



Urgent Field Safety Notice

NIM Vital™ Nerve Monitoring System

NIM Vital™ System False Negative Response & Software Update Fix Availability
Software Update

June 2024

Medtronic Reference: FA1422

EU Manufacturer Single Registration Number (SRN): US-MF-000023264

Dear Healthcare Professional/Risk Manager,

The purpose of this letter is to advise you that Medtronic is issuing an urgent field safety notice for the NIM Vital™ Nerve Monitoring System (Model Number: NIM4CM01, NIM4CPB1, and NIM4SWU143), due to the potential for a false negative response.

At the issuance of this letter, Medtronic has developed a NIM™ Vital software version 1.5.4 to address this issue. Medtronic records indicate your facility may have at least one of the devices identified in product scope table below. See below for more details on the issue and software update process.

The NIM Vital™ system is intended for locating and monitoring, including stimulation, of cranial, spinal, peripheral motor and mixed motor-sensory nerves and registering EMG responses during surgery. The NIM Vital™ system does not prevent the surgical severing of nerves. If monitoring is compromised, the surgical practitioner must rely on alternate methods, or surgical skills, experience, and anatomical knowledge to prevent damage to nerves. For more information, please refer to the Instructions For Use (IFU).

Product Scope:

Product Name	Model Number(s)	GTIN/UDI Number	Serial Number(s)
CONSOLE NIM4CM01 NIM 4.0	NIM4CM01	00763000395896	All NIM Vital™ Nerve Monitoring systems installed with the NIM Vital™ System software version v1.4.3 or earlier
PATIENT INTERFACE NIM4CPB1 NIM 4.0	NIM4CPB1	00763000395902, 00763000528584	
SOFTWARE NIM4SWU143 UPGRADE V1.4.3	NIM4SWU143	00763000709341	

Issue Description:

This field safety corrective action was initiated because customers reported experiencing false negative responses (the condition where the probe is on a nerve, but no EMG tone is triggered) while using the NIM Vital™ Nerve Monitoring System. If this issue presents during procedure, potential risks include delay or cancellation of procedure, nerve damage, facial nerve damage, nerve paresis, and nerve paralysis. The following potential causes of false negative were addressed:

- Noise and artifact due to system fault could interact with the auto threshold and wireless muting functions, if enabled, resulting in the potential for a false negative response.
- Though additionally mitigated and unlikely to result in an observation of false negative response, changes were also made to correct the potential for failure of stimulator calibration, fuse check, and data processing functions.

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- Furthermore, accumulation of charge on the recording electrodes could result in a system error and possible false negative response.

Potential Health Hazard(s):

Serious injuries could occur due to the issue associated with this field safety corrective action. Between April 1, 2020, and May 31, 2024, Medtronic has received 70 reports for this potential issue including 10 serious harm reports, one resulting in a cancelled case, the others reporting nerve damage, facial nerve damage, nerve paresis, or nerve paralysis.

Customer Actions:

- Identify all NIM Vital™ Nerve Monitoring Systems within your inventory. The NIM Vital™ Nerve Monitoring System is not required to be returned for this issue as Medtronic has deployed NIM Vital™ System software version 1.5.4. which is readily available to fix this issue.
- Your Medtronic Representative will contact you to install the new software version 1.5.4 for correction of the impacted product in your possession.
- Identify, segregate, and quarantine all thumb drives SOFTWARE NIM4SWU143 UPGRADE V1.4.3 (Model Number: NIM4SWU143) within your inventory. Dispose of the product, do not return to Medtronic.
- Please share this communication within your organization, with other organizations where impacted devices have been transferred, and any other associated organizations that may be impacted by this action. Maintain a copy of this letter for your records.

For patients who are currently being monitored with the NIM Vital™ Nerve Monitoring System please continue to follow your medical protocols in place.

Additional Information:

Medtronic has notified the Competent Authority of your country of this action.

We regret any inconvenience this may cause. We are committed to patient safety and appreciate your prompt attention to this matter. If you have any questions regarding this communication, please contact your Medtronic Representative.

Sincerely,

Local/OU manager