hiya



Global Call Threat Report

Insights into today's worldwide spam problem

Q4 2024



This is Hiya's eighth edition of the Global Call Threat Report. You can download the seven other reports here.

Q3 2024 | 1H 2024 | Q4 2023 | Q3 2023 | Q2 2023 | Q1 2023 | Q4 2022



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Phone spam is a global problem

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Section one

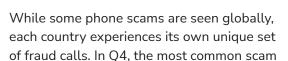
Phone spam is a global problem

Holiday season brings out scammers in Q4

The fourth quarter is a busy time of year for everyone. It's a festive season, where consumers spend freely on holiday gifts and events, and businesses make a final push to maximize sales and close up the books for the year.

Fourth quarter is also a busy time for scammers. Unwanted phone calls — both illegal fraud calls and annoying nuisance calls — jumped in Q4. In the first three quarters of 2024, global unwanted calls hovered around 9.8 billion. But in Q4, unwanted calls surpassed 11.3 billion — increasing by more than 1.5 billion calls in Q4 compared to Q3.

The types of phone scams perpetrated in Q4 reflected the holiday season. Amazon scams are popular year round, but accelerated during Q4. Package delivery scams were also plentiful in the fourth quarter, with fraudsters impersonating delivery companies to trick consumers into paying phony delivery fees or to divulge personal information.





in the United States related to Medicare and health insurance. In the UK, HMRC tax scams were number one. Amazon scams ruled in Canada, while residents of France and Spain were bombarded with calls from electricity providers.

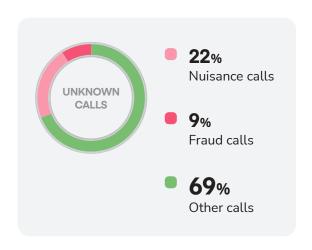
Read on to discover the top phone scams in seven key countries. And be sure to check out the Solution section below to learn how Hiya Protect, the industry-leading call protection solution, uses Adaptive AI to block fraud calls and label nuisance calls.

11.3 Billion

Global calls flagged as suspected spam in Q4 2024

123_{Million}

Calls flagged as suspected spam per day

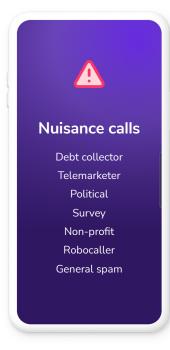


How Hiya measures phone spam

Hiya is in a unique position to measure phone spam around the world. Through its relationship with mobile device manufacturers and global downloads of the Hiya mobile app, Hiya has insight into spam calls in more than 40 countries. This report is based on a representative sample of calls observed during the fourth quarter of 2024 on the Hiya Voice Security Network, which includes Samsung Smart Call enabled devices and the Hiya mobile app.

Spam is defined as unwanted calls, and includes both fraud calls and nuisance calls. The spam rate in this report represents calls that Hiya has identified and flagged as either "potential fraud" or "suspected spam." The spam rate measures the number of unwanted calls from non-contacts, which are calls placed from numbers that are not in an individual's address book.

Graphs showing volumes of specific scams are based on user reports. When a call is received, Hiya users can report the category of spam, and can also leave a written comment. Keywords in those comments are used to measure the volume of the most common scams.





While some call protection services simply add a "spam" label to all unwanted calls, Hiya's technology distinguishes between 15 different categories of spam. Mobile carriers decide how potentially unwanted calls will appear to subscribers.

Al-generated deepfakes pose a threat, but Al tools are here to fight back

The Global Anti-Scam Alliance estimates that an astounding \$1.03 trillion was lost to scams worldwide in 2024. And one of the biggest threats on the horizon is the use of Al-generated voice clones (commonly referred to as deepfakes) to perpetrate scams.

In a recent article in Forbes, The Year Of The Deepfake: Combating Digital Deception In 2024 And Beyond, author Steven Smith claims, "Deepfakes represent one of the most significant threats to digital security and public trust today." He insists that as generative AI continues to accelerate, distinguishing between real and fake content is nearly impossible.

Al-aided scams are not threats of the future. They are here today. Here are a few examples from the past year:

- CBS News reports that AI voice scams are on the rise. CBS states that "Artificial intelligence-enabled voice cloning tools have made it easier for criminals to mimic strangers' voices and dupe victims into handing over large sums of money." The story includes a video of a man who nearly lost \$9,000 to a family emergency scam. Fraudsters cloned his son's voice pleading for help, followed by a phony defense attorney and court clerk who came on the phone to request money for bail.
- Automaker Ferrari was recently a target of an elaborate scam in which a fraudster called
 a company executive using a deepfake cloned voice of CEO Benedetto Vigna. Mimicking
 his southern Italian accent, the impersonation was nearly perfect. But the executive's
 suspicions were raised when the CEO started talking about an upcoming currency-hedge
 transaction. That led him to ask the CEO about a book he had recently recommended.
 When the caller could not answer the question correctly, the executive ended the call.
- A reporter from the BBC conducted an experiment to see if a cloned voice could fool the voice ID
 systems that protect people's bank accounts. She had a security expert clone her voice to say "My
 voice is my password." She then called two banks where she had accounts and, when prompted,
 played the cloned-voice recording. She successfully accessed her account at both banks.
- The Washington Post and Seattle Times reported that scammers are using generative AI
 programs to impersonate real estate agents, lenders and other parties in home sales. They
 interviewed one couple who lost \$255,000 after receiving what they believed to be an AI
 generated email impersonating their title company lawyer, requesting the down payment
 for a home.

How common are deepfakes? In January 2025, Hiya commissioned a survey of 12,000 consumers in the US, UK, Canada, Spain, France and Germany. They were asked specifically about their encounters with deepfake audio. Results of that survey are shown below.

Al-generated deepfakes pose a threat, but Al tools are here to fight back

Consumers aren't the only ones being targeted. Businesses, too, are losing huge sums to deepfakes. For example, A report by the identity security firm Regula found that in 2024 half of all US businesses (49%) had experienced fraud involving audio and video deepfakes, and on average, businesses across industries lost nearly \$450,000 to deepfakes.

Fortunately, AI is not only in the hands of the bad guys. AI can be used to fight back against scams and deepfakes.

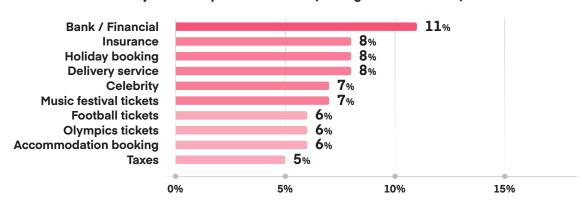
In 2024, Hiya launched Protect AI Voice Detection, a solution for detecting AI-generated voice fraud. It integrates voice intelligence technology with Hiya's Adaptive AI fraud prevention system to help carriers and businesses identify and prevent fraudulent calls.

Deepfake voice scams around the world

	US	UK	CA	ES	FR	DE
Have received a voice deefake in past year	31%	26%	27%	47%	32%	40%
Have been scammed by a deepfake voice call (of those who have received a vocie deepfake)	45%	40%	31%	40%	50%	50%
Lost money to a deepfake voice call (of those who were scammed)	34%	35%	35%	26%	32%	34%
Personal information stolen on a deepfake vocie call (of those who were scammed)	32%	32%	25%	26%	26%	27%
Of those who lost money, average lost	\$ 7237	£ 13,342	CA\$ 35,995	€13,678	€23,277	€19,851

Data based on a survey conducted by Censuswide in January 2025 of 12,000 consumers in the 6 countries listed above.

Subject of deepfake voice call (average of 6 countries)



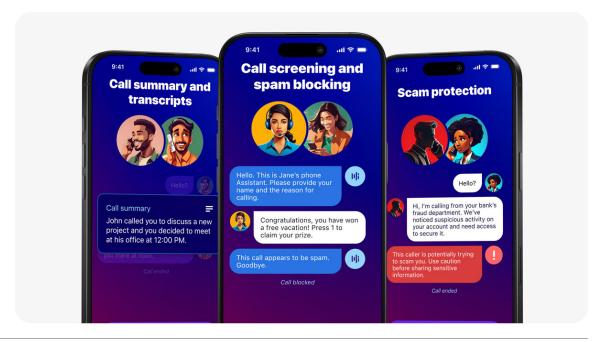
Hiya launches first AI call assistant that stops live and deepfake scams in real-time

Hiya has introduced the Hiya Al Phone app, an advanced Al-powered call assistant designed to protect users from scams, including deepfake voice fraud. Fraudsters are increasingly using Al to clone voices and create more sophisticated scams, making real-time detection essential. The new app is powered by Hiya's proprietary Al Voice Detection technology.

Key Features of Hiya Al Phone:

- Real-Time Scam Protection The app continuously analyzes call audio to detect scam language and suspicious patterns. If a potential scam is identified, it alerts the user with a vibration and an on-screen warning.
- Al Voice and Deepfake Detection The app detects Al-generated or modified voices by analyzing subtle audio patterns and notifies users when an Al voice is detected.
- Intelligent Call Screening An AI assistant answers all unknown calls on your behalf, asking callers to state their name and reason for the call. Based on that, it blocks scam and spam calls while connecting legitimate ones. It also includes visual voicemail with AI voice detection, reviewing message transcripts and their summaries.

The technology behind the Hiya AI Phone is also available to carriers through the Hiya Protect platform for network integration into new and existing call protection services. Hiya is offering a two-week trial for readers of the Global Call Threat Report. To redeem, download the app on Android or iPhone and complete the installation.



Spam trends in 7 key countries



Spam volumes vary by country

The amount of phone spam you're likely to receive depends on which country you live in. In Q4, Germans received an average of 3 spam calls per person each month, while residents of Brazil and Chile averaged 28.



HMRC scams #1 in the UK

HMRC tax scams continue to be the most prevalent scam in the UK, coming in #1 every quarter this year. Still, Brits receive only 4 spam calls per person each month, one of the lowest rates in Europe.



Spain ties for most spam calls in Europe

Residents of Spain get 15 unwanted calls per month — tied with France for the most spam calls in Europe. Spain's problem is considered worse because there are 5X more fraud calls in Spain than France.



Germans average just 3 spam calls per month

Of the seven countries with detailed analysis in this report, Germany gets the fewest spam calls: just 3 per month. Sweepstakes, PayPal and tech support scams are popular in Germany.



Medicare scams surge in Q4

Medicare scams were, by far, the most common scam call in Q4. Americans receive relatively high volumes of spam (15/month) but most fraud calls are blocked by carriers before they reach subscribers.



Amazon scams dominate Canada

With 6 spam calls per month, Canadians average more spam calls than UK residents, but fewer than half what Americans receive. Amazon scams remain the most common type of phone fraud in Canada.



Spam on the increase in France

Spam calls are increasing in France, which this quarter tied with Spain for the most spam calls per person in Europe. Calls from energy/electricity suppliers are the most common unwanted call.



Brazilians receive 28 spam calls/month

Of the 40+ countries in this report, Brail gets the most spam calls: 28/person/month (tied with Chile). That's about one every single day. Bank scams are by far the most prevalent scams in Brazil.

United States

POPULATION

324 Million

REGULATOR

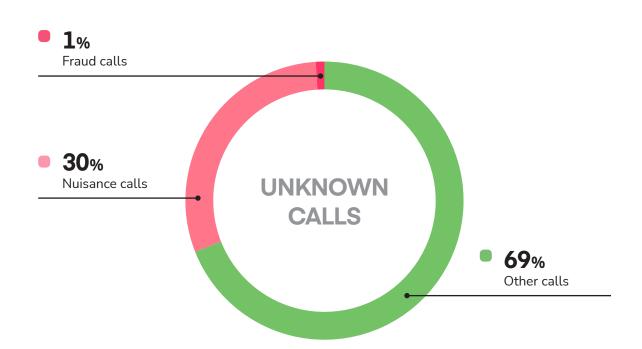
Federal
Communications
Commission
(FCC) ()

Average spam calls per person

15
Calls/Month

Spam flag rate

31%



Medicare scams surge in Q4

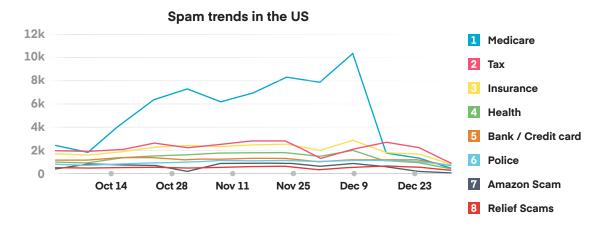
In Q4, citizens of the United States received an average of 15 spam calls per person each month. Spam call volumes in the US are relatively high compared to Canada and most European countries. What makes the US unique is its low fraud rate: just 1%. That's because carriers in the US block fraud calls at the network level, so they never reach the recipient's phone.

Spam ratios represent the number of unwanted calls from "noncontacts," which are calls placed from numbers that are not in an individual's address book.

United States

Regarding the types of spam calls Americans receive, Q4 was dominated by Medicare, the government-funded healthcare plan for Americans 65 and older. Medicare scams are common year round, but scam calls surged in the fourth quarter — especially during the open enrollment period, Oct. 15 to Dec. 7. Medicare scams peaked during the week open enrollment ended.

With Medicare scams, fraudsters are commonly trying to steal personal information, rather than money directly. In December, the FTC sent out a consumer alert explaining how criminals are signing up Medicare recipients for hospice, and then falsely billing Medicare for home health services.



The second most common scam category in Q4 was tax scams. April 15 is the tax filing deadline in the US, but tax and IRS scams climbed throughout the year, and actually hit their peak in November.

Insurance scams came in #3. There were calls about auto, home and even pet insurance, as well as plenty of medical insurance calls. Health was #4, as users reported calls related to health care and health insurance.

Bank and credit card scams, which are common worldwide, took a back seat to Medicare and health insurance scams this quarter, ending up #5. Next came police scams. Most users mentioned unwanted calls from charities purporting to support various police associations.

Rounding out the top scams were Amazon impersonators and various relief scams. Relief scams lure their victims with offers of debt relief, mortgage relief, student loan relief, and more.

Although they don't rank among Hiya's high-volume calls, there's a new threat that Americans are increasingly concerned about: Al-generated deepfake scams. According to a survey commissioned by Hiya, 31% of US respondents said they had experienced an audio deepfake, and many of those occurred on a personal or work call.

United Kingdom

POPULATION

65 Million

REGULATOR

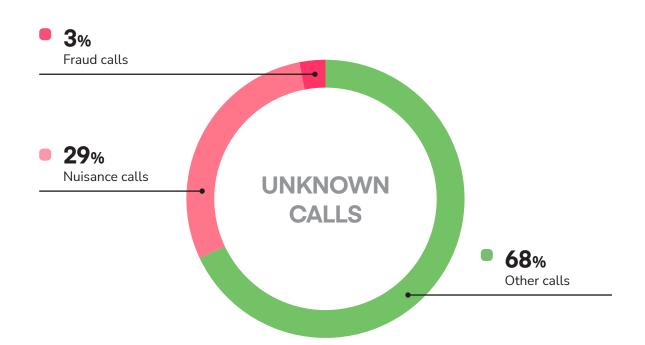
Office of Communication (Ofcom) ()

Information
Commissioner's
Office (ICO)

Average spam calls per person

4 Calls/Month Spam flag rate

32%

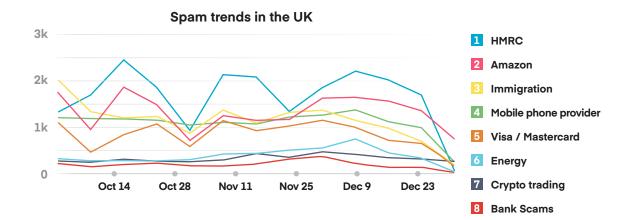


HMRC scams #1 in the UK

Residents of the UK receive only 4 spam calls per person each month, one of the lowest rates in Europe. The proportion of unknown calls that are fraud, 3%, is also low compared to other European countries.

Spam ratios represent the number of unwanted calls from "noncontacts," which are calls placed from numbers that are not in an individual's address book.

United Kingdom



Tax scams impersonating Her Majesty's Revenue and Customs (HMRC) were the most common phone scams in Q4. These scams are plentiful year round, and actually peaked in Q3. Users reported both live and prerecorded robocalls threatening legal action for unpaid taxes.

Amazon scams were #2. There were certainly plenty of Amazon imposters during the holiday season, but, just as with HMRC scams, Amazon scams hit their peak in Q3. Coming in #3 were immigration scams. Users reported calls claiming to be from "the immigration bureau" warning of an expired visa. Robocalls were commonly spoken in both English and Chinese.

The fourth most commonly reported unwanted call in Q4 came from mobile phone providers, often offering a discount. Most users reported these as fraud calls, while some reported them as telemarketing.

Consumers use their credit cards more during the holiday season, and Q4 was rife with imposters pretending to represent Visa/Mastercard. Energy scams shot up in early December, at volumes nearly double what they were in the preceding months. These are expected to remain high during the cold winter months.

Just as we saw in the US, Brits too are concerned about the advent of AI-generated deepfakes. In Hiya's survey, 26% of British respondents said they had experienced an audio deepfake, often on a personal or work call.

Canada

POPULATION

36 Million

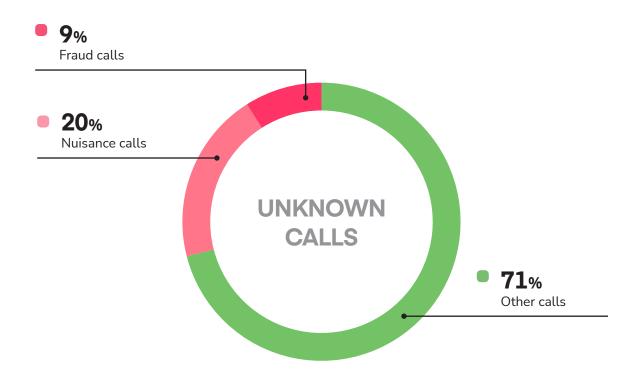
REGULATOR

Canadian
Radio-television and telecommunications
Commission
(CRTC) ()

Average spam calls per person

6 Calls/Month Spam flag rate

29%

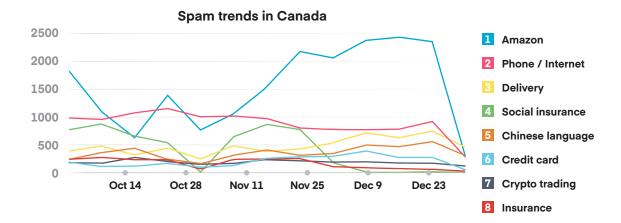


Spam ratios represent the number of unwanted calls from "noncontacts," which are calls placed from numbers that are not in an individual's address book.

Amazon scams dominate Canada

With an average of 6 spam calls per person per month, Canadians receive far fewer unwanted calls than residents of the United States, who receive 15 per month. However, Canada's proportion of fraud calls, 9%, is much higher than the US's 1%.

Canada



In Canada, Amazon scams have been the most common type of phone scam all year, and Q4 was no different. Just as Amazon package deliveries increase during the holiday season, so do the number of Amazon impersonators. Amazon scams were nearly double the second most common scam: fraudsters impersonating Canadian mobile phone and internet providers.

Delivery scams were #3, with imposters posing as Canada Post, DHL, FedEx and UPS. Often these scams claim that delivery fees need to be paid in order to complete a package delivery, or they're phishing for personal information such as name and full address.

Social insurance scams were #4, with government impersonators trying to convince victims to reveal their social insurance number. Chinese language scams came in #6. These scams (both robocalls and live callers) target Chinese speaking Canadians, often trying to get their victims to pay fees for immigration violations.

Rounding out the top scams of the quarter were credit card scams, cryptocurrency and investment scams, and a variety of insurance scams.

Spain

POPULATION

46 Million

REGULATOR

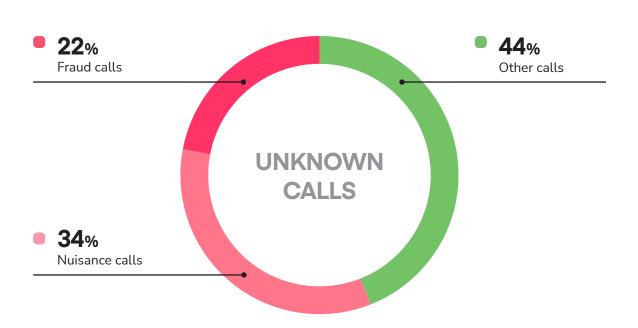
Comisión Nacional de los Mercados y la Competencia (CNMC)

Average spam calls per person

15
Calls/Month

Spam flag rate

56%



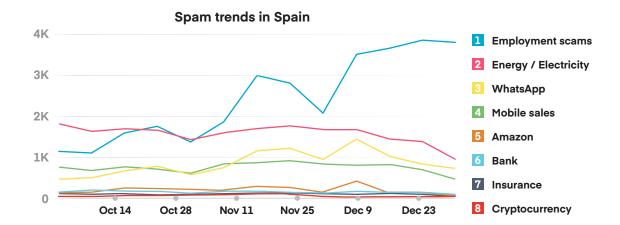
Spain tied with France for most spam calls in Europe

In Q4, residents of both Spain and France received an average of 15 unwanted calls per person each month — higher than all other European countries. Spain and France also have the highest spam rates in Europe, at 56% and 59% respectively. That means more than half of unknown calls are either nuisance or fraud calls.

Between the two countries, Spain is considered to have the worst spam problem because its residents get a higher percentage of illegal fraud calls. In France, only 4% of unknown calls are fraud, but in Spain, 22% of unknown calls are fraud — 5 times more than in France.

Spam ratios represent the number of unwanted calls from "noncontacts," which are calls placed from numbers that are not in an individual's address book.

Spain



In Q4, the most commonly reported spam call was, by far, employment scams. Spaniards reported calls with fake job offers, unsolicited employment opportunities, and calls impersonating human resources personnel from the job matching website Indeed.

The second most common unwanted call had to do with energy and electricity. In Spain, residents can choose their utilities provider, so it's not uncommon to receive sales calls from utility companies competing for business. Some users reported these as telemarketing calls, but there were also many reports of utility scams.

Rather than talk to people over the phone, many fraudsters prefer to communicate via private messaging apps, especially WhatsApp. Early in 2024, more than 100 people were arrested in Spain for impersonating loved ones who had lost their mobile phones and therefore wanted to communicate on WhatApp instead. In Q4, many Hiya users reported a robocall with an offer for work, claiming that more details will be provided via WhatsApp.

Calls from mobile phone companies were the fourth most reported type of unwanted call. Just as we saw with energy/electricity calls, some were reported as telemarketing calls, and others were clearly fraud calls intended to steal money or personal information.

Q4 also included other types of scams, many of which have been around for years, including, Amazon scams, bank scams, insurance scams and cryptocurrency scams.

France

POPULATION

67 Million

REGULATOR

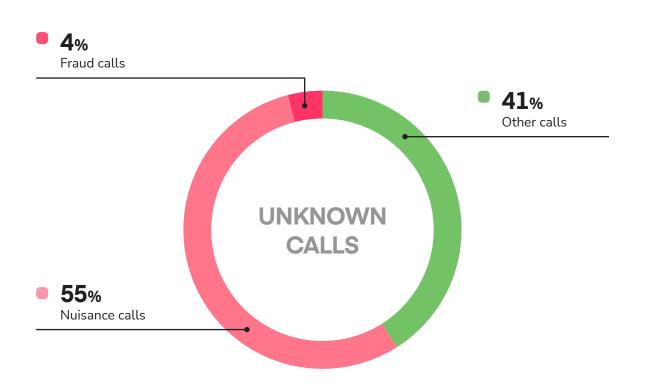
Autorité de
Régulation des
Communications
Électroniques des
Postes (ARCEP)

Average spam calls per person

15
Calls/Month

Spam flag rate

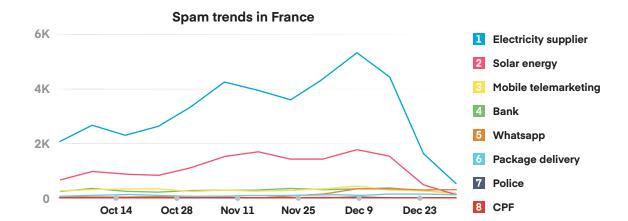
59%



French citizens bombarded with energy/electricity scams

Spam ratios represent the number of unwanted calls from "noncontacts," which are calls placed from numbers that are not in an individual's address book. Last quarter, France had the second-worst spam problem in Europe, but in Q4 it bumped up to tie with Spain, with both countries receiving an average of 15 unwanted calls per person per month. That's a significant increase from one year ago. In Q4 2023, French residents received 10 unwanted calls per person, so the problem is getting worse rather than better.

France



In Q4, the most common type of spam call in France came from electricity and energy providers. Although some Hiya users reported these as telemarketing calls, it's more likely they are all illegal fraud calls, as the Naegelen Law in France specifically prohibits phone solicitations for electricity/energy contracts. The Naegelen Law also applies to the second-most-common spam call in France: solar energy.

Coming in #3 were calls promoting mobile phone services. These, too, were reported as a mixture of fraud calls and legitimate-but-annoying telemarketing calls. Next came banking scams, which are common worldwide.

WhatsApp scams were the fifth most common. These often begin as an SMS message impersonating a family member who has lost their phone, asking to communicate on WhatsApp. Once on WhatsApp, a request for money soon follows.

Coming in #6 are package delivery scams, which are seen worldwide, especially during the holidays. There were also reports of scam calls impersonating the police and ploys to cheat citizens out of their Compte Personnel de Formation (CPF) funds, which are provided by the French government to pay for professional training courses.

Germany

POPULATION

82 Million

REGULATOR

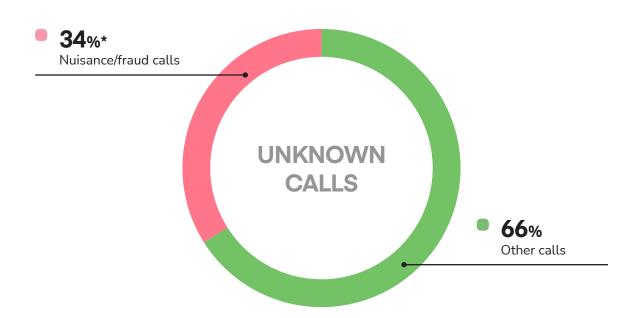
Bundesnetzagentur (BNetzA) ()

Average spam calls per person

3
Calls/Month

Spam flag rate

34%

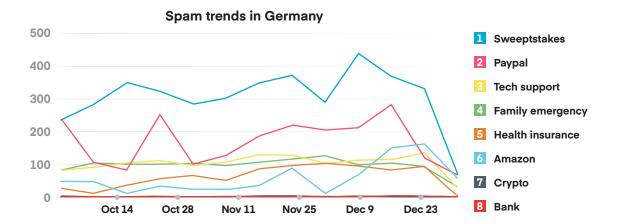


^{*} Hiya uses a single "spam" warning for both nuisance and fraud calls.

Germans average only 3 spam calls per month

Spam ratios represent the number of unwanted calls from "noncontacts," which are calls placed from numbers that are not in an individual's address book. Of the seven countries with detailed analysis in this report, Germany gets the fewest spam calls. Germans receive an average of only 3 spam calls per person per month.

Germany



The makeup of phone scams in Germany is different from other countries too. For example, the #1 type of phone scam in Germany is sweepstakes scams ("gewinnspiel" in German). These have remained #1 for years, but you won't find them among the top 10 in any of our other key countries. Sweepstakes scams snare their victims by telling them they're won a large prize — but they need to pay taxes or fees in advance in order to claim that prize.

Coming in second are PayPal scams. Users report robocalls pretending to be from PayPal, saying a purchase has been made on the account and asking the call recipient to press a number to confirm or deny the transaction.

The third most common scam type in Germany, tech support scams, aren't unique to Germany, but it is the only country where they show up in the top 10. With these scams, the goal is to gain access to the victim's computer.

The "Hallo mama" scam is #4, and has been making the rounds in Germany for the past several quarters. It begins with an SMS message saying, "Hello, mama/papa. I've lost my mobile phone. Please message me on WhatsApp at this new number." If the conversation continues on WhatsApp, a request for money follows.

Health insurance scams have been on the rise since last year. Users report robocalls informing them that they're paying too much for their private health insurance (krankenversich) and encouraging them to speak to a representative for more information.

The other top scams are common in all our other key countries. They include Amazon scams, cryptocurrency scams, and bank scams.

Brazil

POPULATION

206 Million

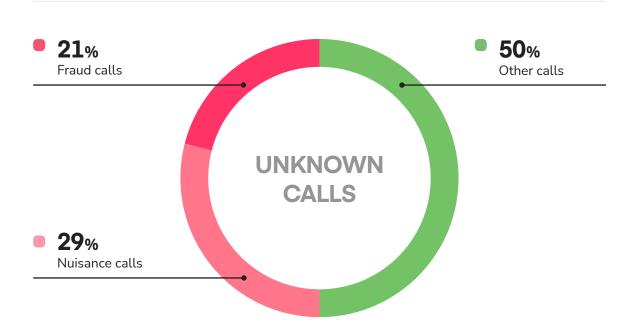
REGULATOR

Agência Nacional de Telecomunicações (Anatel) (3) Average spam calls per person

28
Calls/Month

Spam flag rate

50%



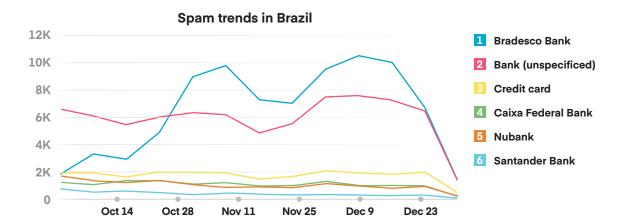
Brazilians lead the world with 28 spam calls per month

Of the 42 countries mentioned in this report, Brazil receives the most spam calls: an average of 28 per person each month. That's about one spam call every single day. Even that high number is an increase from the 24 calls per person per month we reported in Q4 of last year.

Spam ratios represent the number of unwanted calls from "noncontacts," which are calls placed from numbers that are not in an individual's address book.

Not only do Brazilians receive a high volume of unwanted calls, but a high percentage of those calls are fraud: 21%.

Brazil



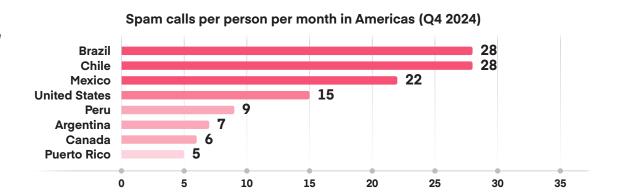
Bank scams are not unique to Brazil. But what is unique is that all of the top scams in Brazil are some form of bank or credit card scam. With bank scams, fraudsters try to convince their victims that there is a problem with their bank account and that they need to verify information such as an account number or password. These scams can be financially devastating if the scammer gains access to the person's bank account.

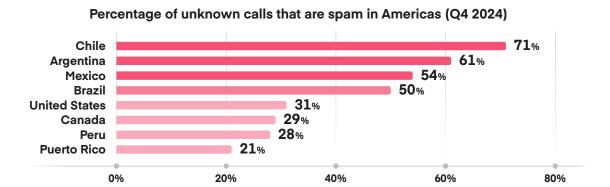
In Q4, the most common scam in Brazil impersonated Banco Bradesco, a Brazilian financial services company. Next came general bank scams, where Hiya users reported a bank scam call but didn't mention a specific bank name. Coming in third were credit card scams.

Other banks impersonated by fraudsters in Q4 included Caixa Federal Bank, Santander Bank, and Nubank, a large digital banking platform used in Brazil, Mexico, and Colombia.

Americas

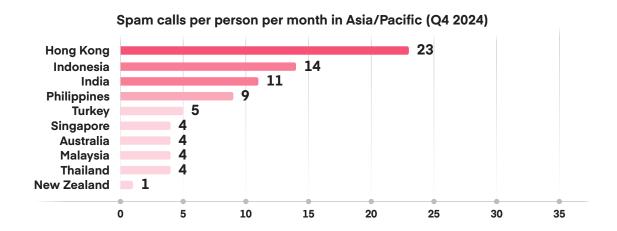
Brazil and Chile top the Americas with the most spam calls per person each month



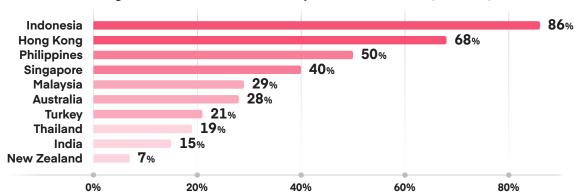


Asia/Pacific

Citizens of Hong Kong receive the most spam calls in the Asia/Pacific region

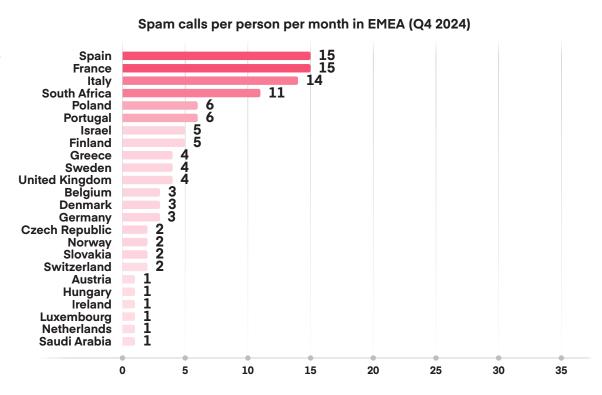


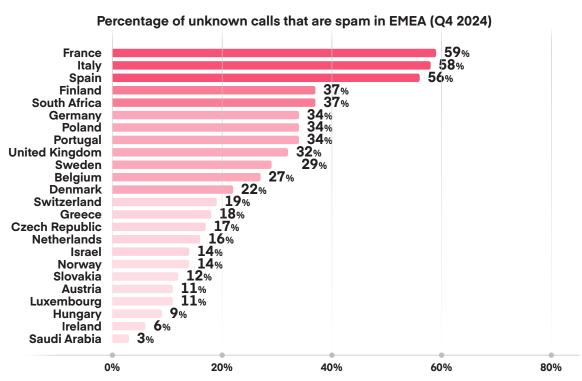
Percentage of unknown calls that are spam in Asia/Pacific (Q4 2024)



EMEA

Spain and France receive the most spam calls in Europe





SOLUTION

How carriers can fight back against spam

Hiya Protect is a complete call protection solution that enables mobile carriers to protect their subscribers by blocking fraud calls and labeling nuisance calls. It is used by carriers, device manufacturers, and network providers who are looking to create a differentiated voice offering and increase customer satisfaction.

Hiya Protect is powered by the industry's largest and most comprehensive real-time data set, with call event data from more than 500 million users worldwide.

Hiya Protect uses Adaptive AI, the industry's only self-learning spam protection system that adjusts to the latest fraud and nuisance calls. Unlike other solutions, it uses a multi-layer approach to analyze every aspect of a phone call, from the phone number to the call recipient, the enterprise making the call, and the characteristics of the call itself.

Working with Hiya, carriers can meet regulatory requirements designed to protect users from malicious phone calls. Hiya regularly works alongside carriers in conversations with regulatory bodies around the world to ensure that provided capabilities meet or exceed both existing and emerging regulations. This includes the FCC in the US, CRTC in Canada, and Ofcom in the UK. For more information about Hiya Protect, visit our website, or send us a message.

Individuals who don't have network-based protection through their mobile carrier or device manufacturer can download the Hiya mobile app to their smartphone.

Section two

Spam calls by country

Argentina

PERIOD

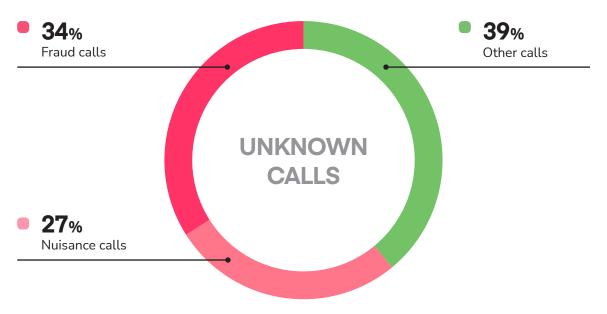
Q4Oct 2024 - Dec 2024

Average spam calls per person

7Calls/Month

Spam flag rate

61%



Spam ratios represent the number of unwanted calls from "noncontacts," which are calls placed from numbers that are not in an individual's address book.

Source: Samsung Smart Call users in Argentina

Brazil

PERIOD

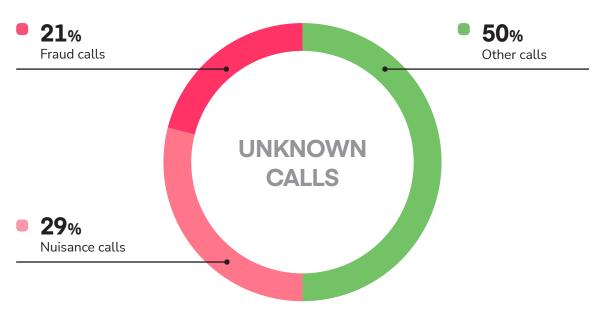
Q4Oct 2024 - Dec 2024

Average spam calls per person

28
Calls/Month

Spam flag rate

50%



Spam ratios represent the number of unwanted calls from "noncontacts," which are calls placed from numbers that are not in an individual's address book.

Source: Samsung Smart Call users in Brazil

Canada

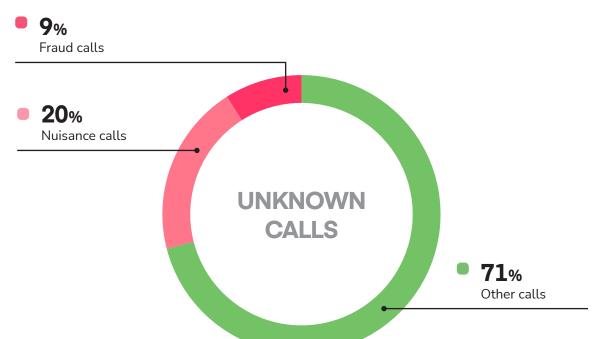
PERIOD

Q4Oct 2024 - Dec 2024

Average spam calls per person

6 Calls/Month Spam flag rate

29%



Spam ratios represent the number of unwanted calls from "noncontacts," which are calls placed from numbers that are not in an individual's address book.

Source: Samsung Smart Call users in Canada

Chile

PERIOD

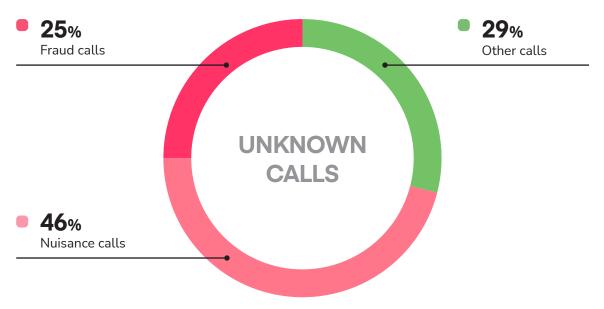
Q4Oct 2024 - Dec 2024

Average spam calls per person

28
Calls/Month

Spam flag rate

71%



Spam ratios represent the number of unwanted calls from "noncontacts," which are calls placed from numbers that are not in an individual's address book.

Source: Samsung Smart Call users in Chile

Mexico

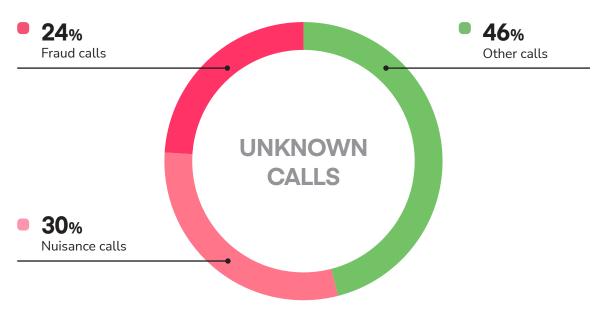
PERIOD

Q4Oct 2024 - Dec 2024

Average spam calls per person

22 Calls/Month Spam flag rate

54%



Spam ratios represent the number of unwanted calls from "noncontacts," which are calls placed from numbers that are not in an individual's address book.

Source: Samsung Smart Call users in Mexico

Peru

PERIOD

Q4

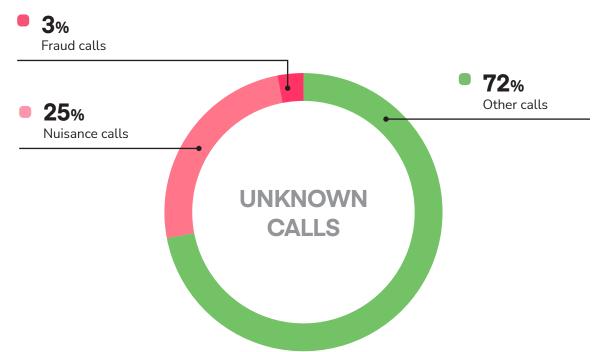
Oct 2024 - Dec 2024

Average spam calls per person

9Calls/Month

Spam flag rate

28%



Spam ratios represent the number of unwanted calls from "noncontacts," which are calls placed from numbers that are not in an individual's address book.

Source: Samsung Smart Call users in Peru

Puerto Rico

PERIOD

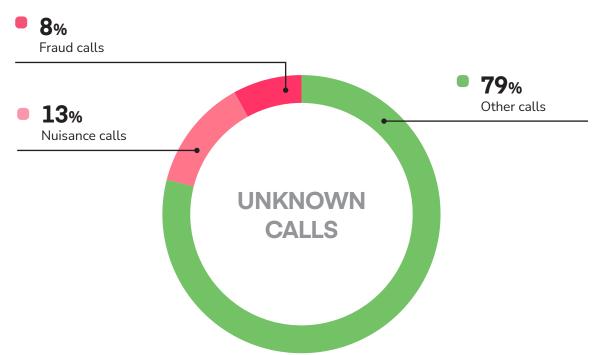
Q4Oct 2024 - Dec 2024

Average spam calls per person

5 Calls/Month

Spam flag rate

21%



Spam ratios represent the number of unwanted calls from "noncontacts," which are calls placed from numbers that are not in an individual's address book.

Source: Samsung Smart Call users in Puerto Rico

United States

PERIOD

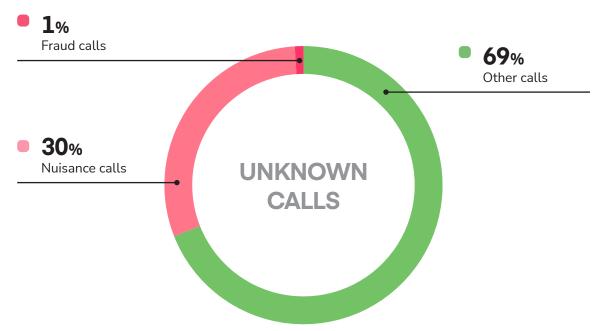
Q4Oct 2024 - Dec 2024

Average spam calls per person

15
Calls/Month

Spam flag rate

31%



Spam ratios represent the number of unwanted calls from "noncontacts," which are calls placed from numbers that are not in an individual's address book.

Source: Samsung Smart Call users in United States

Australia

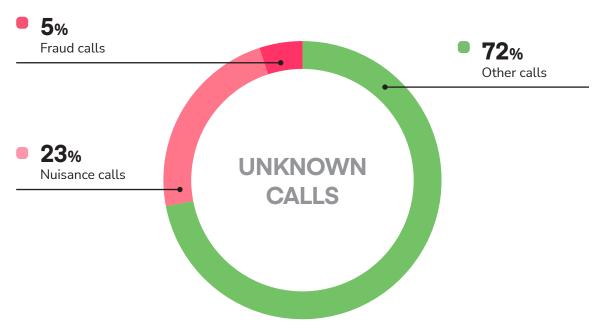
PERIOD

Q4Oct 2024 - Dec 2024

Average spam calls per person

4 Calls/Month Spam flag rate

28%



Spam ratios represent the number of unwanted calls from "noncontacts," which are calls placed from numbers that are not in an individual's address book.

Source: Samsung Smart Call users in Australia ASIA/PACIFIC

Hong Kong

PERIOD

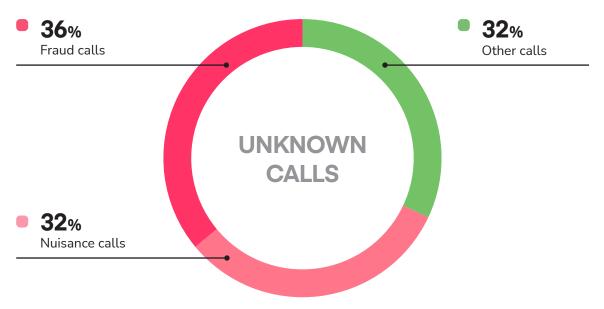
Q4Oct 2024 - Dec 2024

Average spam calls per person

23
Calls/Month

Spam flag rate

68%



Spam ratios represent the number of unwanted calls from "noncontacts," which are calls placed from numbers that are not in an individual's address book.

Source: Samsung Smart Call users in Hong Kong

India

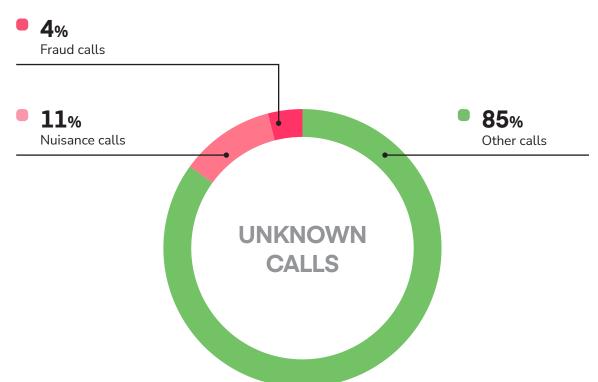
PERIOD

Q4Oct 2024 - Dec 2024

Average spam calls per person

11 Calls/Month Spam flag rate

15%



Spam ratios represent the number of unwanted calls from "noncontacts," which are calls placed from numbers that are not in an individual's address book.

Source: Samsung Smart Call users in India ASIA/PACIFIC

Indonesia

PERIOD

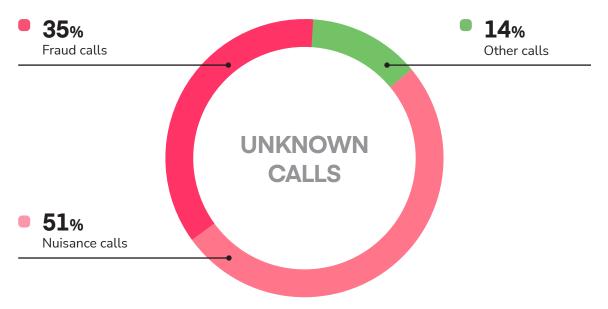
Q4Oct 2024 - Dec 2024

Average spam calls per person

14
Calls/Month

Spam flag rate

86%



Spam ratios represent the number of unwanted calls from "noncontacts," which are calls placed from numbers that are not in an individual's address book.

Source: Samsung Smart Call users in Indonesia ASIA/PACIFIC

Malaysia

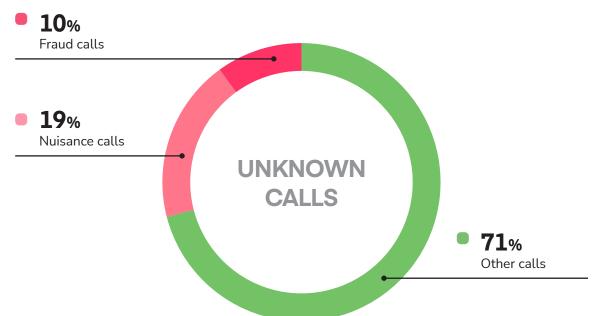
PERIOD

Q4Oct 2024 - Dec 2024

Average spam calls per person

4 Calls/Month Spam flag rate

29%



Spam ratios represent the number of unwanted calls from "noncontacts," which are calls placed from numbers that are not in an individual's address book.

Source: Samsung Smart Call users in Malaysia

New Zealand

PERIOD

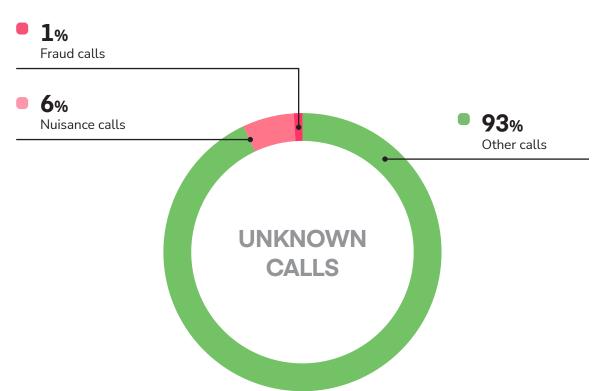
Q4Oct 2024 - Dec 2024

Average spam calls per person

1Calls/Month

Spam flag rate

7%



Spam ratios represent the number of unwanted calls from "noncontacts," which are calls placed from numbers that are not in an individual's address book.

Source: Samsung Smart Call users in New Zealand ASIA/PACIFIC

Philippines

PERIOD

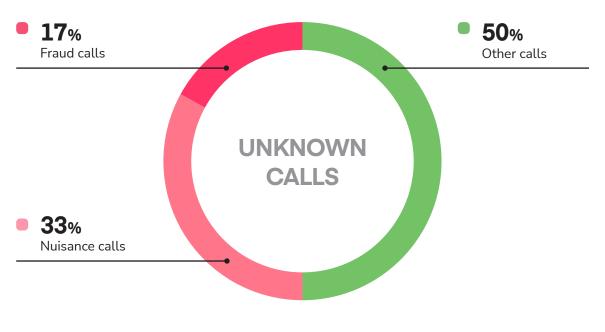
Q4Oct 2024 - Dec 2024

Average spam calls per person

9Calls/Month

Spam flag rate

50%



Spam ratios represent the number of unwanted calls from "noncontacts," which are calls placed from numbers that are not in an individual's address book.

Source: Samsung Smart Call users in Philippines ASIA/PACIFIC

Singapore

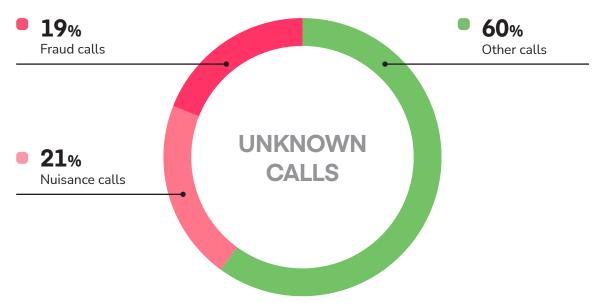
PERIOD

Q4Oct 2024 - Dec 2024

Average spam calls per person

4 Calls/Month Spam flag rate

40%



Spam ratios represent the number of unwanted calls from "noncontacts," which are calls placed from numbers that are not in an individual's address book.

Source: Samsung Smart Call users in Singapore

Thailand

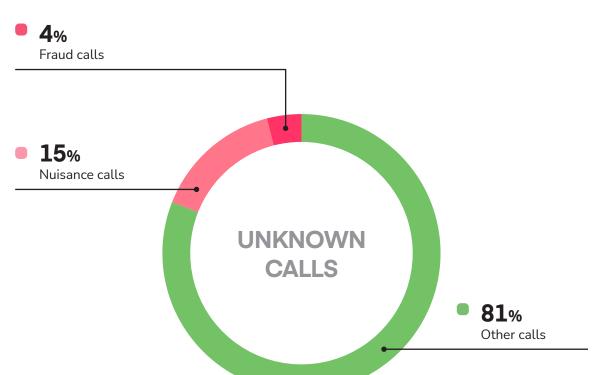
PERIOD

Q4 Oct 2024 - Dec 2024 Average spam calls per person

Calls/Month

Spam flag rate

19%



Spam ratios represent the number of unwanted calls from "noncontacts," which are calls placed from numbers that are not in an individual's address book.

Source: **Samsung Smart Call users** in Thailand

ASIA/PACIFIC

Turkey

PERIOD

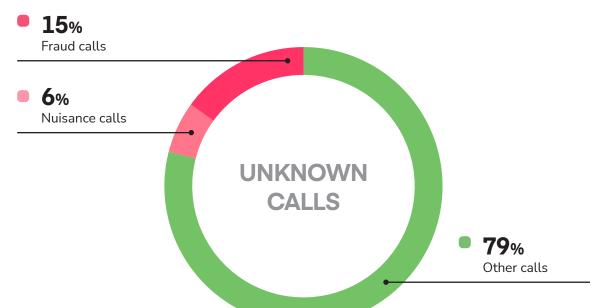
Q4Oct 2024 - Dec 2024

Average spam calls per person

5Calls/Month

Spam flag rate

21%



Spam ratios represent the number of unwanted calls from "noncontacts," which are calls placed from numbers that are not in an individual's address book.

Source: Samsung Smart Call users in Turkey

Austria

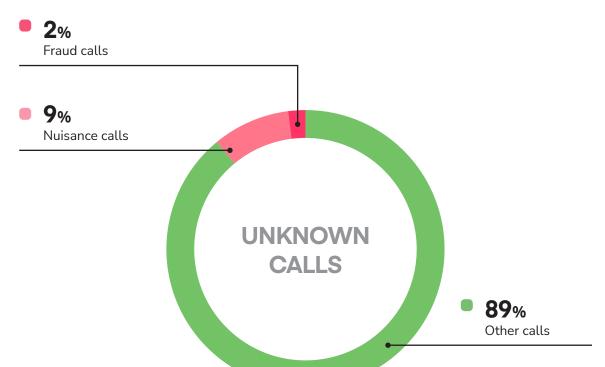
PERIOD

Q4 Oct 2024 - Dec 2024 Average spam calls per person

Calls/Month

Spam flag rate

11%



Spam ratios represent the number of unwanted calls from "noncontacts," which are calls placed from numbers that are not in an individual's address book.

Source: **Samsung Smart Call users** in Austria

Belgium

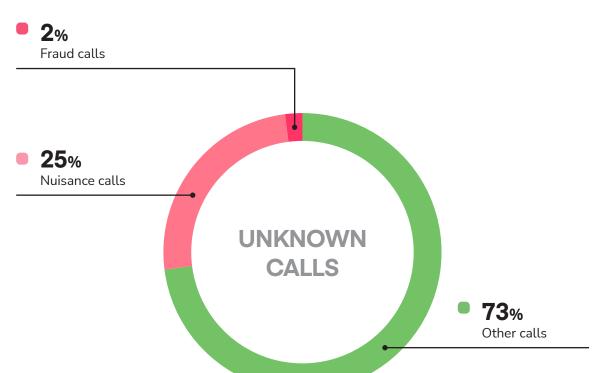
PERIOD

Q4 Oct 2024 - Dec 2024 Average spam calls per person

Calls/Month

Spam flag rate

27%



Spam ratios represent the number of unwanted calls from "noncontacts," which are calls placed from numbers that are not in an individual's address book.

Source: **Samsung Smart Call users** in Belgium

Czech Republic

PERIOD

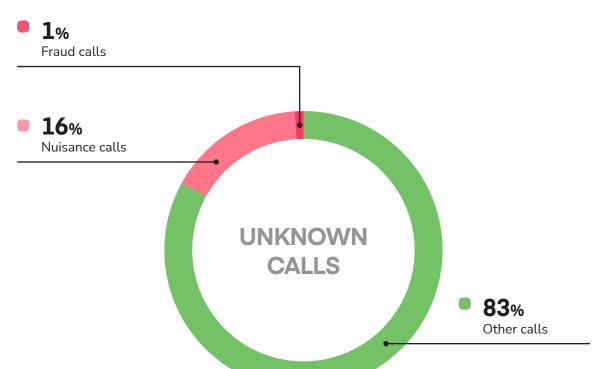
Q4Oct 2024 - Dec 2024

Average spam calls per person

2Calls/Month

Spam flag rate

17%



Spam ratios represent the number of unwanted calls from "noncontacts," which are calls placed from numbers that are not in an individual's address book.

Source: Samsung Smart Call users in Czech Republic

Denmark

PERIOD

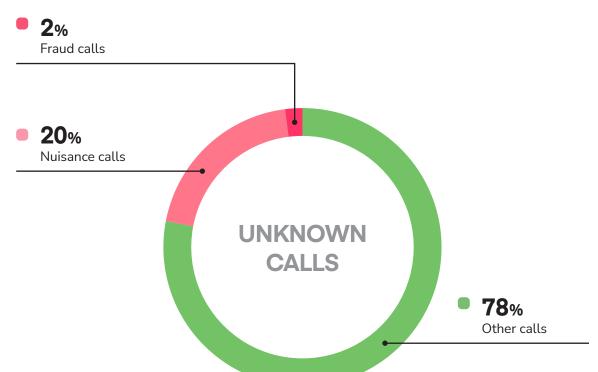
Q4

Oct 2024 - Dec 2024

Average spam calls per person

3 Calls/Month Spam flag rate

22%



Spam ratios represent the number of unwanted calls from "noncontacts," which are calls placed from numbers that are not in an individual's address book.

Source: Samsung Smart Call users in Denmark

Finland

PERIOD

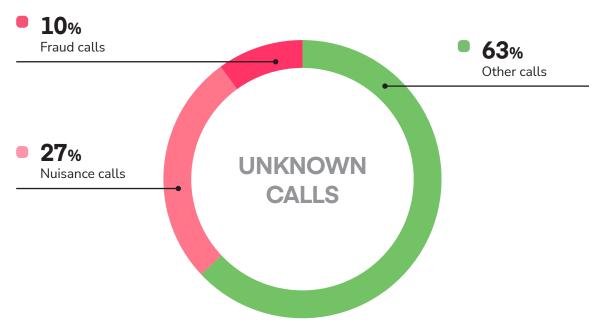
Q4Oct 2024 - Dec 2024

Average spam calls per person

5Calls/Month

Spam flag rate

37%



Spam ratios represent the number of unwanted calls from "noncontacts," which are calls placed from numbers that are not in an individual's address book.

Source: Samsung Smart Call users in Finland

France

PERIOD

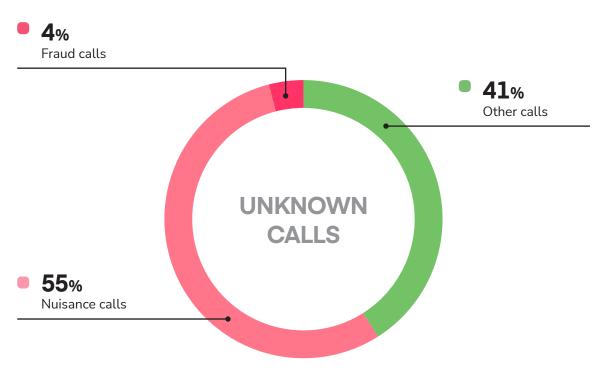
Q4Oct 2024 - Dec 2024

Average spam calls per person

15
Calls/Month

Spam flag rate

59%



Spam ratios represent the number of unwanted calls from "noncontacts," which are calls placed from numbers that are not in an individual's address book.

Source: Samsung Smart Call users in France

Germany

PERIOD

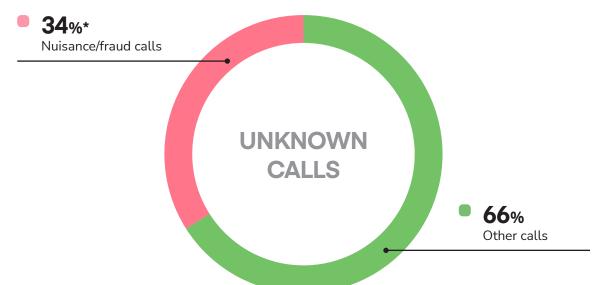
Q4

Oct 2024 - Dec 2024

Average spam calls per person

3 Calls/Month Spam flag rate

34%



Spam ratios represent the number of unwanted calls from "noncontacts," which are calls placed from numbers that are not in an individual's address book.

Source: Samsung Smart Call users in Germany

^{*} Hiya uses a single "spam" warning for both nuisance and fraud calls.

Greece

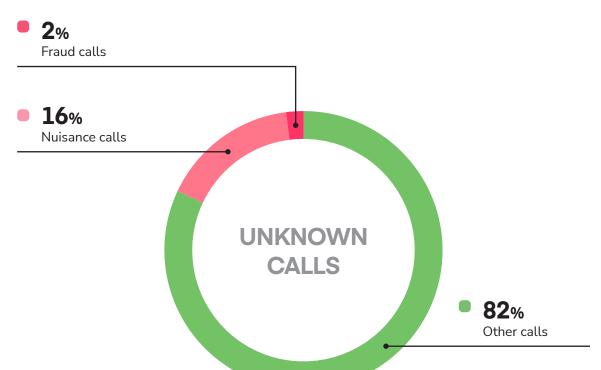
PERIOD

Q4Oct 2024 - Dec 2024

Average spam calls per person

4 Calls/Month Spam flag rate

18%



Spam ratios represent the number of unwanted calls from "noncontacts," which are calls placed from numbers that are not in an individual's address book.

Source: Samsung Smart Call users in Greece

Hungary

PERIOD

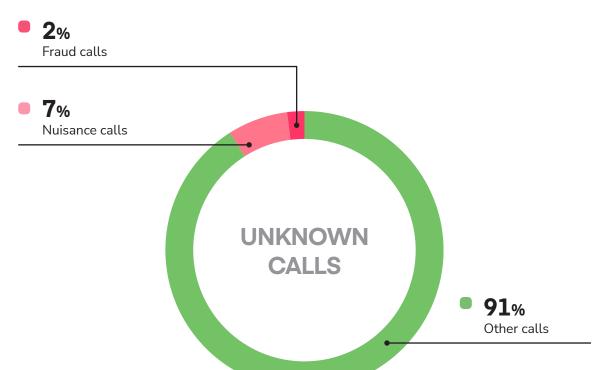
Q4Oct 2024 - Dec 2024

Average spam calls per person

1Calls/Month

Spam flag rate

9%



Spam ratios represent the number of unwanted calls from "noncontacts," which are calls placed from numbers that are not in an individual's address book.

Source: Samsung Smart Call users in Hungary

Ireland

PERIOD

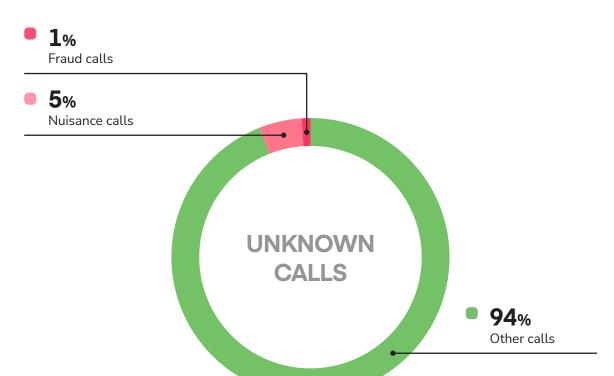
Q4Oct 2024 - Dec 2024

Average spam calls per person

1Calls/Month

Spam flag rate

6%



Spam ratios represent the number of unwanted calls from "noncontacts," which are calls placed from numbers that are not in an individual's address book.

Source: Samsung Smart Call users in Ireland

Israel

PERIOD

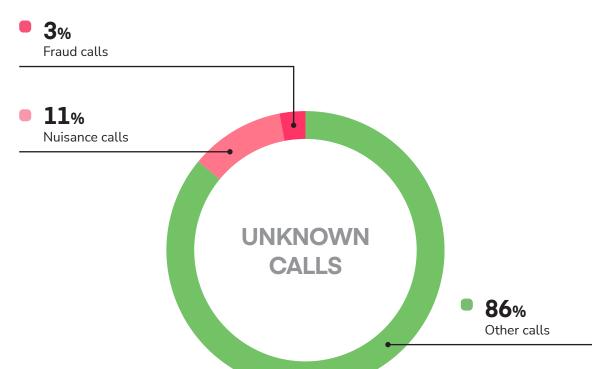
Q4Oct 2024 - Dec 2024

Average spam calls per person

5 Calls/Month

Spam flag rate

14%



Spam ratios represent the number of unwanted calls from "noncontacts," which are calls placed from numbers that are not in an individual's address book.

Source: Samsung Smart Call users in Israel

Italy

PERIOD

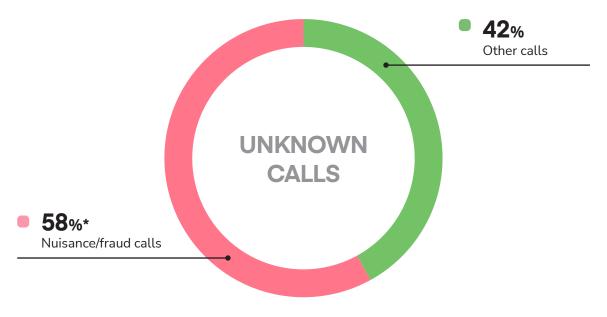
Q4Oct 2024 - Dec 2024

Average spam calls per person

14
Calls/Month

Spam flag rate

58%



Spam ratios represent the number of unwanted calls from "noncontacts," which are calls placed from numbers that are not in an individual's address book.

Source: Samsung Smart Call users in Italy

^{*} Hiya uses a single "spam" warning for both nuisance and fraud calls.

Luxembourg

PERIOD

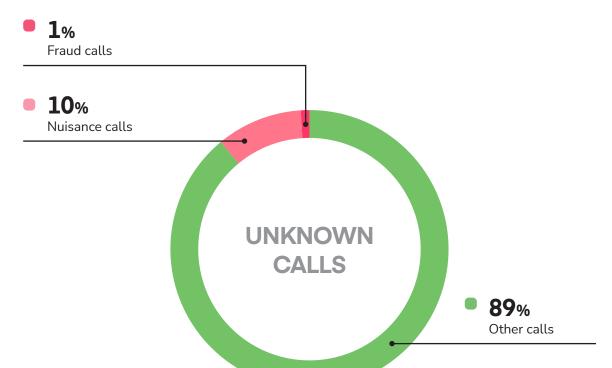
Q4Oct 2024 - Dec 2024

Average spam calls per person

1Calls/Month

Spam flag rate

11%



Spam ratios represent the number of unwanted calls from "noncontacts," which are calls placed from numbers that are not in an individual's address book.

Source: Samsung Smart Call users in Luxembourg

Netherlands

PERIOD

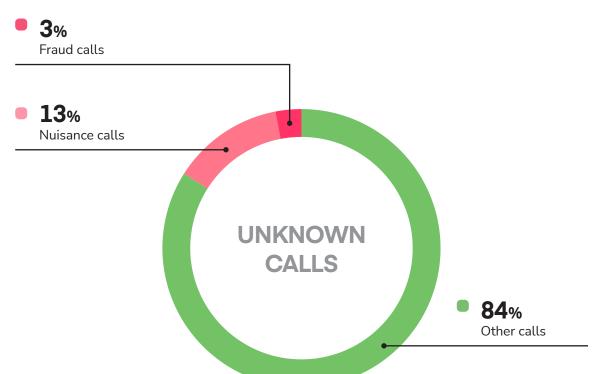
Q4Oct 2024 - Dec 2024

Average spam calls per person

1Calls/Month

Spam flag rate

16%



Spam ratios represent the number of unwanted calls from "noncontacts," which are calls placed from numbers that are not in an individual's address book.

Source: Samsung Smart Call users in Netherlands

Norway

PERIOD

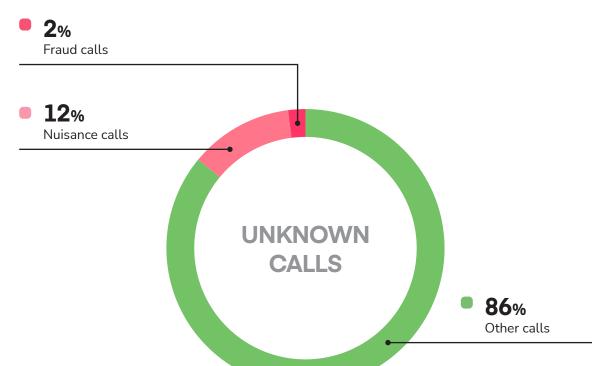
Q4Oct 2024 - Dec 2024

Average spam calls per person

2Calls/Month

Spam flag rate

14%



Spam ratios represent the number of unwanted calls from "noncontacts," which are calls placed from numbers that are not in an individual's address book.

Source: Samsung Smart Call users in Norway

Poland

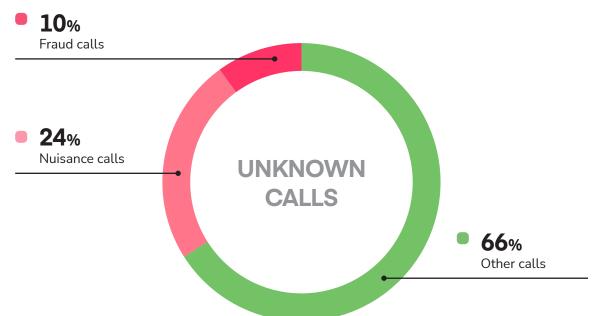
PERIOD

Q4 Oct 2024 - Dec 2024 Average spam calls per person

Calls/Month

Spam flag rate

34%



Spam ratios represent the number of unwanted calls from "noncontacts," which are calls placed from numbers that are not in an individual's address book.

Source: **Samsung Smart Call users** in Poland

Portugal

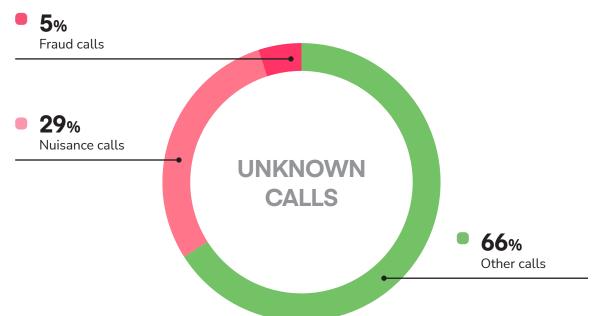
PERIOD

Q4Oct 2024 - Dec 2024

Average spam calls per person

6 Calls/Month Spam flag rate

34%



Spam ratios represent the number of unwanted calls from "noncontacts," which are calls placed from numbers that are not in an individual's address book.

Source: Samsung Smart Call users in Portugal

Saudi Arabia

PERIOD

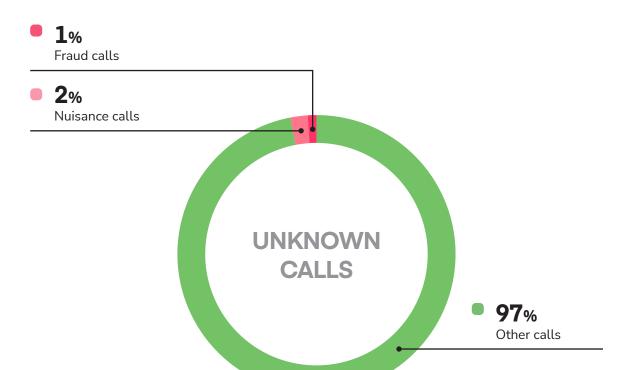
Q4Oct 2024 - Dec 2024

Average spam calls per person

1Calls/Month

Spam flag rate

3%



Spam ratios represent the number of unwanted calls from "noncontacts," which are calls placed from numbers that are not in an individual's address book.

Source: Samsung Smart Call users in Saudi Arabia

Slovakia

PERIOD

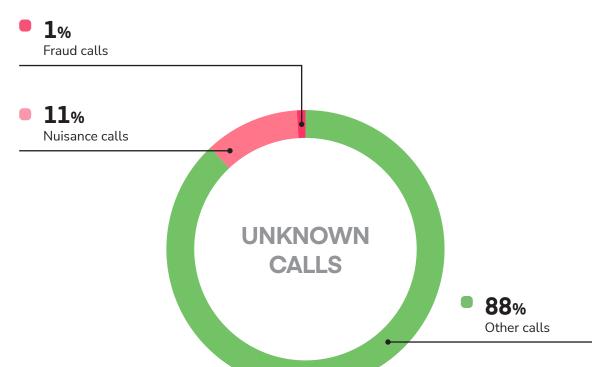
Q4Oct 2024 - Dec 2024

Average spam calls per person

2Calls/Month

Spam flag rate

12%



Spam ratios represent the number of unwanted calls from "noncontacts," which are calls placed from numbers that are not in an individual's address book.

Source: Samsung Smart Call users in Slovakia

South Africa

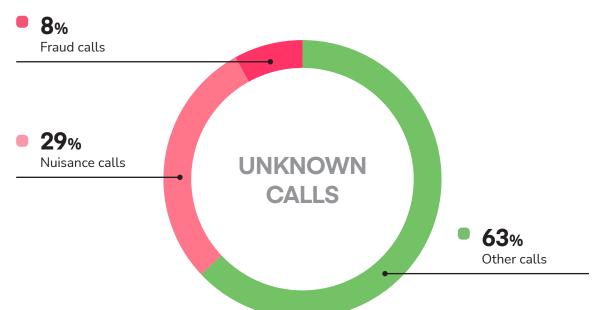
PERIOD

Q4Oct 2024 - Dec 2024

Average spam calls per person

11 Calls/Month Spam flag rate

37%



Spam ratios represent the number of unwanted calls from "noncontacts," which are calls placed from numbers that are not in an individual's address book.

Source: Samsung Smart Call users in South Africa

Spain

PERIOD

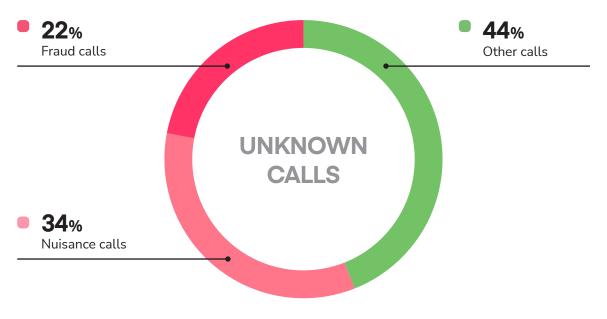
Q4Oct 2024 - Dec 2024

Average spam calls per person

15
Calls/Month

Spam flag rate

56%



Spam ratios represent the number of unwanted calls from "noncontacts," which are calls placed from numbers that are not in an individual's address book.

Source: Samsung Smart Call users in Spain

Sweden

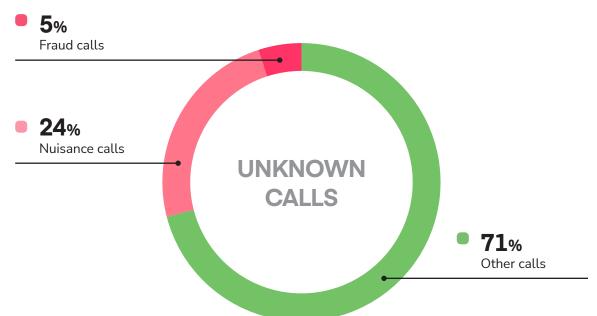
PERIOD

Q4Oct 2024 - Dec 2024

Average spam calls per person

4 Calls/Month Spam flag rate

29%



Spam ratios represent the number of unwanted calls from "noncontacts," which are calls placed from numbers that are not in an individual's address book.

Source: Samsung Smart Call users in Sweden

Switzerland

PERIOD

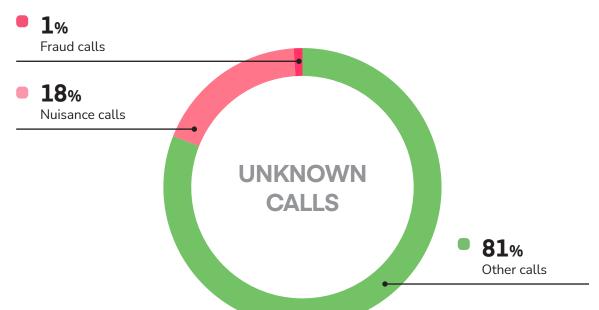
Q4Oct 2024 - Dec 2024

Average spam calls per person

2Calls/Month

Spam flag rate

19%



Spam ratios represent the number of unwanted calls from "noncontacts," which are calls placed from numbers that are not in an individual's address book.

Source: Samsung Smart Call users in Switzerland

United Kingdom

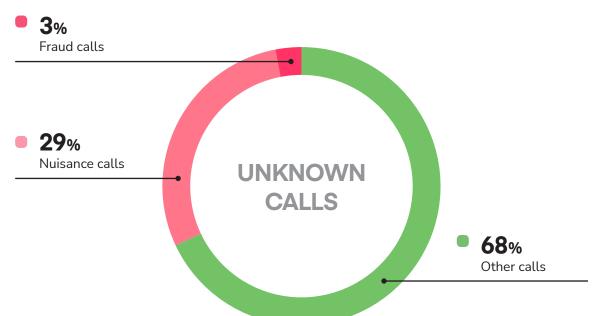
PERIOD

Q4Oct 2024 - Dec 2024

Average spam calls per person

4 Calls/Month Spam flag rate

32%



Spam ratios represent the number of unwanted calls from "noncontacts," which are calls placed from numbers that are not in an individual's address book.

Source: Samsung Smart Call users in United Kingdom





ABOUT HIYA

Hiya is trusted by global businesses, carriers and consumers to provide secure, engaging connections and stop unwanted calls. Built on the world's leading Voice Security Platform, Hiya connects businesses with their customers, helps carriers secure their networks, and protects people from spam and fraud calls.

Hiya's SaaS applications, Hiya Connect and Hiya Protect, serve more than 500 million users on the Hiya Network, powering call protection and identity for EE, Samsung, Ericsson and more. Learn more at www.hiya.com.