



PGEU Medicine Shortages Report

2025

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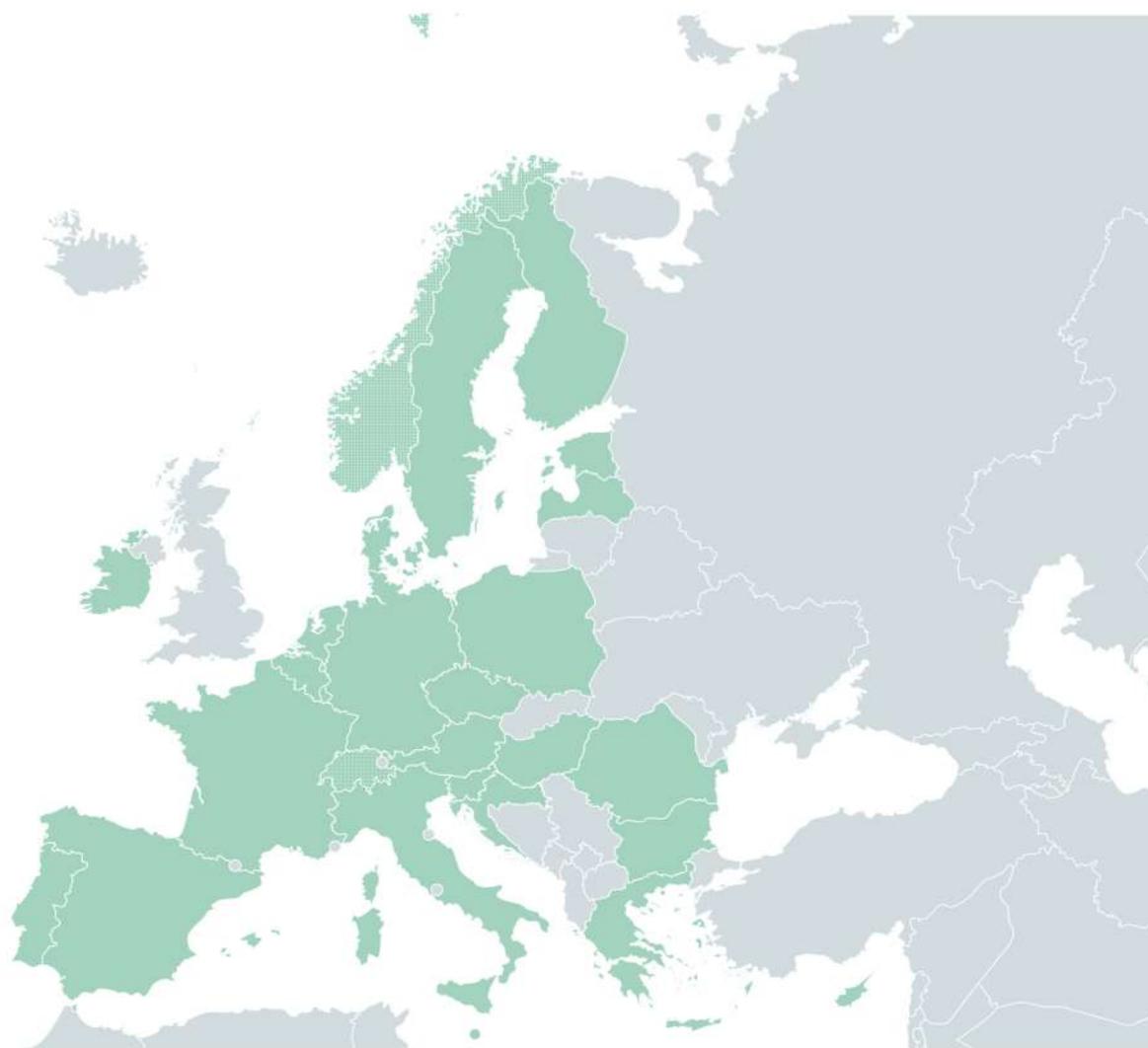
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PGEU Medicine Shortages Report 2025

Every year PGEU conducts a survey among its members to map the impact of medicine shortages across Europe from the community pharmacists' perspective.

The 2025 survey was open to all [PGEU member organisations](#) and has been conducted between 15 January and 15 February 2026. **A total of 27 EU and EFTA countries responded to the survey** (1 response per country): Austria, Belgium, Bulgaria, Croatia, Cyprus, Czechia, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Luxembourg, Malta, Poland, Portugal, Romania, Slovenia, Spain, Sweden, The Netherlands, Norway, and Switzerland.



Note: For the purpose of this report, the term "medicine shortage" covers every (temporary) inability for a community pharmacy to supply patients with the medicinal product requested as a result of factors beyond their control, requiring the dispensing of an alternative agent or even discontinuation of an ongoing medical therapy. Shortages of drug-device combinations were counted towards shortages of "medicines". In terms of reporting / notification of medicine shortages, respondents were asked to apply their national definition, if available.

Key Findings

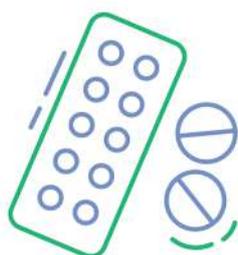
1. Medicine shortages remain a structural and systemic problem across Europe



96% of responding countries report shortages. In 70%, the situation has stagnated at high levels. In 37% of countries, more than 600 medicines were in shortage.

Medicine shortages are **no longer episodic disruptions** but an embedded and persistent feature of the pharmaceutical supply chain.

2. Shortages increasingly affect clinically critical therapies



Two classes (alimentary tract and nervous system) were reported by 85% of countries being in short supply, while cardiovascular, anti-infectives and oncologic therapies were reported by 81%.

Insulins, GLP-1 receptor agonists (GLP-1 RAs), antibiotics and medicines for the nervous system are repeatedly reported in shortage. In several countries, a significant share of shortages concerns medicines listed as critical at EU or national level, which highlights that critical medicines are not protected from shortages.

3. Patient safety, continuity of care and trust are under strain



All responding EU Member States report patient distress. 89% report treatment interruptions. For the first time, **reduced patient trust at pharmacy level (85%)** is the most frequently reported impact in pharmacies (surpassing financial or administrative burden), signaling erosion of citizens' confidence in the health system.

4. Community pharmacies are absorbing the systemic cost



Pharmacies now spend **around 12 hours per week** managing shortages, more than double the level recorded in 2021. 81% report increased administrative duties and 81% report financial loss due to time invested in mitigating shortages. **Pharmacies are acting as operational shock absorbers within fragile supply chains.**

5. Legal flexibility and predictive capacity remain uneven



Only 15% of countries allow therapeutic substitution (and often within defined protocols). Only 30% report expansion of pharmacists' scope of practice since last year. **While 81% of countries now have a definition of shortages and 74% have reporting systems that can be used by pharmacists, reporting is rarely mandatory (11%) and seldom digitally integrated (19%).** 33% have no shortages predictive system in place, and 26% report systems still under development. Europe continues to manage shortages largely after they occur rather than anticipating and preventing them.



Policy Recommendations

Community pharmacists are, in most cases, successful in minimising the negative impact of shortages on patients' health and ensuring continuity of care. However, to effectively address the growing problem of medicine shortages in Europe, PGEU calls on policymakers to adopt ambitious measures, namely:

1. Ensure availability and resilience

Given that:

63% *of countries cite manufacturing disruption*

41% *cite pricing and procurement policies as root causes*

It is urgent to:

- Strengthen EU coordination under the Critical Medicines Act
- Enforce public service obligations across the supply chain
- Address pricing and procurement models that undermine market sustainability
- Support diversification of manufacturing and API resilience

2. Empower pharmacists to safeguard continuity of care

With only:

15% *of countries allowing therapeutic substitution*

30% *reporting expansion of pharmacists' scope of practice*

It is useful to:

- Expand legal frameworks for therapeutic substitution (under defined protocols)
- Harmonise substitution rules across Member States
- Facilitate cross-border sourcing mechanisms
- Support structured compounding frameworks

3. Move from reactive to predictive governance

Given that:

33% *of countries lack shortages predictive systems and reporting remains largely voluntary*

We urge policymakers to:

- Establish interoperable EU-level early warning systems
- Make shortage reporting universal and digitally integrated
- Include pharmacist-level reporting in national monitoring systems
- Improve transparency of stock and supply data across the supply chain

4. Protect patient trust and financial sustainability

With trust erosion emerging as the leading impact and pharmacies dedicating

12 hours *per week to manage shortages*

It is necessary to:

- Recognise and compensate pharmacies for time invested in managing shortages
- Prevent additional financial burden on patients due to shortage-driven substitutions
- Integrate communication tools to support prescriber-pharmacist coordination

Medicine shortages are no longer an exceptional event. They are a test of Europe's capacity to ensure equitable access for patients to essential therapies. The time to shift from managing shortages to preventing them is now.

Persistence and large-scale shortages

Medicines

Question 1. *In the last 12 months, have you experienced shortages of medicines in community pharmacy in your country?*

(% of responding countries)



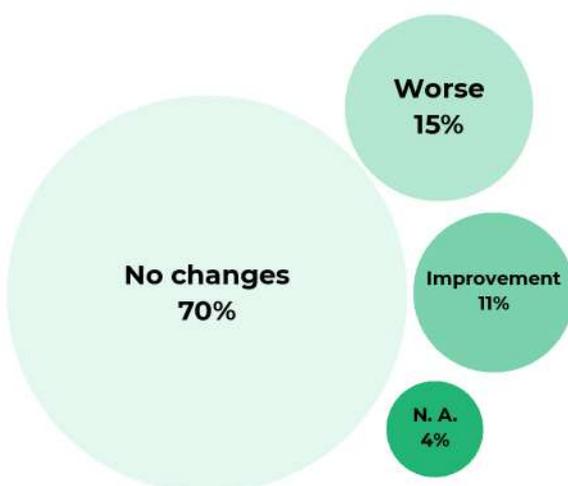
96% of responding countries (26/27) experienced medicine shortages in the last 12 months.

One country indicated that the possibility for pharmacists to perform generic substitution, combined with the availability of alternatives from the local pharmaceutical industry, mitigated the impact of shortages at community pharmacy level.

This confirms that shortages remain a widespread and persistent issue across Europe. While the last seven years of PGEU surveys reported shortages in 100% of responding countries, the 2025 result differs only marginally and is driven by a single Member State reporting no shortages. **Overall, medicine shortages continue to represent an embedded and systemic challenge for community pharmacies across Europe.**

Question 2. *If you have experienced shortages, how would you compare to the situation in the previous 12 months:*

(% of responding countries)



Compared to the previous 12 months, in 2025, **in 19 out of the 27 responding countries (70%) there were no changes in the situation**, confirming a continued stagnation in medicine shortages across Europe. The situation got worse in 4 countries (15%), while 3 countries (11%) reported improvements.

Member States report that even where the number of unavailable products has decreased, the workload for pharmacists has remained the same (or increased), as shortages increasingly require time-consuming sourcing, substitution, patient counselling, and administrative steps.

Comments from members

The Netherlands

The number of unavailable medicines has decreased compared to last year. However, pharmacists report experiencing a similar workload in 2025 as in 2024, without significant changes, indicating that reduced availability figures do not necessarily translate into reduced operational burden.

Ireland

A survey conducted by the Irish Pharmacy Union (IPU) indicates a levelling out of shortages encountered by pharmacists, with 57% reporting that shortages have “significantly increased” over the past 12 months, compared to 82% in 2024. This suggests relative stabilisation, albeit at a high level.

Poland

The situation regarding shortages of medicinal products has not improved over the last 12 months. The Minister of Health issues an official announcement every two months listing medicinal products, specific nutritional products, and medical devices at risk of unavailability. The number of products included has increased over the past year.

Slovenia

The number of reported shortages in 2025 remains comparable to 2024 (432 vs. 460), reflecting continued high levels of medicine unavailability.

Italy

The overall number of medicines in shortage identified by the National Competent Authority increased by 4.8% in 2025 compared to the previous year, indicating a worsening of the situation.

Estonia

The Estonian State Agency of Medicines received 305 new shortage notifications in 2025 (5% more compared to 2024), while the total number of medicines in shortage without an available alternative or substitution remained stable. Frequent shortages are primarily linked to the limited availability of existing therapeutic alternatives.

Spain

Official data from the Spanish Agency for Medicines and Medical Devices indicate that, in the last semester of 2025, 1,159 presentations were recorded as being in shortage, representing 3.51% of the total. These figures are comparable to those reported in the second semester of 2024, confirming a continued stagnation.

Portugal

There was an increase in the number of unavailable packs in 2025 compared to 2024, indicating further pressure on medicine availability.

Belgium

While the overall number of shortages decreased (from 9% to 6.5%), the impact on pharmacists did not decrease. The additional workload is more closely linked to the nature and complexity of shortages rather than their absolute number. Improvements for patients, such as reimbursement of imported medicines, have been introduced. However, these measures entail additional administrative requirements for pharmacists.

Denmark

The average number of packages in shortage decreased from 585 in 2024 to 486 in 2025, suggesting some quantitative improvement.

Question 3. *If you have experienced shortages in the last 12 months in your country, which medicine classes have been in short supply in community pharmacy?*

(ATC Level 1, multiple answers per country, % of responding countries)

Anatomical Therapeutic Chemical (ATC) Classification level 1	Responding countries (%)
Alimentary tract and metabolism	85%
Nervous system	85%
Cardiovascular system	81%
Anti-infectives for systemic use (e.g. antibiotics)	81%
Antineoplastic and immunomodulating agents	81%
Blood and blood forming organs	74%
Respiratory system	74%
Systemic hormonal preparations (excluding sex hormones and insulins)	74%
Dermatologicals	67%
Musculo-skeletal system	67%
Genito-urinary system and sex hormones	67%
Various	67%
Sensory organs	63%
Antiparasitic products, insecticides and repellents	56%
Vaccines	44%
N. A. / No Shortages	4%

From those, the three classes of medicines most frequently in short supply were:



76%
Nervous system



64%
Cardiovascular medications



28%
Anti-infectives for systemic use (e.g. antibiotics)

Medicine shortages in 2025 continue to affect nearly all major therapeutic areas.

Two main classes (alimentary tract and metabolism, and nervous system medicines) were reported in shortage by 85% of responding countries.

Particularly concerning is the continued impact on other classes of medicines (such as medicines for the cardiovascular system, antibiotics, and anti-neoplastic and immunomodulating agents (all 81%)), which **highlight that shortages affect not only common chronic treatments but also critical and life-saving therapies.**

When asked to identify the medicines most frequently in short supply, **nervous system medicines (76%) and cardiovascular medicines (64%)** ranked highest, suggesting that shortages are increasingly concentrated in therapeutic areas with limited substitution possibilities and high clinical relevance.



In 2025, medicine shortages continue to affect essential treatments **for mental health and neurological conditions, cardiovascular diseases, cancer, diabetes and obesity, respiratory illnesses, and infections.** Long-standing shortages were reported for ADHD medicines, antipsychotics, oncology treatments, insulins, GLP-1 RAs, antibiotics, and hormonal therapies.

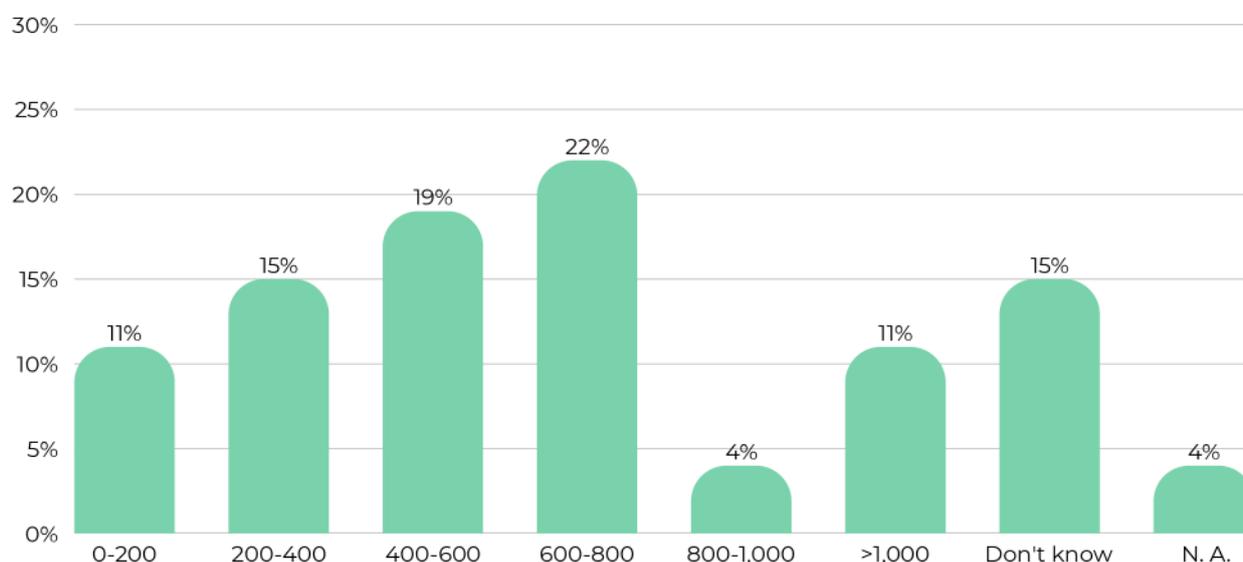


Several Member States highlight that shortages increasingly concern specific strengths and formulations, **limiting substitution options and disproportionately affecting vulnerable patients.**

Even when overall numbers decline, **the clinical complexity and administrative workload for pharmacists remain high**, and gaps in national reporting systems continue to hinder transparency and monitoring.

Question 4. How many medicines are in short supply at the time of completing this survey? (according to your national definition of a medicine shortage if applicable)?

(% of responding countries)



The number of medicines reported in shortage remains high across Europe.

A significant proportion of countries (37%) reported more than 600 medicines in shortage, with 11% reporting over 1,000 medicines unavailable. This confirms that shortages remain widespread and, in several countries, systemic in scale.

At the same time, 15% of countries were unable to provide a precise figure, highlighting continued gaps in monitoring systems and data transparency.

Shortages of critical medicines:

- ▶ Critical medicines are affected by shortages across Europe. PGEU members report **dozens to over 100 critical substances or presentations in short supply** in several countries. In one Member State, 36.7% of all shortages concerned medicines on the Union List of Critical Medicines.
- ▶ Reported shortages include insulins and GLP-1 RAs, oncology treatments, antibiotics, vaccines and medicines for the central nervous system, where substitution is often clinically complex.
- ▶ At the same time, several countries are unable to quantify critical shortages due to gaps in national monitoring and transparency. Critical medicines are not protected from shortages, and monitoring remains fragmented.



Medical devices

Question 5. *In the last 12 months, have you experienced shortages of medical devices in community pharmacy in your country?*

(% of responding countries)



In 2025, **59% of responding countries reported shortages of medical devices in community pharmacies**, a result broadly consistent with the previous year. This confirms that medical device shortages remain a widespread concern across Europe.

These findings demonstrate that supply chain vulnerabilities extend beyond medicines and continue to affect patient care in community pharmacy settings.

Question 6. *If you have experienced shortages in the last 12 months in your country, which medical devices have been in short supply in community pharmacy?*

(multiple answers per country, % of responding countries)

Medical Device Classification	Responding countries (%)
Class I (low risk - e.g. bandages, thermometers, surgical face masks)	19%
Class IIa (medium risk - e.g. lancets, needles, short-term contact lenses)	26%
Class IIb (medium to high risk - e.g. oxygen concentrator)	19%
Class III (highest risk - e.g. contraceptive intrauterine devices)	19%
In-vitro diagnostics (e.g. self-tests)	19%
Other	41%
N. A. / No shortages	30%

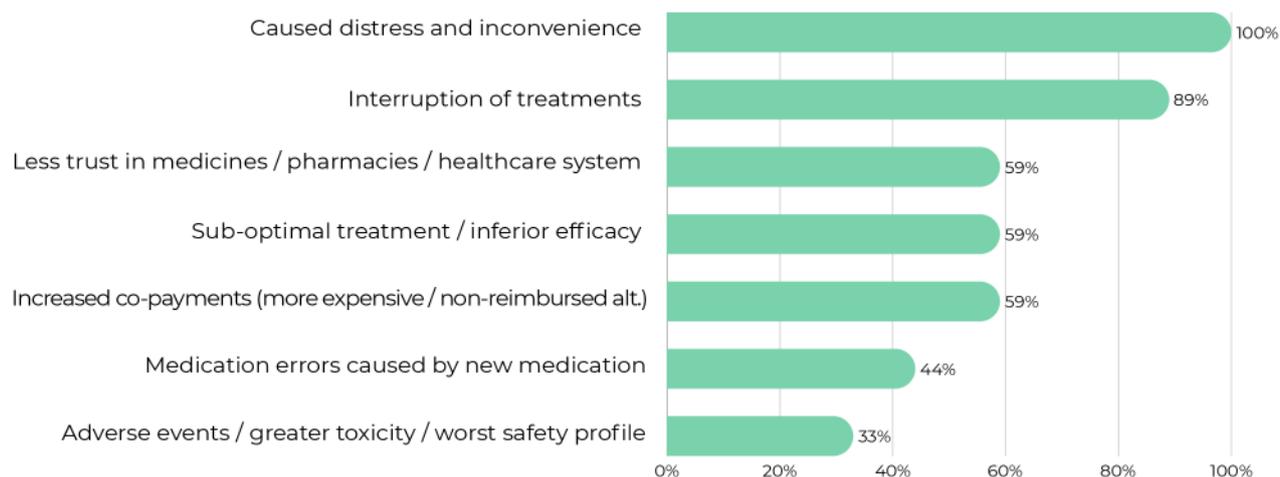
Countries have experienced shortages across **all classes of medical devices**, including medium- and high-risk categories. The distribution of affected classes is broadly similar to last year.

However, only two Member States report the existence of a dedicated medical device shortage monitoring system that provides information directly to pharmacists.

Clinical impact of shortages

Question 7. In your experience, how have medicine shortages adversely affected patients in your country?

(multiple answers per country, % of responding countries)



Medicine shortages continue to have a direct and widespread impact on patients. **All responding countries (100%) report that shortages cause distress and inconvenience, while 89% indicate treatment interruptions.**

In 59% of countries pharmacists report that patients **perceive less trust in medicines and the healthcare system**, and they consider that shortages result in **sub-optimal treatment** or **increased co-payments**.

Importantly, 44% of countries link shortages to **medication errors** following switches, and 33% report **adverse events or increased toxicity**, highlighting **patient safety** implications.

Shortages are affecting patients' health, safety and finances



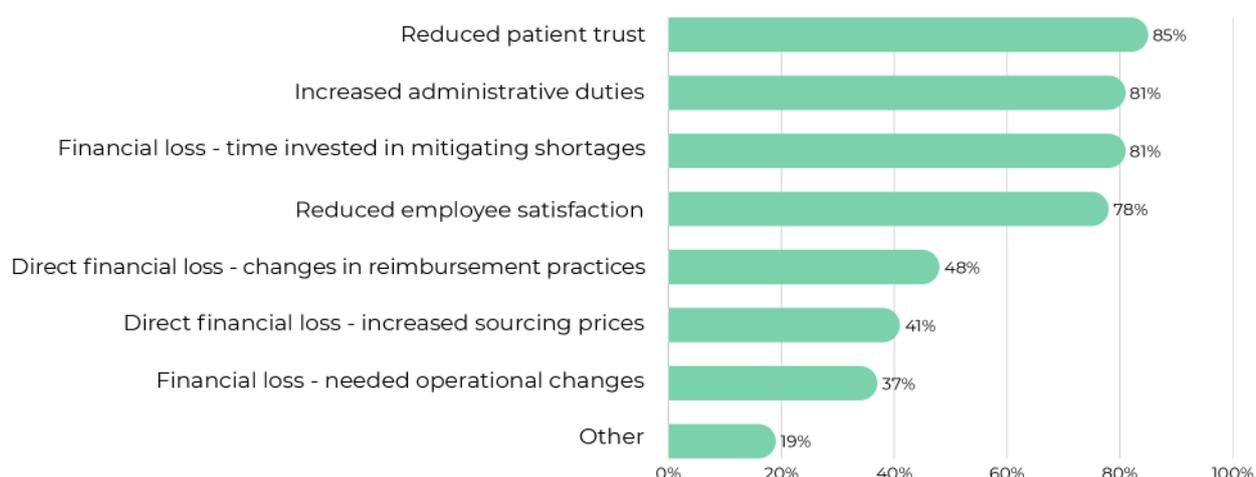
All responding countries – including all EU Member States that participated – report patient distress and inconvenience. Nearly 9 in 10 report treatment interruptions.

In around 60% of countries, shortages lead to sub-optimal treatment, higher costs for patients, and reduce trust in the system. In 44%, switching medicines has caused medication errors.

Operational strain on pharmacies and sustainability

Question 8. In your experience, how have medicine shortages affected community pharmacies in your country?

(multiple answers per country, % of responding countries)



Medicine shortages continue to exert **significant operational and financial pressure on community pharmacies**. In 85% of countries, shortages have contributed to reduced patient trust, while 81% report increased administrative duties and financial losses due to the time invested in mitigating shortages.

A substantial majority (78%) indicate reduced employee satisfaction. Additional direct financial impacts arise from reimbursement changes (48%), increased sourcing costs (41%) and operational adjustments (37%) such as minimum stock keeping, import fees, etc.

These findings demonstrate that shortages not only affect patients, but also threaten the sustainability and resilience of community pharmacy practice.



In contrast to previous years, **reduced patient trust** emerges in 2025 as the single most reported impact of medicine shortages (85%).

In 2024, reduced trust, reduced employee satisfaction and financial loss due to time invested were reported at similar levels.

The fact that reduced patient trust now stands alone as the primary impact indicates a shift in perception: beyond financial and operational strain, pharmacists increasingly experience shortages as **an erosion of confidence in medicines, pharmacies and the healthcare system itself**, revealing a systemic trust issue.

Comments from members

France

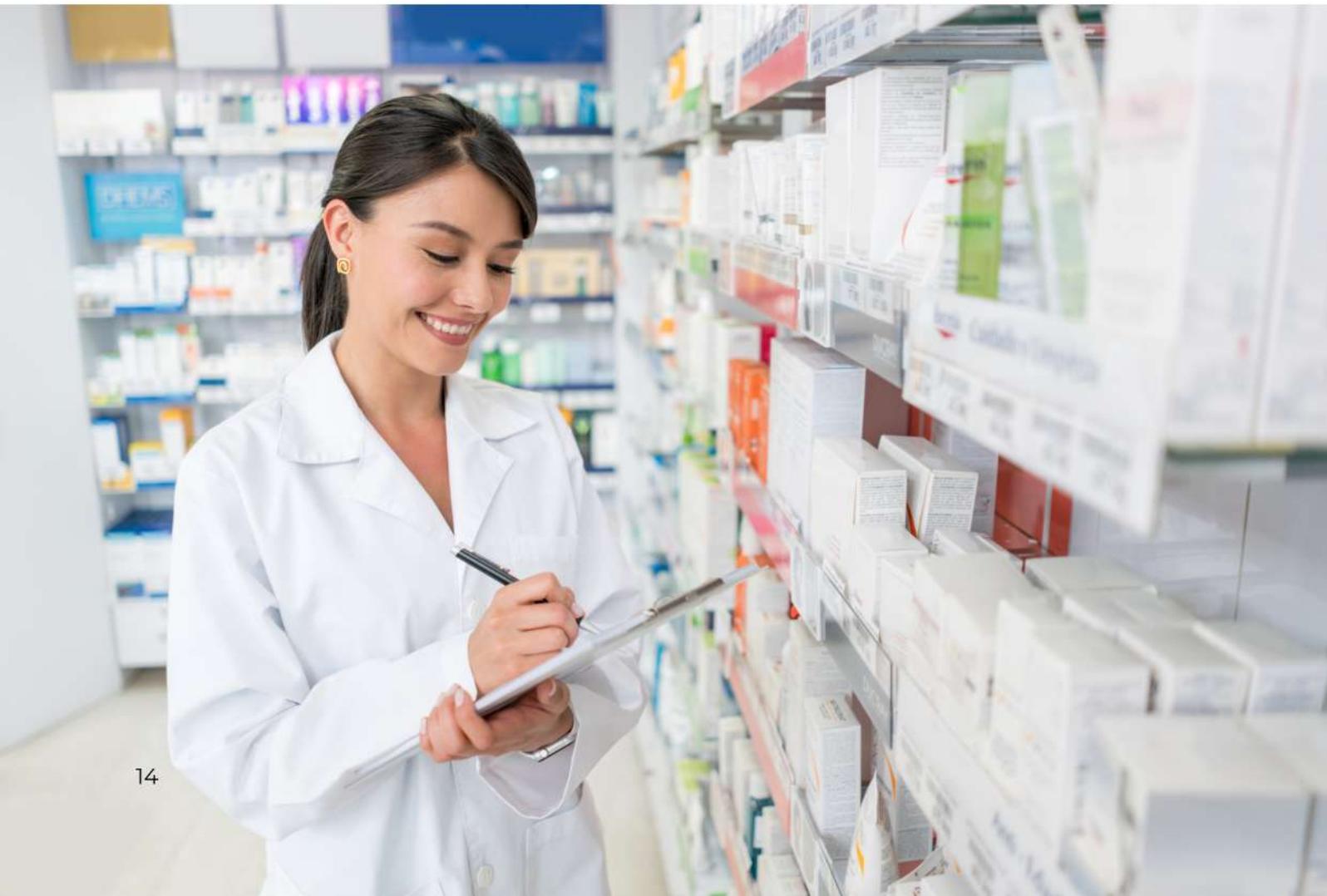
The most significant impacts reported are the time invested in managing shortages, increased administrative duties, and hostility or aggression from patients who do not understand why medicines cannot be supplied.

Ireland

An alarming trend identified in the 2025 Medicine Shortages Survey is the sustained increase in workload and operational burden experienced by pharmacists on a daily basis, with no clear indication that the situation will improve.

Belgium

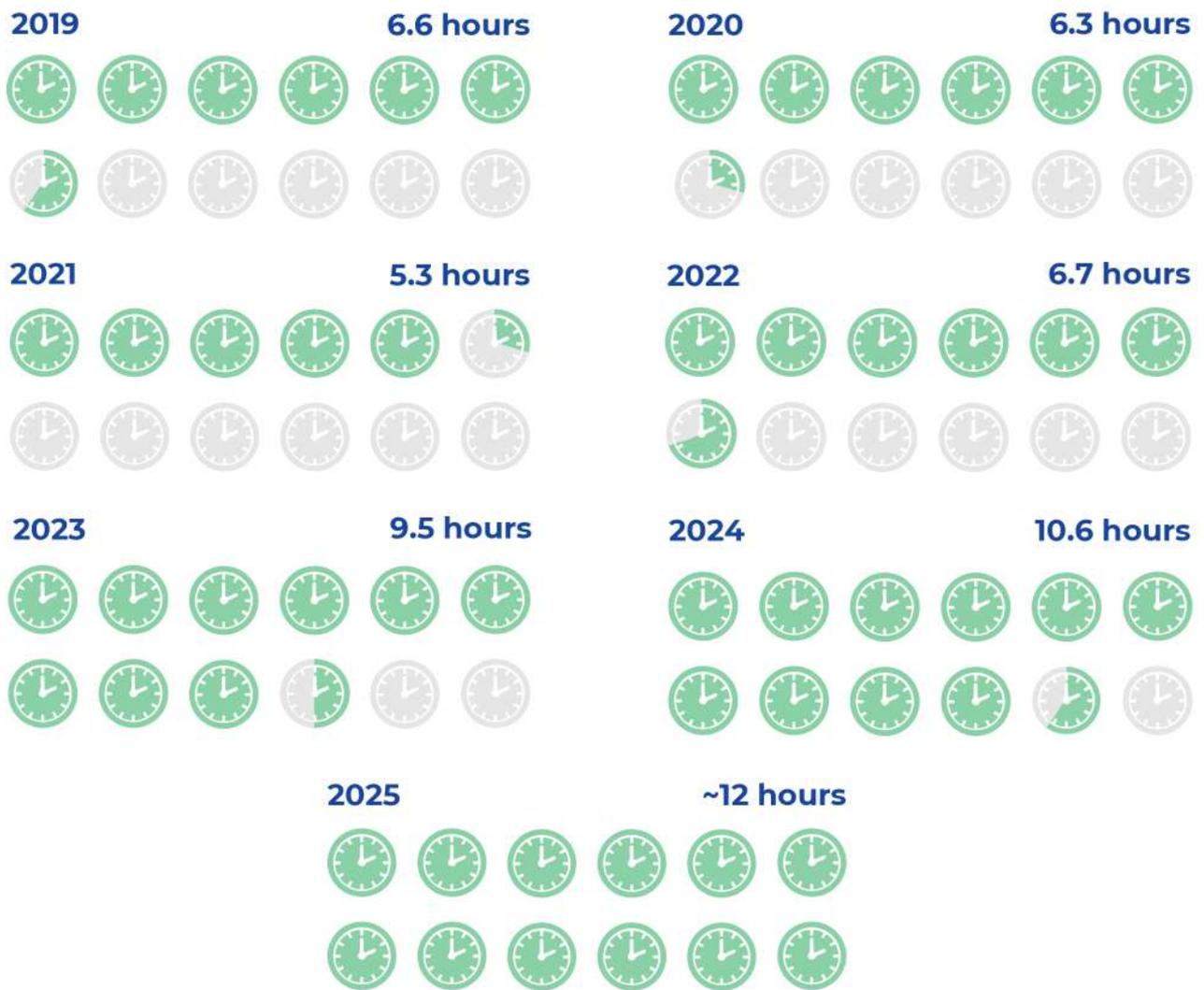
Pharmacies report instances of patient aggression linked to medicine shortages.



Question 9. On average, per week, how much time does pharmacy staff spend dealing with medicine shortages?
(time expressed in hours)

In 2025, community pharmacies reported spending on average **around 12 hours per week** per pharmacy managing medicine shortages. This represents a continued increase compared to previous years and nearly doubles the levels recorded in 2021.

Several countries report extreme cases **exceeding 30 or even 40 hours per week**. Even where the number of shortages has stabilised, pharmacists indicate that the complexity of sourcing, substitution and administrative requirements continues to drive workload upward.

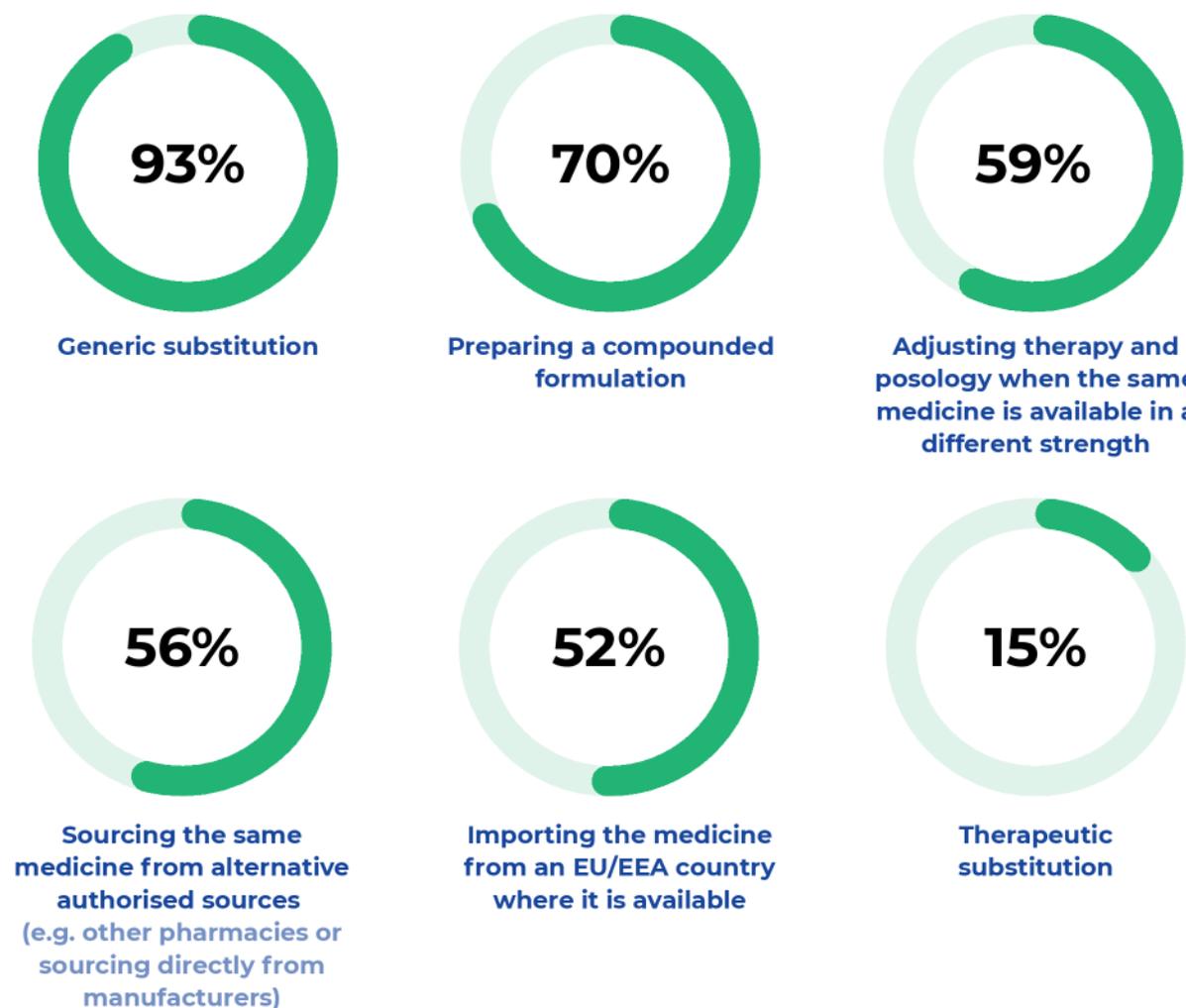


 Pharmacies now spend the equivalent of more than one full working day per week managing medicine shortages.

Governance gaps and legal fragmentation

Question 10. Which solutions can legally be offered by pharmacists in case of a shortage?

(multiple answers per country, % of responding countries)



The most widely available mitigation tool remains **generic substitution (93%)**, followed by **compounding (70%)**. More than half of countries (59%) allow therapy and posology adjustment, or allow sourcing from alternative authorised suppliers (56%) or even importing from other EU/EEA countries (52%).

However, only 15% of countries allow therapeutic substitution (and often within pre-approved protocols with the prescribers). This indicates that pharmacists' ability to respond flexibly to shortages remains limited in most Member States, particularly when switching to a different active substance may be clinically appropriate.



Across Member States, legal mitigation tools often exist but remain subject to prescriber approval, administrative procedures, or temporary authorisations, limiting pharmacists' ability to act swiftly during shortages.



Across the last three PGEU Medicine Shortages reports (2022, 2023 and 2024), generic substitution has remained the most widely available mitigation tool, reported in over 90% of responding countries.

Over time, there has been some expansion in compounding (up to 70% in 2025) and ability to import from EU/EEA sources, but therapeutic substitution continues to be limited with only a few Member States allowing pharmacists to autonomously switch medicines.

These findings confirm that, **while pharmacists are legally enabled to manage shortages in many countries, significant gaps in legal flexibility persist**, particularly when therapeutic substitution or cross-border sourcing are needed to ensure continuity of care. This highlights **the ongoing need for legal and regulatory reforms** to empower pharmacists more consistently across Europe.

Comments from members



Sourcing directly from manufacturers is permitted; sourcing from other pharmacies is not. "Special" officinal formulae may be compounded during shortages, but only on an exceptional and temporary basis authorised by the Medicines Agency (ANSM) or the Minister of Health. Therapy adjustments generally require prescriber agreement. Therapeutic substitution may occur under ANSM-issued shortage guidelines, with prescriber consent, or in limited emergency / local cooperation contexts.



Pharmacists are not legally authorised to implement substitution or other mitigation measures independently and must always contact the prescriber to request an alternative.



Progress has been made on pharmaceutical formulation substitution in shortages situations. A forthcoming medicines law is expected to formally allow pharmacists to perform such substitutions.



Generic substitution and compounding are generally subject to consultation with the prescriber, except in emergencies.



Generic substitution is permitted within defined interchangeable groups. Therapy adjustments are carried out in agreement with the prescriber.



Most mitigation measures require consultation with the prescriber and possible amendment of the prescription.



Adjusting therapy and posology when a different strength is available has been legally possible since January 2026.



Therapeutic substitution is legally possible, but necessary technological and implementation systems are not yet fully operational.



Several mitigation options require prior contact with the prescriber. Importation procedures involve additional administrative requirements.



Importing from another EU/EEA country is a common mitigation strategy, but pharmacies may only order through local wholesalers (except veterinary medicines).

Compounding requires an *ex-tempore* prescription, and pharmacists cannot substitute authorised medicinal products with compounded formulations on their own initiative.

Question 11. *Have you seen an expansion of the legal scope of pharmacy practice to manage shortages in your country over the last 12 months (including regulatory flexibilities, permanent or temporary)?*

(% of responding countries)



In 2025, only 30% of responding countries reported an expansion of the legal scope of pharmacy practice to manage shortages, **while 70% reported no changes**. Despite continued high levels of medicine shortages, **there has not been a broad acceleration of legal reforms**. Expansion of pharmacists' scope of practice remains limited and uneven. Some reforms reported in last year's reports are still pending implementation (e.g. secondary legislation, pilot projects, future laws).



The regulatory response does not appear to be keeping pace with the persistence of shortages.

While some Member States are introducing reforms, many measures remain temporary, conditional, or pending implementation. Structural and harmonised legal empowerment of pharmacists across the EU remains limited.

Comments from members

Ireland

The Health (Miscellaneous Provisions) Act 2024 provides a legal basis for therapeutic substitution through secondary legislation (not yet enacted). The 2025 Community Pharmacy Agreement introduces a framework to mitigate shortages, including reimbursement visibility and exploration of therapeutic substitution protocols.

Belgium

Regulatory adjustments were introduced regarding imports at wholesaler level, including financial measures to prevent additional costs being borne by patients.

Slovenia

A new regulation under preparation is expected to broaden substitution possibilities.

Finland

From January 2026, amendments to the Medicines Act allow pharmacists to deviate from prescriptions regarding strength, formulation, brand, package size and dosage instructions in case of shortages, based on pharmaceutical judgment.

Estonia

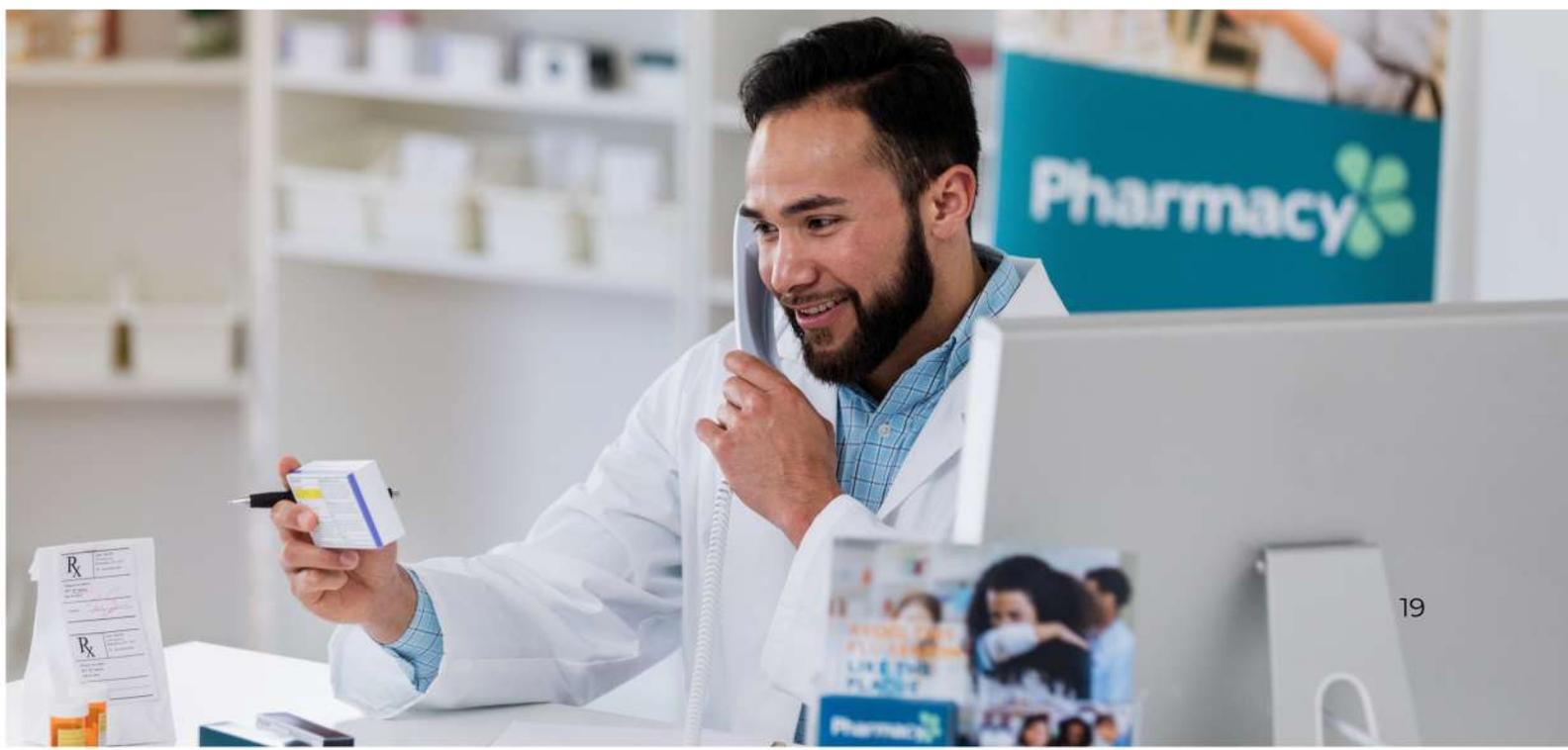
Reimbursement of medicines not included in the national reimbursement list has been authorised in shortages situations.

Spain

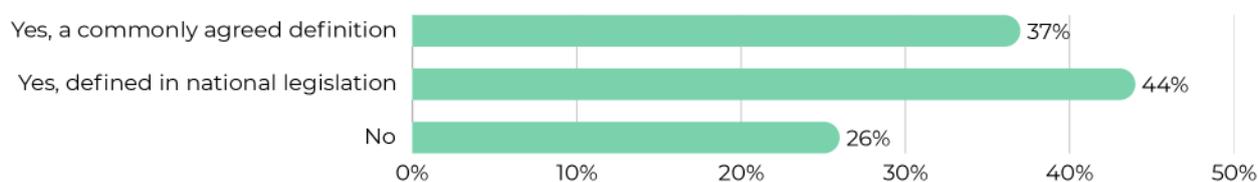
Temporary exceptional measures allowed pharmacists to dispense alternative strengths / formulations (e.g. amoxicillin tablets for children) during shortages. A forthcoming medicines law is expected to formally expand pharmaceutical form substitution.

Denmark

A pilot project on Serious Shortage Protocols is planned for 2026 to broaden substitution options under protocols defined by the national medicines agency.



Question 12. Is there a definition of medicine shortages in your country?
(% of responding countries)



In 2025, the vast majority of responding countries (81%) reported having a definition of medicine shortages, with 44% embedding this definition in national legislation. **This represents a significant increase compared to 2024, when only 28% reported a legislative definition**, and a strong improvement signal compared to previous years, suggesting increasing formalisation and regulatory maturity in the approach to shortages.

However, 26% of countries still lack a formal definition. The absence of a standardised legal definition limits consistency in monitoring, reporting and enforcement across Member States.

Definitions of medicine shortages – convergence or fragmentation?

- ▶ While 81% of responding countries report having a definition of medicine shortages, the definitions vary significantly in scope and methodology.
- ▶ Some Member States align with the EMA/HMA approach, defining shortages as a supply not meeting national demand. Others apply time-based thresholds, ranging from 12 hours to several weeks of unavailability. In certain Member States, shortages are triggered when stock levels fall below defined consumption averages, while others focus on the inability of the marketing authorisation holder to ensure continuous supply.
- ▶ Several Member States distinguish between concepts such as “shortage”, “unavailability”, “rupture”, or “supply disruption”, further increasing variability.

The existence of national definitions does not equate to harmonisation. Divergent thresholds and methodologies limit comparability of data across the EU and complicate coordinated responses to shortages.

Question 13. Does your country have (a) reporting system(s) for shortages in place which can be used by community pharmacists?

(% of responding countries)



In 2025, **74%** of responding countries report having a medicine shortages reporting system accessible to community pharmacists, a significant increase compared to 64% in 2024.

While this reflects progress in monitoring infrastructure, more than one quarter of countries still lack such systems. Moreover, earlier responses indicate that even where reporting mechanisms exist, data transparency, comparability and critical medicine tracking remain inconsistent across Member States.

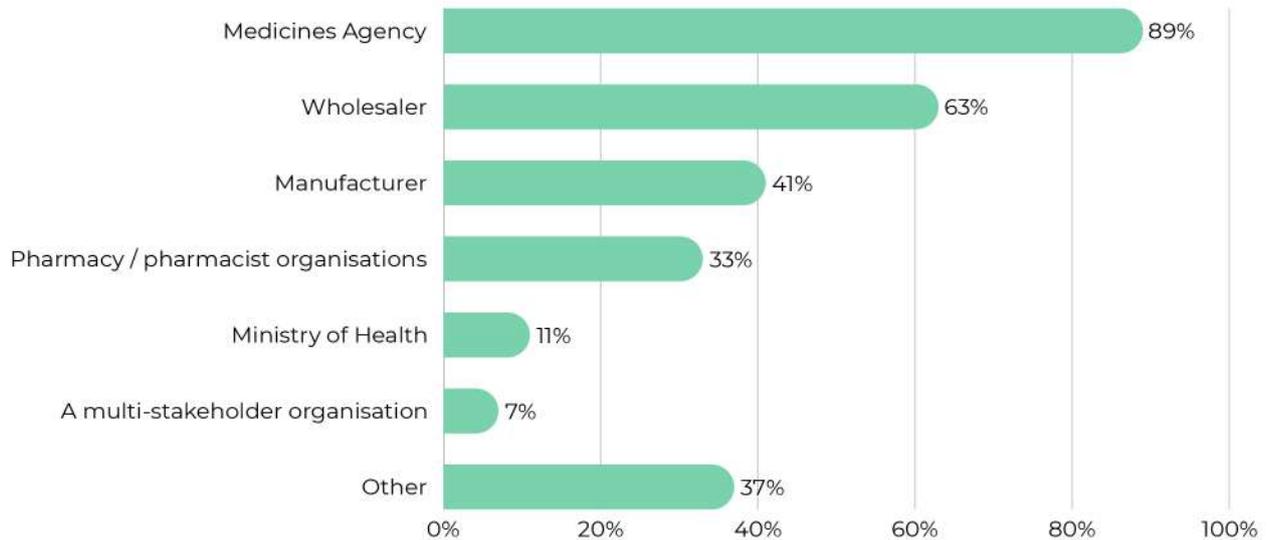
Pharmacist reporting shortages: an untapped early warning mechanism rarely utilised

- ▶ Although 74% of countries report having a national shortages reporting system, only 67% (18 respondents) indicate that pharmacists actively report shortages. In one third of countries, pharmacists cannot report shortages at all.
- ▶ **Reporting is rarely mandatory:** only 11% of Member States require pharmacists to report shortages, while in 67% reporting remains voluntary, with uneven participation levels.
- ▶ **Digital integration is limited,** with only 19% (5 countries) reporting that shortages reporting is incorporated into pharmacy software. Many systems rely on email (44%), pharmacy software / web interface / dedicated website (30%), telephone (19%) or other manual processes, increasing administrative burden and reducing efficiency.
- ▶ Pharmacies have access to publicly accessible repository systems with information on medicine shortages in 63% of the cases, but access is non-existent in 15% of countries. These repositories are updated daily (48%), weekly (15%) or in real time (11%).
- ▶ These findings indicate that community pharmacists – who are often the first to detect medicines unavailability at patient level – are not systematically integrated into national early warning systems.

Strengthening pharmacists' ability and universal reporting of shortages by multiple stakeholders, supported by digital integration and interoperable systems, would significantly improve early detection and coordinated response across the EU.

Question 14. Who provides information on medicine shortages to pharmacists in your country? e.g. - How long will medicines be unavailable for? / Reasons for shortages

(multiple answers per country, % of responding countries)



In 89% of countries, the national medicines agency provides information on shortages – indicating **that regulatory authorities remain the main information hub**. Wholesalers play a significant operational role, with 63% of countries reporting that wholesalers are the second most common source of information. **This reflects the practical reality that pharmacists often rely on supply chain actors for real-time availability information.**

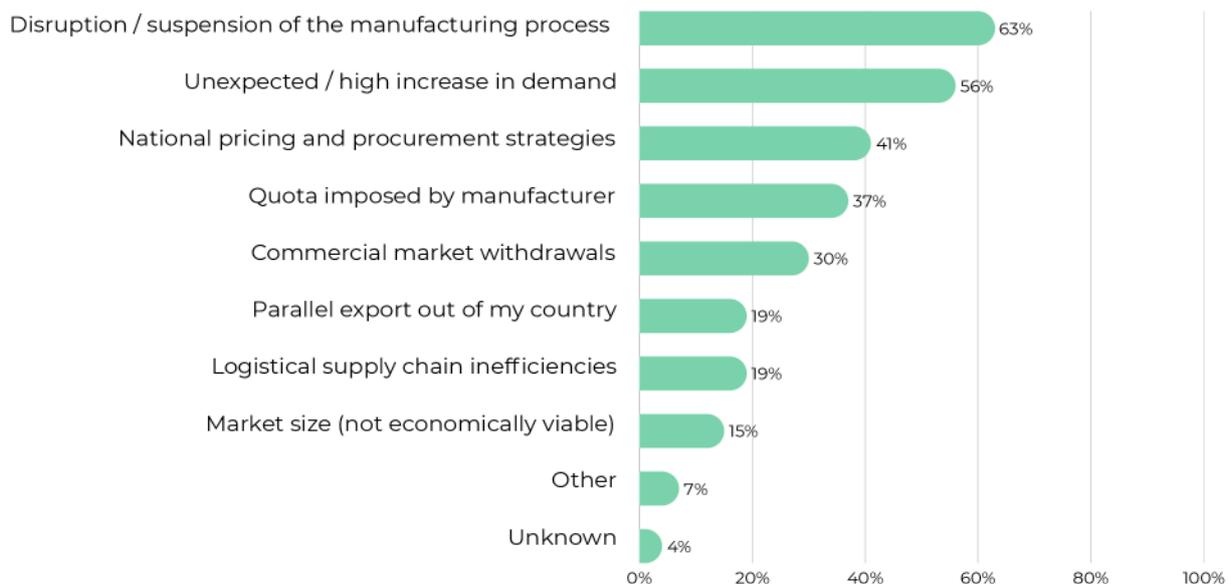
Compared to last year, the role of medicines agencies has increased, while direct involvement of Ministries of Health remains limited (11%). These findings suggest that information flows are primarily regulatory and supply-chain based, with limited formal multi-stakeholder coordination at national level.

Some Member States include regulatory-based data in pharmacy / dispensing softwares to increase communication to pharmacists.



From reactive management to predictive prevention

Question 15. From your experience and daily practice, what have been the 3 most common causes of shortages in your country?
(3 answers per country, % of responding countries)



Manufacturing disruptions remain the primary driver, with 63% of countries reporting that shortages are **primarily attributed to disruptions or suspension of manufacturing processes, including API supply issues or natural disasters**. This confirms that upstream vulnerabilities continue to be the dominant structural driver. Demand volatility remains significant, with 56% of respondents identifying unexpected or increased demand as a cause. This can reflect epidemiological fluctuations, stockpiling behaviour, or demand spikes (e.g. seasonal, public health crises).

Economic and regulatory factors also play a significant role: 41% of countries cite national pricing and procurement strategies (such as tendering policies), 37% report manufacturer-imposed quotas, and 30% refer to commercial market withdrawals. **These findings confirm that medicine shortages are driven by a combination of global manufacturing vulnerabilities, demand volatility, and national market and policy dynamics, being also influenced by economic and regulatory frameworks at national level.** Parallel export (19%) and logistical inefficiencies (19%) remain contributing but not dominant factors.

Predictive and early warning systems are limited and uneven



PGEU members responses indicate that predictive or early warning systems for preventing shortages remain limited across Europe.

A majority of responding countries (59%) either report that there is no predictive system currently in place (33%), or report that systems are still under development or planned but not yet fully operational (26%).

Some Member States report partial or sector-specific approaches. **Finland** operates a national stock monitoring system with daily automated reporting from wholesalers, community and hospital pharmacies. **Spain** uses machine learning tools (CisMED) to identify early alerts and predict supply evolution. **Ireland** has a structured Medicines Shortage Framework coordinated by the national authority, though key legislative elements are still pending implementation. **Germany** and **Croatia** are developing early warning systems with legal mandates and predictive algorithms. **Belgium** relies on structured stakeholder coordination and data analysis, though not a fully predictive system.

Beyond fragmentation, some systems are limited to hospital medicines, based on notification rather than prediction, dependent on manufacturer self-reporting, not fully digital or interoperable, or still in planning stages. In some cases, “early warning” exists formally but functions reactively in practice.

Overall, predictive capacity across Europe remains fragmented and uneven.

While monitoring and notification mechanisms are improving, fully operational, data-driven, and interoperable early warning systems are not yet widespread.

These findings suggest that Europe continues to manage medicine shortages largely in a reactive manner. Strengthening predictive capabilities, ensuring timely and mandatory reporting, and enabling interoperable stock monitoring across the supply chain will be essential components of a more resilient medicines framework under the Critical Medicines Act.

Conclusion

The 2025 PGEU survey confirms that medicine shortages **remain a persistent problem of European healthcare systems**. Although the overall situation has stabilised in many Member States, it has stabilised at an unacceptably high level. **Shortages are no longer episodic disruptions but an entrenched operational reality for patients and community pharmacies.**

The therapeutic breadth of shortages is particularly concerning. Essential treatments for cardiovascular disease, mental health, cancer, diabetes and infectious diseases are frequently affected. In several Member States, a significant proportion of shortages concern medicines listed as critical at EU or national level. Critical medicines are not shielded from supply instability.

The impact on patients is profound. Treatment interruptions, sub-optimal therapy and increased out-of-pocket costs remain widespread. In 2025, reduced patient trust emerges as the single most reported consequence of shortages. This represents a shift: beyond operational strain, shortages are now perceived as undermining confidence in medicines and in the healthcare system itself.

Community pharmacies continue to act as shock absorbers within the system. Pharmacists dedicate approximately one full working day per week to managing shortages, often without financial compensation and with limited legal flexibility. While generic substitution and compounding are widely used tools, therapeutic substitution remains rare and legal expansion has not accelerated in most Member States.

Governance frameworks are improving but remain fragmented. Definitions are increasingly formalised in legislation, and reporting systems are expanding. However, reporting is rarely mandatory and often not digitally integrated. Predictive and early warning systems remain uneven, under development, or reactive in nature. Europe continues to manage shortages primarily after they occur, rather than anticipating and preventing them.

Medicine shortages are driven by a combination of global manufacturing vulnerabilities, demand volatility and national pricing and procurement policies. Addressing them therefore requires coordinated action at both EU and national levels. The data in this report show not only persistence of shortages, but a shift in their nature: from acute supply disruptions to chronic systemic strain affecting trust, workforce sustainability and governance preparedness.

Without structural reforms (including strengthened early warning mechanisms, harmonised definitions, improved data interoperability, enhanced legal empowerment of pharmacists, and recognition of the financial burden borne by pharmacies) shortages will remain a chronic challenge rather than a solvable crisis.

About Us

The Pharmaceutical Group of the European Union (PGEU) is the association representing community pharmacists in 33 European countries. In Europe over 500.000 community pharmacists provide services throughout a network of more than 200.000 pharmacies, to an estimated 500 million European citizens daily.



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