirm your eligibility and explain your options.

Lilly Diabetes Solution Center
833-808-1234

Click here or call a live representative to have a confidential conversation and review solutions based on your circumstances.
Novo Nordisk NovoCare®
1-844-NOVO4ME
1-844-668-6463

NovoCare® provides resources to help you understand your options, find costs, and connect you to affordability support.

Sanofi Patient Savings Programs
1-888-847-4877

Call or click to connect with a Sanofi representative about your individual situation.

MannKind Support Programs
Co-Pay Program
Direct Purchase Program

Lilly:
Manufacturer Patient Assistance Programs ($0 out of pocket, for those who qualify)
- If you take Lilly insulin (Humalog, Basaglar) and are uninsured or have Medicare Part D and meet certain income parameters, you may be eligible for free insulin through LillyCares. Call the Lilly Diabetes Solutions Call Center Helpline at 1-833-808-1234 for personalized help finding your options.
  - Reduced out-of-pocket costs: For people with commercial insurance or the uninsured, the out-of-pocket cost for a monthly prescription of most Lilly insulins at the retail pharmacy should be about $100. If your out-of-pocket cost is higher than $100, call the Lilly Diabetes Solution Center.
  - Lower list price Insulins: Humalog U-100, Humalog Mix75/25, and Humalog Junior KwikPen are available as lower-priced versions (at a 50% discount) and can be ordered through pharmacies within 1-2 business days, if not already available at pharmacies.
  - Immediate supply: If you have an unavoidable need for Lilly insulin, you may qualify for an immediate solution.
  - Lilly Cares Foundation: A separate non-profit organization that provides free Lilly insulin for eligible patients. Learn more about eligibility criteria at www.lillycares.com.

Copay Cards ($15 – $99 standard out of pocket, including some options that work for those without insurance)
- If you take Lilly insulin (Humalog, Basaglar) and do not have health insurance or are covered by commercial insurance (including high deductible health plans), you are eligible for Lilly’s $35 per month copay card. Call the Lilly Diabetes Solutions Call Center
Helpline to sign up. Once qualified, you can choose whether to receive the savings card via email (expected within 24 hours of placing a call) or in the mail.

- If you have high-deductible health insurance or are uninsured, you may be eligible for Lilly insulin at 40% discounted through BlinkHealth but this is not available if you are insured through Medicaid or Medicare.

Novo Nordisk Inc:
Manufacturer Patient Assistance Programs ($0 out of pocket, for those who qualify)
- If you take Novo Nordisk insulin (Fiasp, NovoLog, NovoRapid, Levemir, Tresiba): the NovoCare Patient Assistance Program provides free insulin to those who qualify, which is limited to those with no private insurance and who do not qualify for federal insurance programs and who are at or below 400% of the federal poverty level – with a few exceptions.
- Patients in immediate need and at risk of rationing can also receive a free, one-time, immediate supply of up to three vials or two packs of pens of Novo Nordisk insulin with a prescription by calling 844-NOVO4ME (844-668-6463) or by visit NovoCare.com.

Copay Cards ($15 – $99 standard out of pocket, including some options that work for those without insurance)
- If you take Novo Nordisk insulin (Fiasp, NovoLog, NovoRapid, Levemir, Tresiba) and do not have health insurance or are covered by commercial insurance (including high deductible health plans), you are eligible for Novo Nordisk’s My$99Insulin Program, which allows for the purchase of up to three vials or two packs of insulin pens, of any combination of insulins from Novo Nordisk Inc. for $99 per month. If you have private insurance, you may also be eligible for the NovoLog Savings Card or the Cornerstones4Care Savings Card.
  - My$99Insulin: All patients can purchase up to three vials or two packs of FlexPen*/FlexTouch*/Penfill® pens of any combination of insulins from Novo Nordisk Inc. for $99
  - Follow-on brand insulins: Authorized generics of NovoLog® and NovoLog Mix® made by new Novo Nordisk A/S US company, Novo Nordisk Pharma, Inc., available at pharmacies within 1-3 business days at 50 percent off the list price
  - Immediate Supply: New, immediate, one-time insulin supply option available for people facing an acute need when more time is needed to identify a long-term sustainable solution

Sanofi:
Manufacturer Patient Assistance Programs ($0 out of pocket, for those who qualify)
- If you take Sanofi insulin (Admelog, Lantus, Toujeo): the Patient Connection Program provides Sanofi insulins to those who qualify, which is limited to those with no private insurance and who do not qualify for federal insurance programs and who are at or below 250% of the federal poverty level – with a few exceptions.
Copay Cards ($15 – $99 standard out of pocket, including some options that work for those without insurance)

- **If you take Sanofi insulin (Admelog, Lantus, Toujeo)** and do not have prescription medication insurance, you are eligible for Sanofi’s **Insulins ValYou Savings Program**, through which people living with diabetes in the US can pay $99 to access their insulin with a valid prescription. This program offers up to 10 boxes of pens and/or 10 mL vials per month for those without prescription medication insurance. If you do have insurance, you may still be eligible for copay cards based on the type of Sanofi insulin you are taking. [Find possible copay cards here.](#)

- **If you take Mannkind insulin (Afrezza)** and your private insurance covers Afrezza, you can sign up for the **Savings Program**, which may lower copays for those with private insurance.

  - **Insulins Valyou Savings Program**: All uninsured patients, regardless of income level, can access one or multiple Sanofi insulins (Lantus, Toujeo, Admelog, and Apidra) for a fixed price of $99 per month for up to 10 boxes of pens and/or 10mL vials.

  - **Co-pay Assistance Programs**: All commercially insured patients, regardless of income level, can participate in this program which limits out-of-pocket expenses for a majority of patients to $0 or $10. This program exists for **Adlyxin, Apidra, Lantus, Toujeo, and Soliqua 100/33**.

  - **Sanofi Patient Connection**: Qualified low- and middle-income patients can receive free medications through the patient assistance component of this program.

Other Insulin Options

- R and N human insulins are available over-the-counter in 49 states and cost much less than analog insulins ($25-$40 per vial at Walmart). They **work differently** than analog insulins, but in an emergency situation can be a resource. Speak with the pharmacist and your healthcare provider if possible before changing your regimen.

- A generic version of Humalog — Insulin Lispro — is available at pharmacies in the U.S. for $137.35 per vial and $265.20 for a package of five KwikPens (50% the price of Humalog.) If you have a prescription for Humalog, you do not need an additional prescription for Lispro; your pharmacist will be able to substitute the cheaper option. Insulin Lispro is not currently covered by insurance.

- Authorized **generic versions of NovoLog and NovoLog Mix at 50% list price** are now stocked at the wholesaler level. People can order them at the pharmacy and they’ll be available for pick up in 1-3 business days.

- Ask your physician for samples. While this is not a long-term access option, your care provider may be able to provide you with a few vials/pens for free, and bringing your HCP into the access conversation means that they can help direct you to other options that might be available to you, like local community health centers with insulin available.
If you need other diabetes supplies
- Explore test strip subscription programs here (https://beyondtype2.org/test-strip-subscription-guide/).
- Cr3 Diabetes is a nonprofit organization that collects and distributes supplies to those in need through an application process.
- United Healthcare Children’s Foundation provides financial assistance toward out-of-pocket costs for medical services for families of children – apply for a grant through their website.

Affordable prescriptions:
- Association of Diabetes Care and Education Specialists and American Association of Clinical Endocrinologists - http://prescriptionhelp.aace.com

INSULIN & PUMP MANUFACTURERS ON COVID-19:
If you need assistance with your pump supplies or CGM, directly contact the manufacturer via their customer service number.
- Medtronic: 1-800-646-4633
- Tandem: 1-877-801-6901, option 3
- Insulet: 1-800-591-3455
- Dexcom at 1-888-738-3646
- Abbott Diabetes Care*: 1-835-632-8658

- Lilly
- Sanofi-Aventis
- Novo Nordisk
- Omnipod/Insulet
- Dexcom
- Medtronic
- Tandem Diabetes Care

KNOW YOUR RIGHTS
If you have diabetes, you have legal rights that do not go away during a health crisis like COVID-19. Even in a pandemic, you have the right to reasonable accommodations at work, which could include medical leave or alternate work arrangements. Your child’s Section 504 Plan should include accommodation for extra sick days without penalty. This would apply if your child is sick or if you choose to keep him or her home from school to avoid contagion with COVID-19. People with diabetes who are incarcerated or in police custody are entitled to appropriate and adequate medical care, and their medical needs may change during infectious disease outbreaks. If you are concerned you are being treated unfairly because of your diabetes, contact us to seek help from the American Diabetes Association Legal Advocacy by calling 1-800-DIABETES. The American Diabetes Association has prepared and collected information and resources to assist people with diabetes during the COVID-19 pandemic.