

Activity and Air Quality Monitors: Guidelines for Parents/Guardians

Your child has been asked to wear three personal monitors and a vest for 3 days (72 hours):



Physical Activity
Monitor



Air Quality
Monitor

Inlet valve



Nitrogen Dioxide
(NO₂) Badge



Vest to hold personal
monitors

General Guidelines for Use

- Your child should wear the vest at all times for the next 3 days (72 hours), excepting the conditions outlined below. Please place the vest over the child's *top layer of clothes*, which would include a coat while outdoors. Please encourage your child to wear the vest as much as is tolerable during all activities, including eating meals, quiet and energetic play, both inside and outside of the home.
- Because the monitors are not waterproof, please protect them with an umbrella or jacket during rain or snow. It is OK to place the vest under a jacket, but as soon as possible it should be placed outside the outer layer the child wears.
- At preschool/daycare/school, the vest should be worn at all times, with the exception of rest time. Please ask your childcare provider to place the vest near your child while they are resting.
- If food falls on the air quality monitor's inlet valve (shown above), please use a *damp cloth to wipe it clean*. Do not spray cleaning products on the monitor or rinse it in the sink. Crumbs can be shaken out.



Exceptions to Wearing the Monitors

For the safety of your child, remove the vest during the following conditions:

Sleeping

While sleeping, the vest should be located near the child. It can be placed on a table or chair or hung on a doorknob. Care must be taken to ensure the inlet valve of the air quality monitor is not blocked.

Riding in a 5-point harness car seat or booster seat

While your child is in his/her car seat, the vest should be removed and placed on the seat next to your child. *Please remember to replace the vest upon exiting the car.*

Vigorous physical activities

If your child engages in a vigorous physical activity such as gymnastics or karate, the vest should be removed for their protection. During these activities, the vest/monitors can be placed on the sidelines.

For the protection of the monitors, **remove the vest** during the following conditions:

- **Baths/showers**
 - Remove the vest before entering a bathroom or shower room where steam is present.
- **Water activities**
 - The device is NOT waterproof.

Turning Monitors On/Off

- **The physical activity monitor** (small red monitor) has already been activated and is recording data. You do not need to do anything to turn it on or off.
- **The air quality monitor and the NO₂ monitor** need to be activated. We can do this together during our virtual visit or when you are ready to start the monitoring. The instructions are provided on the following page.
- **After the end of the 3 day study period,**
 - **Please remember to turn OFF the air quality monitor (large gray monitor), using the instructions provided on the last page of this document.**
 - **Place the NO₂ badge in the Ziploc bags provided, making sure they are tightly sealed.**
 - Place all monitors and the vest in the prepaid, self-addressed padded envelope and return via the US Postal Service at the end of the 3-day study period. Please wrap the monitors in the bubble wrap provided before mailing.



MicroPEM™ Air Quality Monitor Start Instructions

Link to Youtube video instructions: <http://youtu.be/iU4uyPjcdL8>

1

Remove MicroPEM™ from the vest. The **Red** LED will blink occasionally.

2

Press and hold button #1.

Green LED will illuminate and then begin to blink.

Once blinking starts, release button #1.

3

Make sure **Green** LED continues to blink every 10 seconds.

Listen to the MicroPEM™ to make sure the pump is running (you should hear a slight humming sound).



4

Once the MicroPEM™ has started, place the device in the personal vest.

The inlet valve must face outward to prevent obstruction.

NO₂ Badge Start Instructions

1

Unroll exterior bag to open and remove the smaller Ziploc bag containing the NO₂ badge. Remove badge from this bag as well. Store the bags in the return envelope.



2

Pin the badge onto the vest using the safety pin.



NO₂ Badge Stop Instructions

1

Unpin the badge from the vest.

2

Place the badge back in the Ziploc bag, making sure that the zipper is tightly sealed.

3

Place the Ziploc bag with the used badge in the large plastic bag, roll the yellow tie over until it reaches the top of the bag and fold the sides of the ties over sides of the bag.



MicroPEM™ Monitor Stop Instructions

1

Press and hold down the #2 button.

While holding #2 down, press and HOLD #1 until the **Green** LED shuts off and the **Red** LED lights up.

Once both lights are off and you hear the pump shut down, release the buttons.

2

Listen to the MicroPEM™ to make sure pump is not running.

The **Red** LED should blink every 10 seconds.



3

Once the MicroPEM™ has stopped, place the device with the other monitors and vest in the envelope provided and mail via USPS.

Thank you for your participation!!!