Patient and Caregiver Guide to
MANAGING COVID-19
RECOVERY AT HOME
This guide was created to help patients and caregivers of patients with COVID-19 who are discharged home from hospital. The exercises are designed to be done alone by the patient in his or her room. The caregiver can assist by providing instructions over the telephone. Check with a medical provider before starting this program, especially if you have any cardiac disease, lung disease or other serious illness.

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WHAT IS COVID-19?

SARS-CoV-2, the virus that causes COVID-19, is a new virus that is causing serious illness in many countries of the world. Most patients have fever, dry cough, muscle pain and extreme weakness. In most patients, symptoms last for 2–3 weeks, and often resolve spontaneously. In some patients, COVID-19 can be a more serious illness, causing pneumonia or affecting other organs, sometimes requiring hospitalization. Doctors and scientists are still learning about this disease. The information given below is based on current knowledge.

SYMPTOMS OF COVID-19 INFECTION

These symptoms may appear 2–14 days after exposure:

- Fever
- Chills
- Repeated shaking with chills
- Muscle pain
- Headache
- Sore throat
- New loss of smell or taste
- Diarrhea

If you develop emergency warning signs for COVID-19, get medical attention immediately.

Emergency warning signs include:

- Trouble breathing
- Persistent pain or pressure in the chest
- New confusion or inability to arouse
- Bluish lips or face

More information is available at: https://bit.ly/cdc-covid-faq
CARING FOR A COVID-19 PATIENT AT HOME

These precautions should last until medical authorities clear the patient.

Monitoring the Patient
- Check the patient’s temperature twice a day.
- Monitor for new symptoms such as chest pain, difficulty breathing, blue fingers or face, palpitations, changes in mental status, confusion or swelling of legs. Contact your medical provider if any of these symptoms occur.

Isolation Directions
- Isolate the affected person. He or she should be in a separate room. It is important to have good air circulation in the room (for example, use air conditioning or keep a window open).
- The patient should avoid all contact with older people, pregnant women or anyone with compromised immunity.
- The patient should always wear a mask (see instructions below) and stay at least 6 feet away from the caregiver. Keep interactions as brief as possible.
- If possible, the patient should have a separate bathroom. If this is not possible, then all other unaffected family members should use caution when using shared facilities. Use diluted bleach to wipe down door handles, toilet seat and handles, sink, etc., each time the patient uses the bathroom. The patient should have his or her own toilet paper and towels, which should be kept separately.
- The affected person should eat in his or her room and, if possible, use disposable plates, knives and forks. If not, use gloves when washing the person’s plates, spoons, knives and forks. Use diluted bleach and rinse well.

Hygiene and Cleaning
- Patients and caregivers should wash hands with soap and water for at least 20 seconds, regularly.
- Encourage the patient to have a daily bath.
- The affected person’s clothes should be washed separately and with a bleach containing detergent using a hot wash (90°C) for at least 30 minutes.
- Use disposable gloves and a mask when entering the affected person’s room.
- Dispose of the patient’s trash carefully. Use gloves and avoid handling it with your bare hands.
- SARS-CoV-2 can live on cardboard, plastic and food surfaces for several days. Discard all packaging or disinfect surfaces by wiping them down with a disinfectant solution. Wash all fruit and vegetables for at least 20 seconds using soap and water. Heat appears to kill the virus. However, frozen foods may harbor the virus, so make sure all food is heated well. Microwaving until steam rises also appears to kill coronavirus.

Emotional and Mental Health
- Try to keep the patient’s spirits up. Communicate regularly with the person via phone, video calls or social media.
- Confirmed COVID-19 patients often have symptoms such as regret and resentment, loneliness, helplessness, depression, anxiety and phobia, irritation, sleep deprivation and even panic attacks.
  » Try slow breathing, relaxation, meditation and mindfulness.
  » If these symptoms are persistent or recurring, please seek professional help.
ACCIDENTAL EXPOSURE TO THE PATIENT’S BODY FLUIDS

- If fluids (such as saliva, tears, sputum, etc.) come in contact with your intact skin, remove the contaminant with a tissue or gauze and apply 0.5% iodophor or 75% alcohol to the skin. Let the solution sit for at least 3 minutes for disinfection, and then thoroughly flush with running water.

- If fluids come in contact with broken skin or mucous membranes such as the eyes, nose or mouth, flush with plenty of normal saline (salt water). You can also use 0.5% iodophor for nose disinfection. Isolate yourself for 14 days and observe for symptoms.

- If you have a sharp object injury, squeeze blood out from the top of the wound to the bottom end, and flush the wound with running water. Then disinfect with 75% alcohol or 0.5% iodophor. Isolate yourself for 14 days and observe for symptoms.

- If you are coughed or sneezed on directly, immediately go to another room. Gargle with plenty of normal saline or 0.05% iodophor. Dip a cotton swab into 75% alcohol, and wipe your nasal cavity gently in a circular motion. Isolate yourself for 14 days and observe for symptoms.

HOW TO WEAR A MASK

- Before putting on a mask, clean your hands with an alcohol-based hand rub or soap and water.

- Cover mouth and nose with mask and make sure there are no gaps between your face and the mask.

- If you are using a surgical mask, the colored part should face the outside.

- Avoid touching the mask while using it; if you do, clean your hands with an alcohol-based hand rub or soap and water.

- Replace the mask with a new one as soon as it is damp. Do not reuse single-use masks.

- To remove the mask: remove it from behind (do not touch the front of the mask), discard immediately in a closed bin, and immediately clean your hands with an alcohol-based hand rub or soap and water.

DIET

- COVID-19 patients need a nutritious, high-calorie diet to recover. Foods that boost immunity include citrus fruits, watermelon, berries, spinach, wheat germ, yogurt, garlic, ginger and chicken soup.

- Patients may get exhausted easily and struggle to finish a meal. Soups or soft foods might be preferable.

- Make sure the patient drinks plenty of water, at least 8–10 glasses of water every day. However, if he or she has heart or kidney disease or low sodium, please consult the physician about the correct amount of fluids to drink daily. One way to make sure the patient is hydrated is to ask the patient to check his or her urine. Urine should be clear or pale yellow, and the patient should be urinating 3–4 times a day. If not, he or she needs to drink more water.
EXERCISE

This illness is highly debilitating. We don’t yet know how long most patients will take to recover, but we think it will take several months to recover fully.

- Please check with your physician before starting any exercise routine.
- These exercises are designed to be done alone by the patient in his or her room. The caregiver should not be in the same room.
- The caregiver can provide remote instructions and supervision by telephone from another room.

**Equipment** required:

- Incentive spirometer. If not available, a packet of balloons and a disposable straw can be used as a substitute.
- Light weights (2–5 lbs.). If not available, a water bottle can be used as a substitute.
- 12-inch exercise ball. If not available, a cushion or small pillow can be used as a substitute.

**Precautions**

Patients can start gentle exercises if they have:

- No fever for at least 7 days
- No shortness of breath, palpitations or chest pain while walking around the house
- No swelling of the legs

STOP immediately and GET HELP if the patient develops any of the following:

- Shortness of breath
- Chest pain
- Palpitations
- Exhaustion
- Dizziness or lightheadedness
## SEQUENCE OF EXERCISES

| LEVEL 1 | These exercises are suitable for a patient who is very weak and has to lie down most of the time.  
• Start with the breathing exercises (exercises 1–3) at least twice a day, and increase to 4–6 times a day.  
• Gradually, add the other exercises as tolerated. The patient can do a few different exercises at each session.  
• Once the patient can do all the exercises in one session without any difficulty, repeat them 2–3 times a day. |
| LEVEL 2 | Once the patient can complete level 1 exercises with ease, proceed to level 2, which are mainly seated exercises.  
• Continue with level 1 exercises.  
• Start with a few of the exercises in level 2.  
• Gradually increase the number of exercises at each session.  
• Increase to repeating the exercises 2–3 times a day. |
| LEVEL 3 | Once the patient can complete level 2 exercises with ease, proceed to level 3, which are mainly standing exercises.  
• Continue with level 1 and 2 exercises.  
• Start with a few of the exercises in level 3.  
• Gradually increase the number of exercises at each session.  
• Increase the numbers of sessions as tolerated. The goal is to do these exercises 2–3 times a day. |
# LEVEL 1 EXERCISES

<table>
<thead>
<tr>
<th>Exercise</th>
<th>Frequency/Duration</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deep breathing exercises</td>
<td>2 minutes, several times a day</td>
<td>Aerate the lower parts of the lung</td>
</tr>
<tr>
<td>Pursed-lip breathing exercises</td>
<td>2 minutes</td>
<td>Exercise the breathing muscles</td>
</tr>
<tr>
<td>Blowing exercises</td>
<td>10 repetitions</td>
<td>Exercise the breathing muscles</td>
</tr>
<tr>
<td>Ankle pumps</td>
<td>Repeat 2–3 times; increase gradually to 8 repetitions (1 set)</td>
<td>Improve leg circulation; prevent ankle contractures</td>
</tr>
<tr>
<td>Hip and knee bends in bed</td>
<td>Repeat 2–3 times; increase gradually to 8 repetitions (1 set)</td>
<td>Maintain hip and knee range of motion</td>
</tr>
<tr>
<td>Crossing your legs in bed</td>
<td>Repeat 2–3 times; increase gradually to 8 repetitions (1 set)</td>
<td>Maintain hip external rotation</td>
</tr>
<tr>
<td>Overhead arm stretch</td>
<td>Repeat 2–3 times; increase gradually to 8 repetitions (1 set)</td>
<td>Maintain shoulder abduction and extension</td>
</tr>
<tr>
<td>Touching back of neck</td>
<td>Repeat 2–3 times; increase gradually to 8 repetitions (1 set)</td>
<td>Maintain shoulder external rotation</td>
</tr>
<tr>
<td>Touching the mid-back</td>
<td>Repeat 2–3 times; increase gradually to 8 repetitions (1 set)</td>
<td>Maintain shoulder internal rotation</td>
</tr>
<tr>
<td>Dangling legs</td>
<td>As long as tolerated</td>
<td>Improve sitting balance; reduce postural dizziness</td>
</tr>
<tr>
<td>Supported sit to stand</td>
<td>10 times (1 set)</td>
<td>Improve ability to get up</td>
</tr>
<tr>
<td>Relaxation</td>
<td>10 minutes</td>
<td></td>
</tr>
</tbody>
</table>
LEVEL 1 EXERCISES

Deep breathing exercises
- Lie on your back in bed with a pillow under your head and knees.
- Place one hand on your belly. Place the other hand on your chest.
- Slowly breathe in through your nose. Let your belly fill with air, feeling your belly rise.
- Breathe out through your nose. As you breathe out, feel your belly sink.
- The hand on your belly should move more than the one that is on your chest.
- Repeat for 2 minutes, several times a day.

Pursed-lip breathing exercises (Fig. 1)
- Relax your neck and shoulder muscles.
- Breathe in for 2 seconds through your nose, keeping your mouth closed as if you are smelling a rose.
- Breathe out for 4 seconds through pursed lips as if you are blowing out birthday candles. If this is too long for you, simply breathe out twice as long as you breathe in.
- Repeat for 2 minutes.

Blowing exercises (Fig. 2)
If you were given an incentive spirometer, use it.
- Sit straight on a chair or the edge of your bed.
- Breathe out completely to clear all the air from your lungs.
- Close your lips firmly around the mouthpiece. You'll have to breathe in only through your mouth. Plug your nose if you need to.
- Breathe in slowly, and make the piston/ball rise as high as you can. Then hold your breath up to 5 seconds.
- Repeat 10 times.

If you do not have an incentive spirometer, you could:
- Get a packet of balloons and practice blowing them up.
- Get a straw and imagine sucking up a thick milkshake; hold your breath up to 5 seconds.
- Repeat 10 times.
LEVEL 1 EXERCISES

**Ankle pumps** (Figs. 3–4)
- Lie down on the bed. Point your toes up to the ceiling (Fig. 3), then point them straight down, so that your toes are parallel to the bed (Fig. 4).
- Repeat 2–3 times.
- Increase gradually to 8 repetitions.

**Hip and knee bends in bed** (Fig. 5)
- Slide your feet up the bed so your heels are almost touching your buttocks.
- Return to the original position.
- Repeat 2–3 times.
- Increase gradually to 8 repetitions.

**Crossing your legs in bed** (Fig. 6)
- Bend both knees.
- Place your right ankle on your left knee. Hold for 10 seconds.
- Repeat on the other side.

**Overhead arm stretch** (Figs. 7–8)
- While lying in bed, bring your right arm straight up to point to the head of the bed (Fig. 7).
- Keeping your elbows straight, bring your arm to your side as shown (Fig. 8). Return to the starting position.
- Repeat 2–3 times on the same arm. Change sides and repeat.
- Increase gradually to 8 repetitions.

**Touching back of neck** (Fig. 9)
- Bring both palms up and place them on the back of your neck.
- Bring your arms back to your sides and repeat 2–3 times.
- Increase gradually to 8 repetitions.
LEVEL 1 EXERCISES

Touching the mid-back (Fig. 10)
- Bring both arms up to touch your back (as if you are trying to hook a bra).
- Repeat 2–3 times. Increase gradually to 8 repetitions.

Dangling legs (Fig. 11)
- Sit at the side of the bed.
- Dangle your legs off the bed.
- Sit for as long as you can tolerate it.

Supported sit to stand (Figs. 12–13)
- Sit at the edge of the bed. Place the back of a sturdy chair in front of you (Fig. 12).
- Stand up while leaning on to a support (e.g., back of chair or a table) (Fig. 13).
- Repeat 2–3 times. Increase gradually to 8 repetitions.

Relaxation (Fig. 14)
- Lie on the bed with a pillow under your head and your knees.
- Imagine a peaceful setting.
- Keeping this image in your mind, focus on controlled, relaxed breathing; slowing your heart rate; or feeling different physical sensations, such as relaxing each arm or leg one by one.
- Your mind may wander during this exercise. If you notice your thoughts wandering, bring your attention back to your breath.
- Continue for 10 minutes before getting up slowly from the bed.
### LEVEL 2 EXERCISES

<table>
<thead>
<tr>
<th>Exercise</th>
<th>Frequency/Duration</th>
<th>Rationale</th>
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<tr>
<td>Deep breathing exercises</td>
<td>2 minutes</td>
<td>Aerating the lower parts of the lung</td>
</tr>
<tr>
<td>Pursed-lip breathing exercises</td>
<td>2 minutes</td>
<td>Exercising the breathing muscles</td>
</tr>
<tr>
<td>Blowing exercises</td>
<td>10 times</td>
<td>Exercising the breathing muscles</td>
</tr>
<tr>
<td>Chin up and down</td>
<td>Repeat 1–2 times; increase to 8 repetitions</td>
<td>Neck range of motion; vestibular exercises</td>
</tr>
<tr>
<td>Head turns</td>
<td>Repeat 1–2 times; increase to 8 repetitions</td>
<td>Neck range of motion; vestibular exercises</td>
</tr>
<tr>
<td>Shoulder rolls</td>
<td>8 times forwards, 8 times backwards</td>
<td>Shoulder range of motion</td>
</tr>
<tr>
<td>Finger stretch</td>
<td>Hold for a count of 8</td>
<td>Wrist and finger stretch</td>
</tr>
<tr>
<td>Calf stretches in bed</td>
<td>Hold for a count of 8</td>
<td>Calf stretches</td>
</tr>
<tr>
<td>Wrist curls with light weights</td>
<td>Repeat 2–3 times; increase to 8 repetitions</td>
<td>Hand and wrist muscle strengthening</td>
</tr>
<tr>
<td>Biceps curls</td>
<td>Repeat 2–3 times; increase to 8 repetitions</td>
<td>Forearm strengthening</td>
</tr>
<tr>
<td>Seated overhead extension</td>
<td>Repeat 1–2 times; increase to 8 repetitions</td>
<td>Shoulder muscle strengthening</td>
</tr>
<tr>
<td>Tummy twists</td>
<td>Repeat 1–2 times; increase to 8 repetitions</td>
<td>Core strengthening</td>
</tr>
<tr>
<td>Seated shoulder abductions</td>
<td>Repeat 1–2 times; increase to 8 repetitions</td>
<td>Shoulder muscle strengthening</td>
</tr>
<tr>
<td>Seated knee lifts</td>
<td>Repeat 2–3 times; increase to 8 repetitions</td>
<td>Hip flexor stretches and strengthening</td>
</tr>
<tr>
<td>Seated knee extensions</td>
<td>Repeat 2–3 times; increase to 8 repetitions</td>
<td>Hamstring stretches; quad strengthening</td>
</tr>
<tr>
<td>Relaxation</td>
<td>10 minutes</td>
<td></td>
</tr>
</tbody>
</table>
LEVEL 2 EXERCISES

Chin up and down (Figs. 15 and 16)
- Sit up.
- Slowly drop chin to chest (Fig. 15), and then look up to the ceiling (Fig. 16).
- Start with 1–2 times, increasing gradually to 8 repetitions.

Head turns (Figs. 17–18)
- Look left over your left shoulder (Fig. 17).
- Look right over your right shoulder (Fig. 18).
- Start with 1–2 repetitions, increasing gradually to 8.

Shoulder rolls (Figs. 19–20)
- Roll shoulders forward 8 times (Fig. 19).
- Roll shoulders backwards 8 times (Fig. 20).

Finger stretch (Fig. 21)
- Stretch both arms out in front of you.
- Keep your elbows straight.
- With the right hand, stretch the fingers of your left hand backwards.
- Count to 8, then repeat on the other side.

Calf stretches in bed (Fig. 22)
- Sit up in bed.
- Place a towel on the sole of your foot.
- Grab both ends of the towel and pull. You should feel the stretch in your calf.
- Count to 8, then repeat on the other side.
LEVEL 2 EXERCISES

Wrist curls with light weights (Figs. 23–24)
- Place your forearm on a chair's armrest with your hand hanging over the edge (Fig. 23).
- Hold a light weight (2–5 lbs.). Slowly bend your wrist up and down (Fig. 24), then repeat 2–3 times, increasing gradually to 8 repetitions.
- Repeat on the other side.

Biceps curls (Figs. 25–26)
- Place your forearm on a chair’s armrest or on your thigh (Fig. 25).
- Hold a light weight (2–5 lbs.).
- Keep your elbow on the armrest and bring the weight up to your chin. Slowly lower your arm to return to the starting point (Fig. 26).
- Repeat 2–3 times, increasing gradually to 8 repetitions.
- Repeat on the other side.

Seated overhead extension (Figs. 27–28)
- Sit on the chair and hold the ball or a cushion at chest level (Fig. 27).
- Move ball/cushion overhead (Fig. 28) and return to start position.
- Repeat 1–2 times, increasing gradually to 8 repetitions.

Tummy twists (Figs. 29–30)
- Begin in a seated position, holding a ball or cushion in both hands (Fig. 29).
- Slowly twist to the right, return to the center (Fig. 30), and then twist to the left.
- Repeat 1–2 times, increasing gradually to 8 repetitions on each side.
LEVEL 2 EXERCISES

Seated shoulder abductions (Figs. 31–32)
- Sit with elbows at the side (Fig. 31), while holding light weights (2–5 lbs.).
- Slowly raise both arms while keeping the elbows bent at 90 degrees (Fig. 32).
- Slowly lower both arms to return to starting position.
- Repeat 1–2 times, gradually increasing to 8 repetitions.

Seated knee lifts (Fig. 33)
- Sit on a chair.
- Lift the right leg and hold it up for count of 8.
- Change legs.
- Repeat 2–3 times for each leg, increasing gradually to 8 repetitions.

Seated knee extensions (Fig. 34)
- Begin seated in a chair with your back straight and knees bent.
- Slowly extend your right leg forward and hold for a few seconds before lowering back to starting position.
- Repeat with your left leg. Do 2–3 repetitions per leg, gradually increasing to 8.

Relaxation (Fig. 35)
- Lie on the bed with a pillow under your head and your knees.
- Imagine a peaceful setting.
- Keeping this image in your mind, focus on controlled, relaxed breathing; slowing your heart rate; or feeling different physical sensations, such as relaxing each arm or leg one by one.
- Your mind may wander during this exercise. If you notice your thoughts wandering, bring your attention back to your breath.
- Continue for 10 minutes before getting up slowly from the bed.
<table>
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<tr>
<th>Exercises</th>
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<th>Rationale</th>
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<td>2 minutes</td>
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<tr>
<td>Blowing exercises</td>
<td>10 times</td>
<td>Exercising the breathing muscles</td>
</tr>
<tr>
<td>Overhead stretch</td>
<td>Hold for count of 8</td>
<td>Full-body stretch</td>
</tr>
<tr>
<td>Side stretch</td>
<td>Hold 15–30 seconds; repeat 2–4 times</td>
<td>Full-body stretch</td>
</tr>
<tr>
<td>Triceps stretch</td>
<td>Hold 15–30 seconds; repeat 2–4 times</td>
<td>Arm stretch</td>
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<tr>
<td>Quadriceps stretch</td>
<td>Hold 15–30 seconds; repeat 2–4 times</td>
<td>Thigh muscle stretch</td>
</tr>
<tr>
<td>Groin stretch</td>
<td>Hold 15–30 seconds; repeat 2–4 times</td>
<td>Hip muscle stretch</td>
</tr>
<tr>
<td>Calf stretch</td>
<td>Hold 15–30 seconds; repeat 2–4 times</td>
<td>Calf stretch</td>
</tr>
<tr>
<td>Standing shoulder flexion</td>
<td>2–3 repetitions, increasing to 8</td>
<td>Shoulder stretch</td>
</tr>
<tr>
<td>Standing shoulder abduction</td>
<td>2–3 repetitions, increasing to 8</td>
<td>Shoulder stretch</td>
</tr>
<tr>
<td>Upright front row</td>
<td>8 repetitions</td>
<td>Shoulder-strengthening exercise</td>
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<tr>
<td>Biceps curls</td>
<td>2–3 repetitions on each side, increasing to 8</td>
<td>Arm-strengthening exercise</td>
</tr>
<tr>
<td>Core exercises</td>
<td>1–2 repetitions, increasing to 8</td>
<td>Core-strengthening exercise</td>
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<tr>
<td>Leg abduction</td>
<td>Hold for count of 8; start with 2–3 repetitions, increasing to 8</td>
<td>Hip-strengthening exercise</td>
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<tr>
<td>Hamstring curls</td>
<td>Hold for count of 8; start with 2–3 repetitions, increasing to 8</td>
<td>Leg-strengthening exercise</td>
</tr>
<tr>
<td>Supported lateral lunge</td>
<td>Hold for count of 8; start with 2–3 repetitions, increasing to 8</td>
<td>Leg-strengthening exercise</td>
</tr>
<tr>
<td>Supported squats</td>
<td>Hold for count of 8; start with 2–3 repetitions, increasing to 8</td>
<td>Leg-strengthening exercise</td>
</tr>
<tr>
<td>Wall pushups</td>
<td>Hold for count of 8; start with 2–3 repetitions, increasing to 8</td>
<td>Chest-strengthening exercise</td>
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<tr>
<td>Walking</td>
<td>10 minutes; increase to 3 times a day</td>
<td>Cardiovascular fitness</td>
</tr>
<tr>
<td>Relaxation</td>
<td>10 minutes</td>
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</table>
LEVEL 3 EXERCISES

**Overhead stretch** (Fig. 36)
- Stand up straight with your hands at your sides and feet shoulder-width apart.
- Lace your fingers together and raise your hands toward the ceiling with your palms facing up.
- Fully stretch your torso and hold for a count of 8, then return to the starting position.

**Side stretch** (Fig. 37)
- Stand with your back straight and your feet shoulder-width apart. You can do this stretch sitting down if you are not steady on your feet.
- Hold your arms above your head, and hold one hand with the other.
- Pull upward while leaning straight over toward your right side. Keep your lower body straight. You should feel the stretch along your left side.

**Triceps stretch** (Fig. 38)
- Stand with your back straight and your feet shoulder-width apart.
- Bring your left elbow straight up while bending your arm.
- Grab your left elbow with your right hand, and pull your left elbow toward your head with light pressure.
- Hold 15–30 seconds, and then switch elbows.
- Repeat 2–4 times for each arm.

**Quadriceps stretch** (Fig. 39)
- Lie on your side with one hand supporting your head.
- Bend your upper leg back and grab your ankle with your other hand.
- Stretch your leg back by pulling your foot toward your buttocks. You will feel the stretch in the front of your thigh. If this causes stress on your knees, do not do this stretch.
- Hold the stretch 15–30 seconds.
- Repeat 2–4 times for each leg.
LEVEL 3 EXERCISES

**Groin stretch** (Fig. 40)
- Sit on the floor and put the soles of your feet together. Do not slump your back.
- Grab your ankles and gently pull your legs toward you.
- Press your knees toward the floor. You will feel the stretch in your inner thighs.
- Hold 15–30 seconds.
- Repeat 2–4 times.

**Calf stretch** (Fig. 41)
- Place your hands on a wall for balance.
- Step back with your left leg, keeping the knee straight and pressing the heel into the floor.
- Press your hips forward, bending your right leg slightly. You will feel the stretch in your left calf.
- Hold the stretch 15–30 seconds.
- Repeat 2–4 times for each leg.

**Standing shoulder flexion** (Fig. 42)
- Stand while holding light weights (2–5 lbs.) in both hands.
- Lift arms up slowly, keeping elbows straight.
- Slowly bring arms down to return to starting position.
- Start with 2–3 repetitions; increase gradually to 8.

**Standing shoulder abduction** (Figs. 43–44)
- Stand while holding light weights (2–5 lbs.) in both hands (Fig. 43).
- Lift arms up slowly, keeping elbows bent (Fig. 44).
- Slowly bring arms down to return to starting position.
- Start with 2–3 repetitions; increase gradually to 8.
LEVEL 3 EXERCISES

**Upright front row** (Fig. 45)
- Begin standing with your feet shoulder-width apart, knees slightly bent, and partially leaning forward.
- Hold a light dumbbell (2–5 lbs.) in each hand in front of you, with palms facing toward your body.
- Lift both dumbbells toward your chin while keeping your back straight and shoulders stationary.
- Return to starting position; repeat 1–2 times, increasing gradually to 8 repetitions.

**Biceps curls** (Figs. 46–47)
- Place your forearm on a chair’s armrest or on your thigh (Fig. 46).
- Hold a light weight (2–5 lbs.).
- Keep your elbow on the armrest and bring the weight up to your chin (Fig. 47).
- Slowly lower your arm to return to the starting point.
- Repeat 2–3 times; increase gradually to 8 repetitions.

**Core exercises** (Figs. 48–51)
- Sit upright near the edge of a chair with elbows crossed (Fig. 48).
- Keeping the elbows crossed, lean backwards slowly (Fig. 49).
- Come back to the seated upright position.
- Straighten both arms in front of you and stand up without using your arms (Fig. 50–51).
- Sit down again to return to the starting position.
- Start with 1–2 repetitions; slowly increase to 8.
**LEVEL 3 EXERCISES**

**Leg abduction** (Fig. 52)
- Stand facing the back of a chair.
- Hold on to the back of the chair.
- Slowly lift one leg.
- Hold for a count of 8.
- Slowly lower the leg to return to the original position.
- Change legs and repeat.
- Start with 2–3 repetitions, increasing to 8 repetitions on each leg.

**Hamstring curls** (Fig. 53)
- Stand with feet slightly apart.
- The knee of your support leg should be slightly bent.
- Slowly bend the other knee, bringing your heel toward your buttocks.
- Hold for a count of 8 and return to start position.
- Repeat using other leg.
- Start with 2–3 repetitions and increase to 8 repetitions on each leg.

**Supported lateral lunge** (Fig. 54)
- Stand facing the back of a chair.
- Hold on to the back of the chair.
- Slowly lift one leg as shown.
- Hold for a count of 8.
- Slowly lower the leg to return to the original position.
- Change legs and repeat.
- Start with 2–3 repetitions, increasing gradually to 8 on each leg.
LEVEL 3 EXERCISES

Supported squats (Fig. 55)
- Stand facing the back of the chair.
- Hold on to the back of the chair.
- Slowly bend both knees to do half-squat.
- Hold for a count of 8.
- Slowly return to the original position.
- Start with 2–3 repetitions and increase to 8 repetitions on each leg.

Wall pushups (Figs. 56–57)
- Stand facing the wall and place both hands on the wall (Fig. 56).
- Lean forward, keeping both knees straight (Fig. 57).
- Hold for a count of 8.
- Slowly return to the original position.
- Start with 2–3 repetitions, increasing gradually to 8.

Walking
- Walk for 10 minutes at a comfortable pace.
- Gradually increase to 3 times a day.

Relaxation (Fig. 58)
- Lie on the bed with a pillow under your head and your knees.
- Imagine a peaceful setting.
- Keeping this image in your mind, focus on controlled, relaxed breathing; slowing your heart rate; or feeling different physical sensations, such as relaxing each arm or leg one by one.
- Your mind may wander during this exercise. If you notice your thoughts wandering, bring your attention back to your breath.
- Continue for 10 minutes before getting up slowly from the bed.
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