



National Institute for Public Health
and the Environment
Ministry of Health, Welfare and Sport

Early detection of implant side effects

MEBI annual report 2023



The Dutch Reporting Centre for Adverse Effects of Medical Implants (MEBI) enables citizens and healthcare professionals to report suspected side effects (undesired health effects) of implants.¹ For more information about MEBI's activities please consult the final section of this report and the website www.rivm.nl/mebi.

Every year, MEBI publishes its annual report with an overview of reports received and activities carried out in the preceding year. In this report, we look back at 2023.

Overview of reports received in 2023

Number of reports

In 2023, MEBI received 295 reports about health problems likely related to an implant.

Below, the reports from 2023 are outlined per reporter: citizen or healthcare professional. Citizens can be either users with health problems or those making a report on behalf of someone else.

Figure 1. Reports received split by type of reporter



In 2023, MEBI received **295** reports about health problems likely related to an implant

The average age of users concerned in the reports was 43. The youngest was 21 years old, the oldest 78. Almost all (97%) of the reports were about women users.

Additional information was requested from the reporters by MEBI staff in 76% of the reports to obtain a better overview of the report. This included, on occasion, additional data on the reported health problem(s), the implant or the user's medical history.

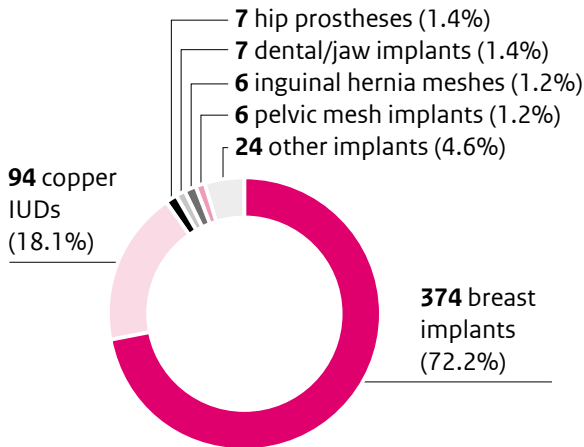
Types and numbers of implants

The 295 reports regarded a total of 518 implants. This means that a large number of reports included multiple implants. This is partly explained by the fact that breast implant users have in most cases two implants placed. Figure 2 outlines the types of implants concerned in the reports received.

In 2023, as in previous years, breast implants (172 reports for 374 implants) and copper intrauterine devices (IUDs) (87 reports for 94 implants) were the most frequently reported implants. These were followed at some distance by hip prostheses (5 reports for 7 implants) and dental/jaw implants (5 reports for 7 implants). There were 24 implants that were less frequently reported (less than 5 times over 2023). These fall into the 'Other implants' category which includes quite diverse types of implants, such as sterilisation coils, hearing implants, gastric balloons and active heart implants, such as implantable heart monitors.

¹ An implant is a medical aid placed inside the body for a prolonged period of time for medical or cosmetic reasons.

Figure 2. Distribution of reports by type of implant in 2023 (in percentages and numbers)



From the 282 citizen reports, 171 were about breast implants. Reports from healthcare professionals mainly concerned copper IUDs, which made up for 10 reports during 2023. The higher number of reports about breast implants and copper IUDs can be explained by the recurring media attention for these type of implants. In 2023, MEBI released a [fact sheet](#) containing information about all reports of health problems associated with breast implants received between July 2017 and December 2022.

The 295 reports received included a total of 1,917 health problems

Types and numbers of health problems

The 295 reports received included a total of 1,917 health problems. As breast implants and copper IUDs were most frequently reported, these were also most frequently associated with the health problems. The total number of health problems attributed to breast implants was 1,459, with 322 different health problems being reported. For copper IUDs, the total number of health problems was 295, with 87 different health problems being reported. The top five most frequently reported health problems for these two types of implants, are shown in Tables 1 and 2, respectively.

Table 1. Top five most frequently reported health problems attributed to breast implants in 2023

Reported health problems	Numbers
Fatigue	123
Joint pain	63
Pain in one or both breasts	56
Memory impairment	53
Mylagia	52

Information about the impact of health problems on daily life was included in 98% of all reports regarding breast implants. Three quarters of reporters with a breast implant mentioned that the problems had serious to very serious impact on their daily life.

Table 2. Top five most frequently reported health problems attributed to copper IUDs in 2023

Reported health problems	Numbers
Severe blood loss during menstruation	50
Dislocation of the copper IUD into the cervix	21
Menstrual pain	15
Fatigue	11
Problems with copper IUD removal	10

Information about the impact of health problems on daily life was included by the reporter in 87% of all reports concerning copper IUDs. The impact of the problems on daily life was considered to serious to very serious in 44% of the reports.

As to hip prostheses and dental/jaw implants, the reported health problems were diverse, and some were only reported once. Both types of implants were associated with local as well as general health problems. For dental/jaw implants, headache, jaw pain and nerve pain were the most frequently reported health problems. For hip prostheses, whereas bursitis was reported twice, several other side-effects were only reported once.

For inguinal hernia meshes and pelvic mesh implants, all reports included pain at the implant site (groin, lower abdomen or pelvic floor). As to inguinal hernia meshes, additional health problems included nerve pain and radiating pain. As to pelvic mesh implant reports, these included more health problems per report and problems other than local problems, such as local pain. General health problems such as a headache and myalgia were also reported.

Number of reports compared to previous years

The table below shows the number of reports made in previous years. The number of reports made in 2023 was higher than the year before. By contrast, the number of reports from healthcare professionals was slightly lower. MEBI's annual reports of previous years are available on the MEBI website (www.rivm.nl/mebi).

Table 3. Overview of the number of reports made in previous years

	Total number of reports	Reports made by healthcare professionals	% women	Average age	Top three types of implants reported
2019	397	25	93	48	1. Breast implants 2. Copper IUDs 3. Pelvic mesh implants
2020	248	46	98	42	1. Breast implants 2. Copper IUDs 3. Pelvic mesh implants
2021	714	139	98	37	1. Copper IUDs 2. Breast implants 3. Pelvic mesh implants
2022	193	28	99	43	1. Breast implants 2. Copper IUDs 3. Wrinkle fillers
2023	295	13	97	43	1. Breast implants 2. Copper IUDs 3. Hip prostheses and dental/jaw implants

Why does MEBI exist?

The purpose of MEBI is to detect possible side effects associated with implants. An implant is a medical aid placed inside the body for a prolonged period of time for medical or cosmetic reasons. There are many different types of implants. For example, there are cardiovascular implants (such as heart valves, pacemakers and stents), breast implants, knee and hip prostheses, gastric balloons, pelvic mesh implants, hernia and scar meshes, wrinkle fillers, dental implants, hearing implants and lens implants.

Like medicines, implants can cause side effects. Side effects are undesirable effects on a person's health (health problems) caused by the implant, such as pain or difficulty when moving.

It is important for all health problems to be reported, as they can be side effects from implant use. The reports help to ensure that possible side effects are detected as soon as possible.

The MEBI working method

Both healthcare professionals and citizens can report issues with one or more implants to MEBI. To do so, they can complete an online reporting form at www.rivm.nl/mebi.

MEBI assesses every report it receives. If more information is needed, the person who made the report may be contacted for further clarification. If necessary, MEBI will analyse a suspected side effect in connection with the implant. For example, it may conduct a literature review or interview care

professionals and/or other experts. The analysis may concern a new (unknown) reaction, a new aspect of a known reaction or a sudden increase in the number of reports of a known reaction.

MEBI publishes information on the reports it receives on its [website](#). It does so in several ways:

- Each year, MEBI outlines which implants have been the subject of reports, and how many, in an annual report. The *annual reports* from previous years are available on the MEBI website (www.rivm.nl/mebi).
- MEBI spreads knowledge about known risks of implants more widely among healthcare professionals and other stakeholders by publishing *notices*. To date, MEBI has issued five notices. These were about a gastric band, a contraceptive device, copper IUDs (2x) and wrinkle fillers. The notices are available on the MEBI [website](#).
- MEBI provides insight into the reports received about a particular type of implant in its fact sheets. The purpose of these *fact sheets* is to show how many reports have been received about that type of implant and what type of health problems have been reported. So far, MEBI has published three fact sheets. Two of those concerned breast implants, and one was about mesh² implants. The fact sheets are available on the MEBI website.
- Finally, MEBI can call for attention of unknown or previously unidentified side effects or risks associated with a particular implant in *alerts*. Till date, MEBI has not issued any alerts

MEBI anonymises all information before publishing it. Once published, the information is available to anyone who is interested, including healthcare professionals, citizens and the Health and Youth Care Inspectorate (IGJ). MEBI actively disseminates its notices, alerts, and fact sheets among relevant professional groups and/or patients' associations.

MEBI uses a reporting system for citizens and healthcare professionals to notify health problems at any time. It is important to ensure that healthcare professionals and citizens actually report suspected side effects of implants and do so as quickly as possible. Since only those side effects that are reported can be considered, the number of reports does not provide insight about the risk of a side effect nor how often it occurs in connection with a particular implant. In other words, the MEBI database cannot be used to calculate incidence.

Impact of health problems on daily life

On the reporting form for health problems, MEBI also asks about the subjective impact of those problems on daily life. This is difficult to define. On the form, the reporter can specify whether the side effect has a very serious, serious, moderate or low impact on daily life, or no impact at all. They can also provide further details about this impact on daily life. For example, the extent to which it has affected their ability to work, do household chores, look after children or engage in hobbies.

The importance of MEBI and of reporting problems

It is important that implants are safe. Reporting to MEBI can contribute to it. Reporting possible side effects may help other people. When many or unusual health problems are reported, MEBI will be able to detect potential connections between implants and problems at an early stage and inform healthcare professionals, patients and the government accordingly. In 2024, MEBI will continue its efforts to increase awareness of its work among healthcare professionals and the general public.

² Mesh implants are sheets, bands or nets made of synthetic material and placed inside the body permanently. They are often made of thread of a synthetic material called polypropylene. Various types of mesh implants are available for the treatment of a variety of conditions, such as pelvic mesh implants, inguinal hernia meshes and abdominal wall meshes.

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