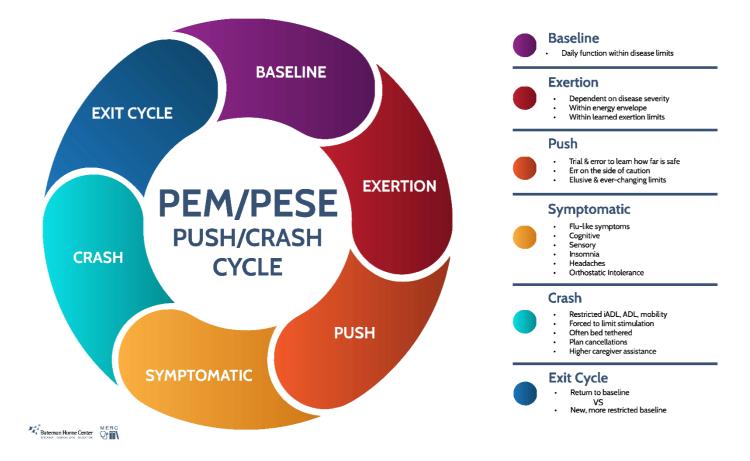


Post-Exertional Malaise (PEM)

Some people with Long COVID may experience a disabling and often delayed fatigue or worsening of symptoms (described as a "crash") after minimal exertion. This is known in scientific terms as "post-exertional malaise", or PEM for short. The worsening is typically felt 12-48 hours after physical or mental activity. Recovery normally takes 24 hours or longer and can affect your energy levels, concentration, sleep and memory, cause muscle/joint pains and flu-like symptoms.

Push and Crash Cycle

Individuals with post-exertional malaise often get trapped in a cycle of "push and crash", swinging between overactivity and forced rest. This can lead to frustration, feeling out of control, more severe illness, and prolonged recovery. Crashes vary from person to person and range in severity from mild to completely debilitating and life-threatening.



Potential PEM Triggers

- Physical: activities of daily living, work, exercise
- Cognitive: reading/writing, long conversations
- Sensory: loud, repetitive noises, bright or flashing lights
- Emotional: challenging interactions, tragic events
- Hormonal Changes: changes during menstrual cycle
- Environmental: proximity to allergens, changes in weather, seasons and temperature

Tips for managing post-exertional malaise

- Find your energy envelope. Keep a daily symptom and activity diary to determine PEM triggers. Make sure to include symptom intensity and duration.
- Avoid the "push and crash" cycle. Don't push yourself when symptoms are mild.
 Balance activity and rest, even on good days.
- Pace yourself:
 - Start with simple goals that you can meet on good and bad days.
 - Break up activities into smaller tasks and spread them out throughout a day or week.
 - Stop and rest before the activity is completed, even if you aren't feeling tired.
 - Rest between activities.
 - Perform activities whenever possible.
- Be patient and kind to yourself. Finding and learning to live within your energy envelope will take time. Try not to blame yourself when setbacks or crashes occur.



A Warning About Exercise:

If you experience PEM, you should avoid exercise and aim to conserve your energy. Any exercise plan should be carefully discussed with your health care provider prior to initiating as the wrong kind or amount of exercise can lead to worsening symptoms.

Adapted 02/7/24 from World Health Organization Regional Office for Europe, "Support for rehabilitation: self-management after COVID-19-related illness. Second edition" - 9/27/2021.