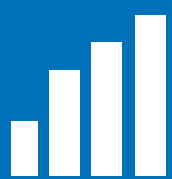


UNHCR Data Visualization Guidelines



Introduction

Data visualization is any graphical representation of information and data. They are essential for presenting information clearly and effectively, and for helping UNHCR communicate key messages, trends, and insights. Well-designed charts and infographics improve the visibility and impact of UNHCR's work by making complex data more accessible to a broad audience.

These data visualization guidelines provide recommendations and standards for creating charts that align with UNHCR's global brand identity. They ensure consistency across all UNHCR publications and platforms, making data easier to interpret while simplifying the production process for both basic and advanced users.

Standardized design and branding

The guidelines define best practices for chart design, including layout, typography, and colour palettes. They help UNHCR to maintain a professional and recognizable visual identity. Standardized elements ensure that all UNHCR

charts are clear, consistent, and accessible to diverse audiences.

The guidelines have been developed by the **Information Product Development and Analysis Unit** from the **Global Data Service (GDS)**, with the support of the **Design Unit and the Global Brand Unit** from the **Division of External Relations (DER)**.

For further guidance or questions, please contact:

- For data visualization: dataviz@unhcr.org.
- For brand: globalbrand@unhcr.org

Contents

2	Introduction
3	Colours
4	Main colours
5	Colour ramps
7	Category colours
8	Special categories
9	Sequential scales
11	Diverging scales
12	Typography
13	Fonts
13	Colours
14	Chart elements
15	What, where and how
16	Specifications
17	Chart type
20	Annex
21	Change over time
23	Comparison
27	Distribution
28	Part-to-a-whole
30	UNHCR specific

Colours

Main colours

UNHCR's data visualization colour palette is an extension of the official UNHCR brand colours. These colours are carefully selected to ensure accessibility, clarity, and consistency across all visualizations, including infographics, maps, and charts. The data colours should be used for all data visualization, in accordance with these guidelines. The Brand colours will continue to be used for all other purposes including reports, websites, banners, etc.

The **blue colour is the primary colour** and should be the predominant colour in all UNHCR visuals. Try to limit the number of different colours in a single graphic. When needed, more colours may be used to ensure clarity, e.g. distinguishing between different categories within the data.

Consistent use of these colours contribute to a coherent and consistent look for UNHCR products across all communication channels and platforms. A strong visual identity improves audience recognition and distinguishes UNHCR from other organisations. Therefore, we strongly recommend implementing these guidelines to the extent possible for all visualizations.

Brand colours

Primary



Blue

CMYK: 99, 50, 0, 0
RGB: 0, 114, 188
HEX: #0072BC



Black

CMYK: 0, 0, 0, 100
RGB: 0, 0, 0
HEX: #000000



White

CMYK: 0, 0, 0, 0
RGB: 255, 255, 255
HEX: #FFFFFF

Accent



Yellow

CMYK: 3, 1, 100, 0
RGB: 250, 235, 0
HEX: #FAEB00

Data colours

Primary



Blue

CMYK: 99, 50, 0, 0
RGB: 0, 114, 188
HEX: #0072BC



Yellow

CMYK: 0, 22, 85, 0
RGB: 255, 199, 64
HEX: #FFC740



Green

CMYK: 70, 0, 63, 0
RGB: 50, 193, 137
HEX: #32C189



Cyan

CMYK: 48, 0, 0, 0
RGB: 108, 216, 253
HEX: #6CD8FD



Red

CMYK: 13, 78, 77, 2
RGB: 210, 90, 69
HEX: #D25A45



Purple

CMYK: 38, 40, 0, 0
RGB: 160, 151, 227
HEX: #A097E3



Brown

CMYK: 35, 79, 72, 35
RGB: 124, 60, 54
HEX: #7C3C36



Neutral

CMYK: 0, 0, 0, 25
RGB: 191, 191, 191
HEX: #BFBFBF

Colour ramps

Blue



Blue 01

CMYK: 18, 4, 0, 0
RGB: 205, 227, 241
HEX: #CDE3F1

Blue 02

CMYK: 42, 12, 0, 0
RGB: 143, 193, 225
HEX: #8FC1E1

Blue 03

CMYK: 66, 25, 0, 0
RGB: 79, 158, 208
HEX: #4F9ED0

Blue 04 - Primary

CMYK: 99, 50, 0, 0
RGB: 0, 114, 188
HEX: #0072BC

Blue 05

CMYK: 97, 70, 21, 5
RGB: 5, 86, 139
HEX: #05568B

Blue 06

CMYK: 99, 77, 42, 36
RGB: 11, 55, 84
HEX: #0B3754

Yellow



Yellow 01

CMYK: 0, 4, 20, 0
RGB: 254, 241, 209
HEX: #FEF1D1

Yellow 02 - Primary

CMYK: 0, 22, 85, 0
RGB: 255, 199, 64
HEX: #FFC740

Yellow 03

CMYK: 10, 38, 100, 0
RGB: 228, 162, 2
HEX: #E4A202

Yellow 04

CMYK: 26, 47, 100, 6
RGB: 185, 132, 5
HEX: #B98405

Yellow 05

CMYK: 37, 53, 100, 20
RGB: 143, 104, 8
HEX: #8F6808

Yellow 06

CMYK: 46, 58, 100, 39
RGB: 104, 77, 11
HEX: #684D0B

Green



Green 01

CMYK: 13, 0, 9, 0
RGB: 218, 246, 235
HEX: #DAF6EB

Green 02

CMYK: 47, 0, 38, 0
RGB: 125, 224, 185
HEX: #7DE0B9

Green 03 - Primary

CMYK: 70, 0, 63, 0
RGB: 50, 193, 137
HEX: #32C189

Green 04

CMYK: 79, 15, 71, 2
RGB: 43, 156, 112
HEX: #2B9C70

Green 05

CMYK: 84, 30, 76, 16
RGB: 37, 121, 88
HEX: #257958

Green 06

CMYK: 84, 41, 77, 37
RGB: 31, 87, 65
HEX: #1F5741

Cyan



Cyan 01

CMYK: 15, 0, 0, 0
RGB: 212, 243, 254
HEX: #D4F3FE

Cyan 02 - Primary

CMYK: 48, 0, 0, 0
RGB: 108, 216, 253
HEX: #6CD8FD

Cyan 03

CMYK: 68, 9, 0, 0
RGB: 1, 182, 242
HEX: #01B6F2

Cyan 04

CMYK: 80, 28, 10, 0
RGB: 4, 147, 194
HEX: #0493C2

Cyan 05

CMYK: 89, 47, 27, 4
RGB: 8, 114, 149
HEX: #087295

Cyan 06

CMYK: 94, 60, 42, 23
RGB: 11, 82, 105
HEX: #0B5269

Red



Red 01

CMYK: 0, 13, 8, 0
RGB: 252, 226, 222
HEX: #FCE2DE

Red 02

CMYK: 0, 36, 27, 0
RGB: 249, 179, 167
HEX: #F9B3A7

Red 03

CMYK: 0, 63, 56, 0
RGB: 246, 127, 106
HEX: #F67F6A

Red 04 - Primary

CMYK: 13, 78, 77, 2
RGB: 210, 90, 69
HEX: #D25A45

Red 05

CMYK: 27, 80, 80, 20
RGB: 156, 70, 55
HEX: #9C4637

Red 06

CMYK: 38, 78, 77, 46
RGB: 104, 50, 41
HEX: #683229

Purple



Purple 01

CMYK: 7, 8, 0, 0
RGB: 231, 229, 247
HEX: #E7E5F7

Purple 02

CMYK: 22, 23, 0, 0
RGB: 195, 190, 237
HEX: #C3BEED

Purple 03 - Primary

CMYK: 38, 40, 0, 0
RGB: 160, 151, 227
HEX: #A097E3

Purple 04

CMYK: 55, 58, 0, 0
RGB: 126, 116, 194
HEX: #7E74C2

Purple 05

CMYK: 73, 73, 18, 3
RGB: 94, 87, 142
HEX: #5E578E

Purple 06

CMYK: 80, 79, 38, 28
RGB: 64, 60, 93
HEX: #403C5D

Brown



Brown 01

CMYK: 7, 14, 10, 0
RGB: 234, 217, 216
HEX: #EAD9D8

Brown 02

CMYK: 17, 32, 26, 0
RGB: 211, 175, 171
HEX: #D3AFAB

Brown 03

CMYK: 26, 52, 43, 2
RGB: 188, 133, 128
HEX: #BC8580

Brown 04

CMYK: 28, 71, 63, 13
RGB: 166, 91, 84
HEX: #A65B54

Brown 05 - Primary

CMYK: 35, 79, 72, 35
RGB: 124, 60, 54
HEX: #7C3C36

Brown 06

CMYK: 48, 75, 70, 62
RGB: 72, 39, 36
HEX: #482724

Grey



Grey 01

CMYK: 0, 0, 0, 10
RGB: 229, 229, 229
HEX: #E5E5E5

Grey 02 - Primary

CMYK: 0, 0, 0, 25
RGB: 191, 191, 191
HEX: #BFBFBF

Grey 03

CMYK: 0, 0, 0, 40
RGB: 153, 153, 153
HEX: #999999

Grey 04

CMYK: 0, 0, 0, 55
RGB: 115, 115, 115
HEX: #737373

Grey 05

CMYK: 0, 0, 0, 70
RGB: 77, 77, 77
HEX: #4D4D4D

Grey 06

CMYK: 0, 0, 0, 85
RGB: 38, 38, 38
HEX: #262626

Category colours

A **categorical palette** is used when the variable is non-numeric and consists of distinct labels without any inherent order. Examples include country, region, activity, or gender. Each unique value is assigned a contrasting colour from a categorical palette to help distinguish between categories.

As part of data visualization best practices, it is recommended not to use **more than six categories** in a single chart. If you have more than six groups, consider consolidating similar categories or splitting the data into multiple charts to maintain clarity and readability.

At right, you can see recommended combinations of colours that offer strong contrast. However, depending on your needs, all base data colours from the visual identity guidelines are designed to work well together and can be mixed as appropriate.

2 categories



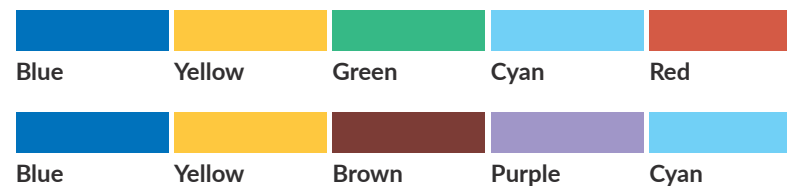
3 categories



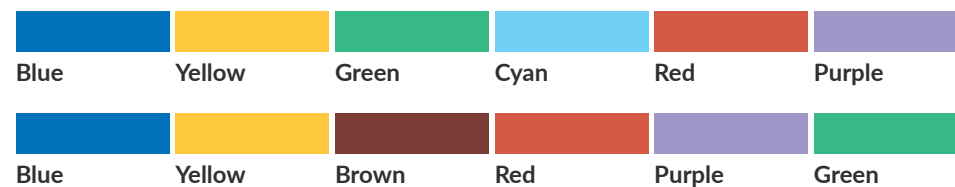
4 categories



5 categories



6 categories



Special categories

In UNHCR, certain category groupings are consistently represented using specific, predefined colour palettes. These are exceptions to the general recommendation of limiting categorical palettes to six or fewer items, as they reflect core elements of our mandate and communication standards.

To ensure consistency and recognizability, the following specific colour combinations have been developed

UNHCR Regions:

Each regional bureau is assigned a unique colour. These colours are designed for clear differentiation and are used across charts, maps, and infographics that compare or report on multiple regions.

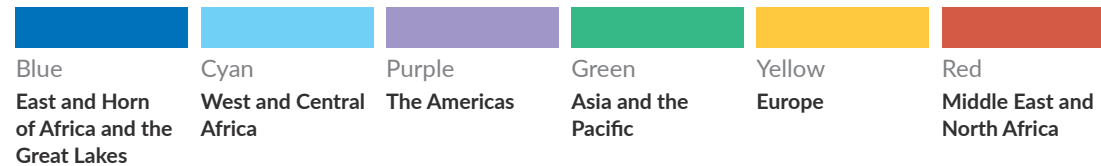
Population type:

The use of the full palette is recommended when visualizing disaggregated data covering all categories.

Gender:

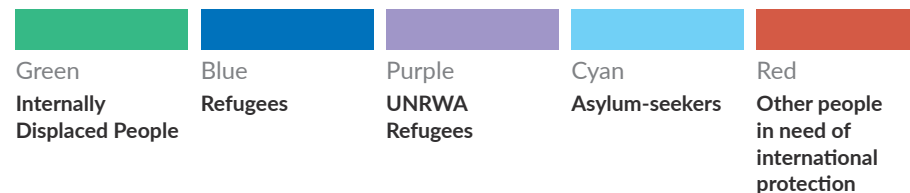
A dedicated palette is also available for representing Female, Male, and Non-binary/Neutral categories.

UNHCR regions



Population type

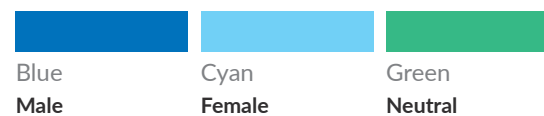
Forcibly Displaced People



Persons who are forcibly displaced, stateless and others of concern to UNHCR



Gender



When visualizing a single category (e.g. only IDPs), the default UNHCR blue or a tonal variation of it should be used. These are the recommended colour combinations. However, depending on the context, any of the approved brand colours may be used as they have been designed to work harmoniously together.

Sequential scales

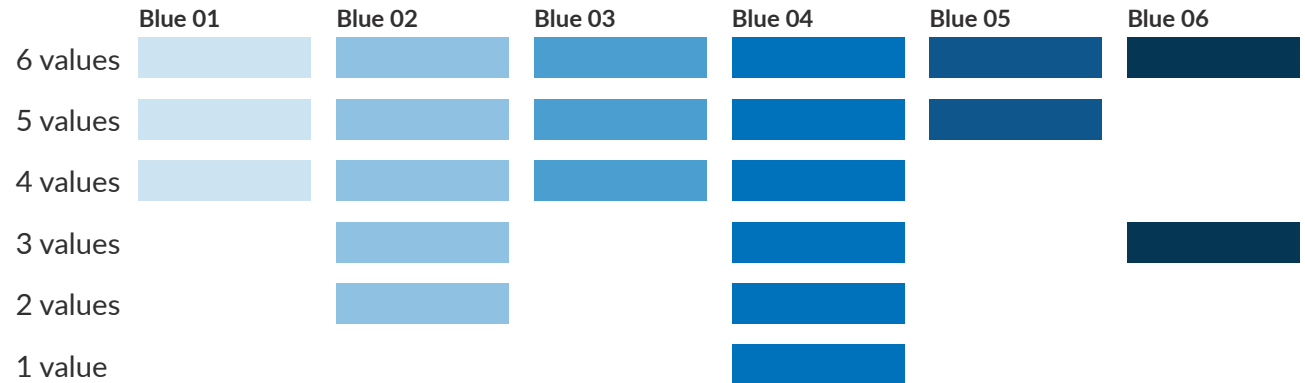
A **sequential palette** is used when the variable is numeric or has inherently ordered values. It represents a gradation of colour that progresses from light to dark (or vice versa), reflecting the magnitude of the data. Sequential colours convey numeric meaning and are ideal for visualizing continuous values such as population, income, temperature, or age.

As shown at right, we include examples using our **main colour ramp** (single hue). You can see how more shades can be added as the number of values increase.

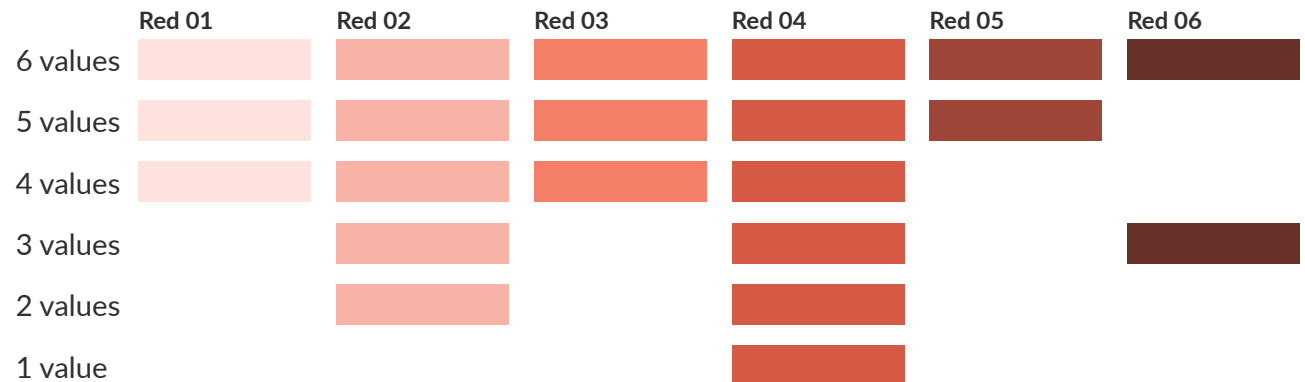
On the next page, we'll explore **multi-hue** sequential palettes, which can be especially useful for maps where additional colour variation improves differentiation and readability.

Single hue

Blue



Red



Multi hue

Blue-Green



Blue-Green 01

CMYK: 13, 0, 9, 0
RGB: 218, 246, 235
HEX: #DAF6EB



Blue-Green 02

CMYK: 38, 5, 11, 0
RGB: 154, 207, 221
HEX: #9ACFDD



Blue-Green 03

CMYK: 63, 19, 8, 0
RGB: 89, 168, 207
HEX: #59A8CF



Blue-Green 04

CMYK: 83, 42, 1, 0
RGB: 22, 127, 193
HEX: #167FC1



Blue-Green 05

CMYK: 97, 68, 19, 4
RGB: 5, 89, 144
HEX: #055990



Blue-Green 06

CMYK: 99, 77, 42, 36
RGB: 11, 55, 84
HEX: #0B3754

Purple-Blue



Purple-Blue 01

CMYK: 18, 4, 2, 0
RGB: 205, 227, 241
HEX: #CDE3F1



Purple-Blue 02

CMYK: 36, 14, 2, 0
RGB: 158, 193, 225
HEX: #9EC1E1



Purple-Blue 03

CMYK: 52, 31, 2, 0
RGB: 124, 158, 206
HEX: #7C9ECE



Purple-Blue 04

CMYK: 65, 51, 6, 0
RGB: 103, 122, 178
HEX: #677AB2



Purple-Blue 05

CMYK: 76, 71, 21, 4
RGB: 86, 89, 139
HEX: #56598B



Purple-Blue 06

CMYK: 80, 79, 38, 28
RGB: 64, 60, 93
HEX: #403C5D

Red-Yellow



Red-Yellow 01

CMYK: 0, 4, 20, 0
RGB: 254, 241, 209
HEX: #FEF1D1



Red-Yellow 02

CMYK: 2, 26, 59, 0
RGB: 248, 194, 122
HEX: #F8C27A



Red-Yellow 03

CMYK: 10, 46, 75, 0
RGB: 225, 150, 86
HEX: #E19656



Red-Yellow 04

CMYK: 20, 64, 82, 6
RGB: 192, 110, 67
HEX: #C06E43



Red-Yellow 05

CMYK: 29, 76, 82, 22
RGB: 152, 76, 54
HEX: #984C36



Red-Yellow 06

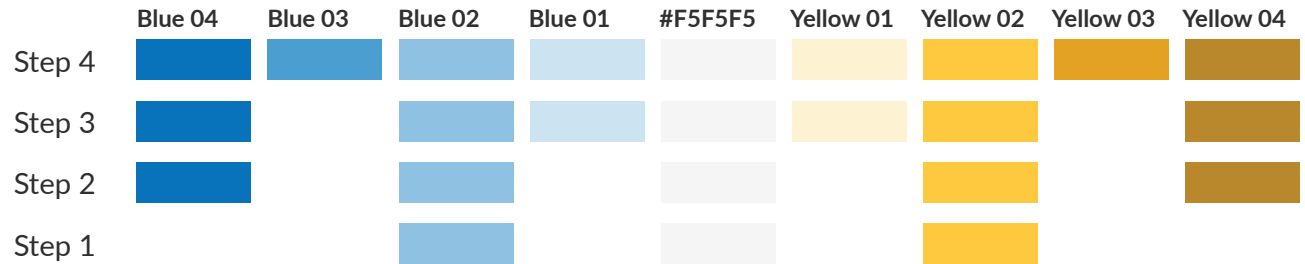
CMYK: 38, 78, 77, 46
RGB: 104, 50, 41
HEX: #683229

Diverging scales

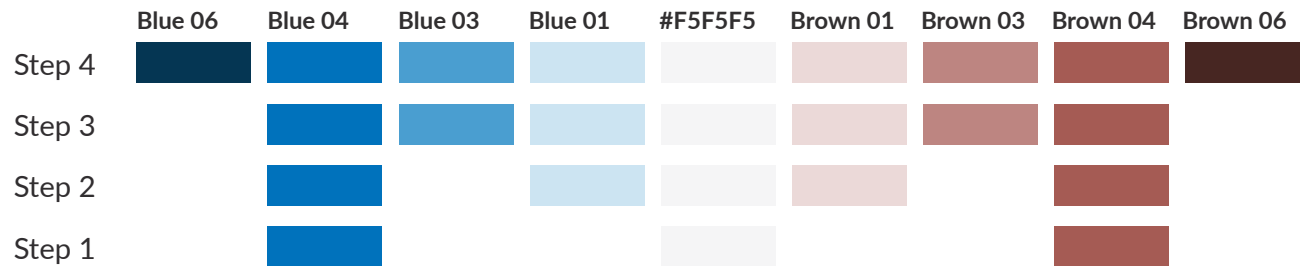
A diverging palette combines two sequential palettes that meet at a common midpoint. Each side progresses from a neutral or light center toward darker, more saturated hues at the extremities. Diverging colours also carry numeric meaning and are commonly used to visualize data with a meaningful center, such as zero. They are useful for highlighting both negative and positive values, like economic growth or temperature anomalies.

As shown on the side, we include examples based on our main colour ramps. As with the sequential palettes, more shades can be added on both sides as the number of groups increases.

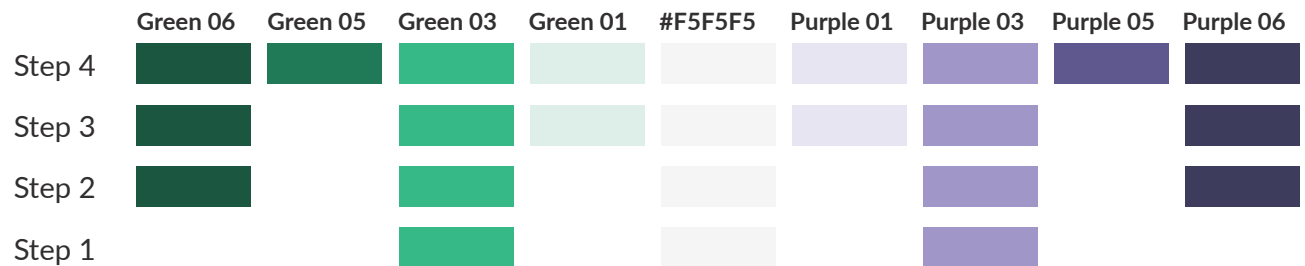
Blue-Yellow



Blue-Brown



Green-Purple



Typography

Fonts

Consistency in typography plays a crucial role in reinforcing UNHCR's visual identity. Maintaining clear guidelines for type usage ensures a **uniform and professional look** across all communication materials.

UNHCR has three approved fonts: **Proxima Nova**, **Arial**, and **Lato**.

For data visualizations, we **recommend using Lato** due to the **high legibility of numbers, clean design, and wide availability across platforms**.

Its open letterforms and well-proportioned numerals make it especially suited for charts, maps, and tables where clarity is essential.

Colours

To ensure clarity and consistency, we have created **AAA-compliant text** for all categorical colours. If using different coloured text is needed for your visual, these colours provide optimal contrast, improving legibility in data visualizations. Although in most cases we will use black text, these text colours are an option that ensures a **clear, professional, and cohesive look** across UNHCR products.



Blue-AAA

RGB: 5, 86, 139
HEX: #05568B



Yellow-AAA

RGB: 104, 77, 11
HEX: #684D0B



Green-AAA

RGB: 31, 87, 65
HEX: #1F5741



Cyan-AAA

RGB: 11, 82, 105
HEX: #0B5269



Red-AAA

RGB: 104, 50, 41
HEX: #683229



Purple-AAA

RGB: 64, 60, 93
HEX: #403C5D



Brown-AAA

RGB: 124, 60, 54
HEX: #7C3C36



Grey-AAA

RGB: 77, 77, 77
HEX: #4D4D4D

Chart elements

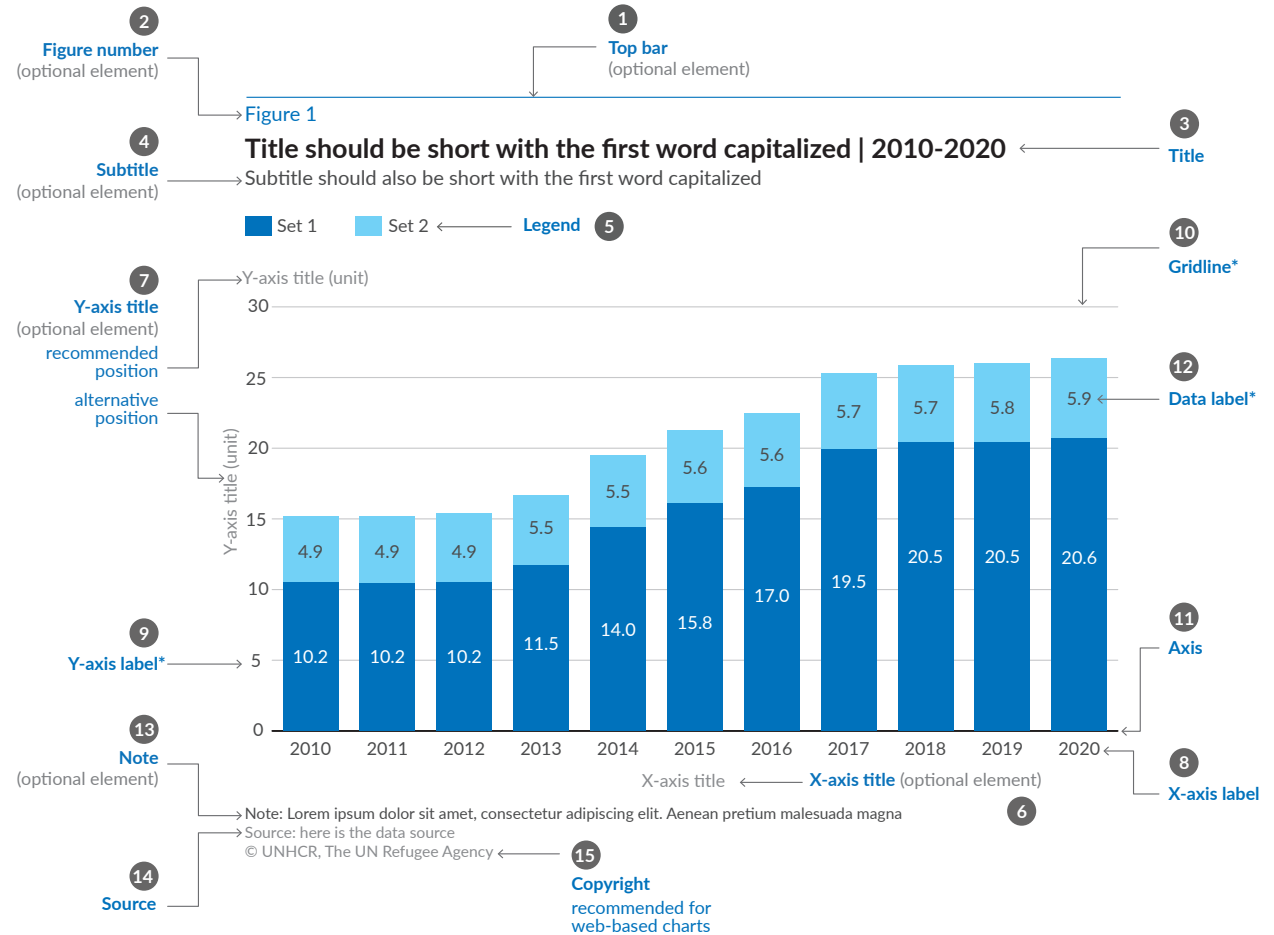
What, where and how

Depending on relevance, UNHCR charts may include the following visual elements.

- 1 Top bar
- 2 Figure number
- 3 Title
- 4 Subtitle
- 5 Legend
- 6 X-axis title
- 7 Y-axis title
- 8 X-axis label
- 9 Y-axis label
- 10 Grid line*
- 11 Axis
- 12 Data label*
- 13 Note
- 14 Source
- 15 Copyright

All chart elements are recommended to be placed and aligned as shown in the example.

Some elements may be required only in certain conditions or for certain types of charts.



*This example is meant to illustrate all possible chart elements. However, we should never use axis labels/gridlines together with data labels. To avoid repetition and chart congestion, it is recommended to use one approach or the other. Please see the appendix for examples.

Specifications

All elements should follow the specifications outlined below.

Font:

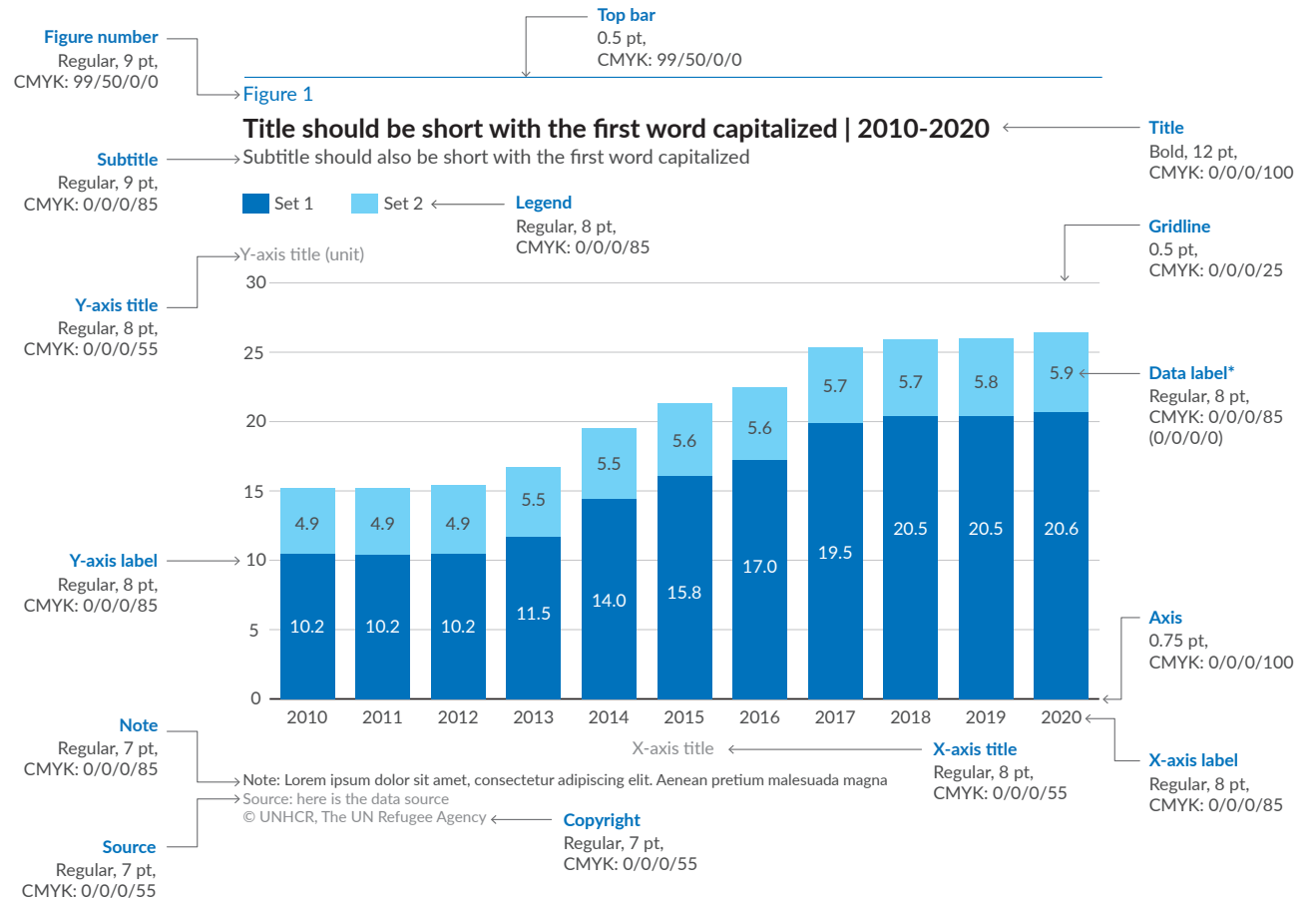
As mentioned previously, **Lato** should be used as the primary font. If Lato is not available, Proxima Nova or Arial may be used as an alternative.

Font size:

The sizes indicated are recommended for print products. They can be adjusted proportionally depending on the context, particularly for web-based outputs.

Colour:

Each element should use the colour specified in the mock-up. While CMYK values are provided for print, corresponding RGB and HEX codes are also available to ensure consistency across digital formats. Please see the relevant data colour ramps on pages 5-6.



*Data labels have two colours: white (0/0/0/0) and dark gray (0/0/0/85). The white colour should be used on dark background, while dark gray should be used on light background.

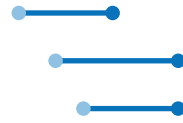
Chart type

Change over time

Charts that show data over a certain period of time as a way to understand trends or highlight changes.



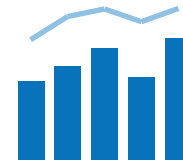
Area chart



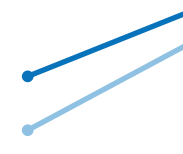
Dot plot



Line chart



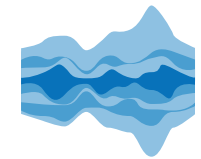
Line column chart



Slope chart



Stacked area chart



Stream graph

Comparison

Charts that show a comparison between two or more variables within the data set. These can be relative or absolute.



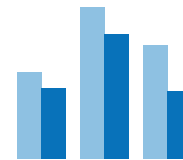
Bar chart



Column chart



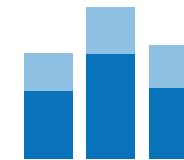
Grouped bar chart



Grouped column chart



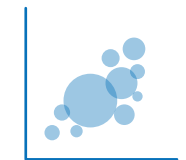
Stacked bar chart



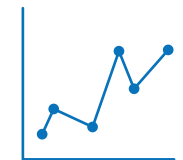
Stacked column chart

Correlation

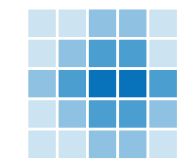
Charts that show how two or more variables relate to each other.



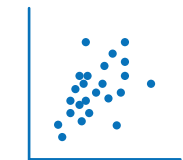
Bubble chart



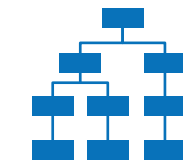
Connected scatterplot



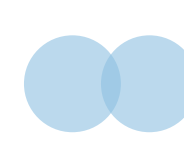
Heatmap



Scatterplot



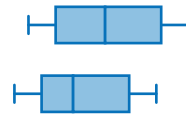
Tree diagram



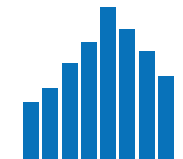
Venn diagram

Distribution

Charts that show how individual data points are grouped or spread out within the data set. It's a great method to find the frequency of events.



Boxplot



Histogram



Population pyramid

Flow

Charts that show movement between two or more states or conditions. It can be logical sequences or geographical locations.



Sankey diagram



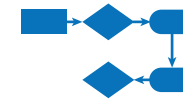
Chord diagram



Flow map



Arc diagram



Flow diagram

Geospatial

Spatial charts, or maps, show location-based data and patterns geographically.



Choropleth map



Bubble map



Flow map



Icon map



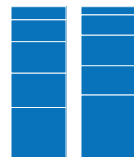
Dot density map



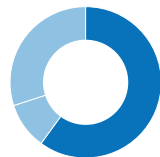
Pie chart map

Part-to-a-whole

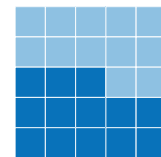
Charts that show how a single entity can be divided into its individual parts.



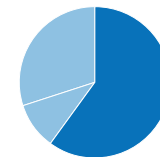
100% stacked column chart



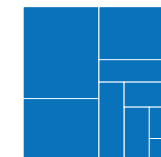
Donut chart



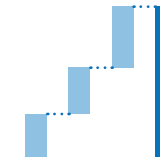
Grid plot



Pie chart



Treemap



Waterfall

Ranking

Charts that show not only the magnitude but also relative ranking of variables.



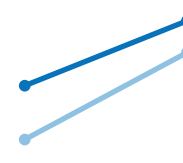
Lollipop chart



Ordered bar chart



Ordered column chart



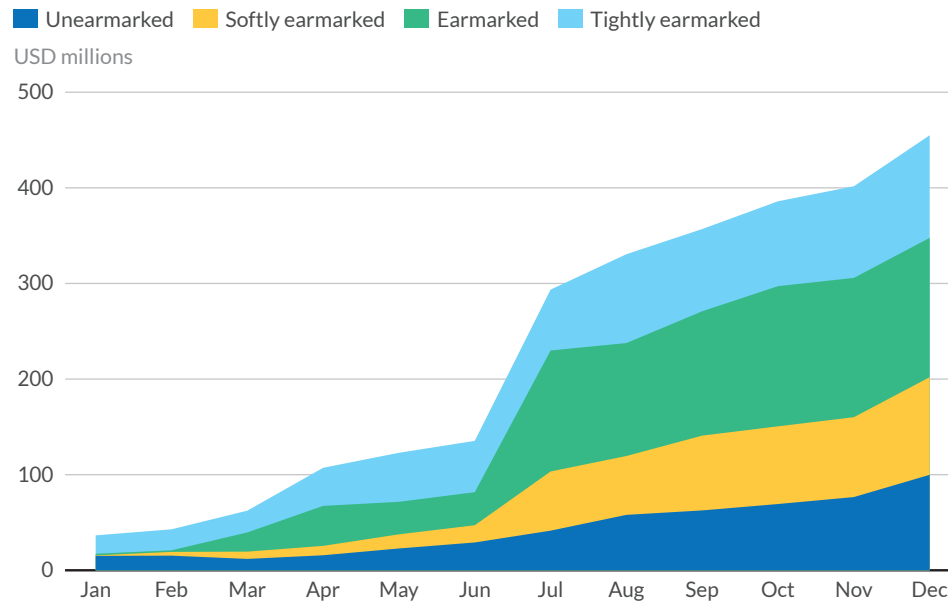
Slope chart

Annex

Change over time

Area chart

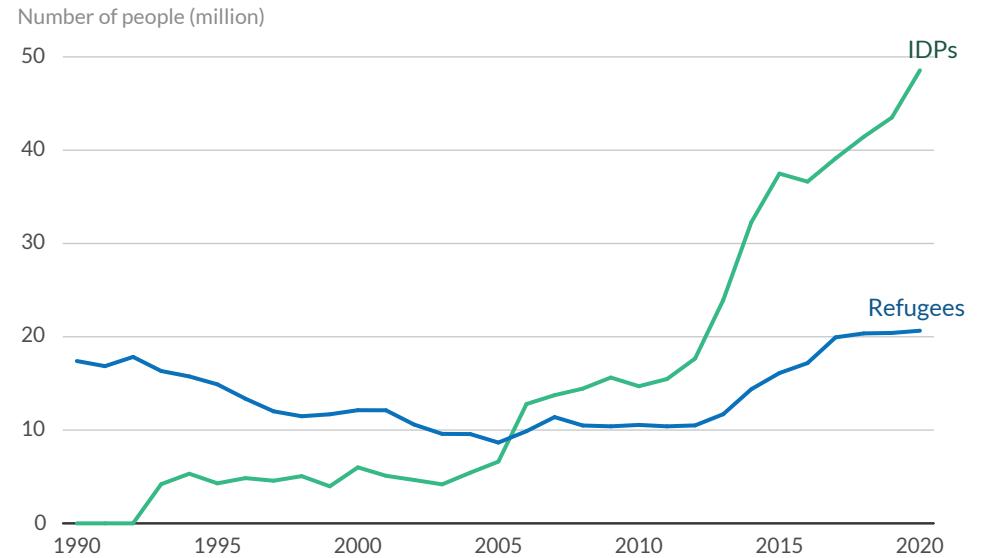
Monthly evolution of funding in West and Central Africa region in 2020



Source: UNHCR
© UNHCR, The UN Refugee Agency

Line chart

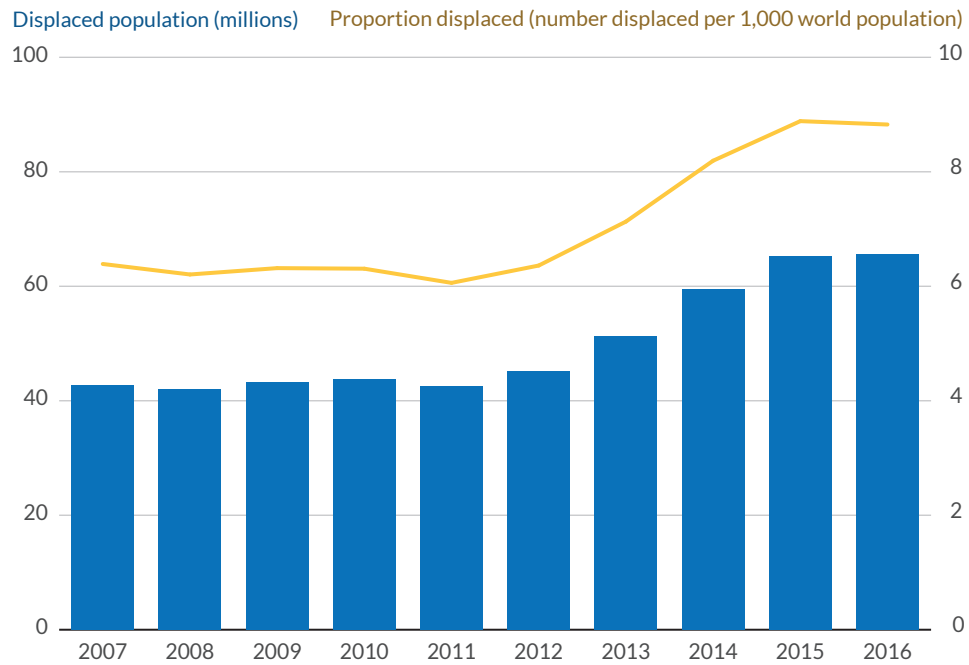
Number of refugees and IDPs of concern to UNHCR | 1990-2020



Source: UNHCR Refugee Data Finder
© UNHCR, The UN Refugee Agency

Line column chart

Trend of global displacement | 2007 - 2016

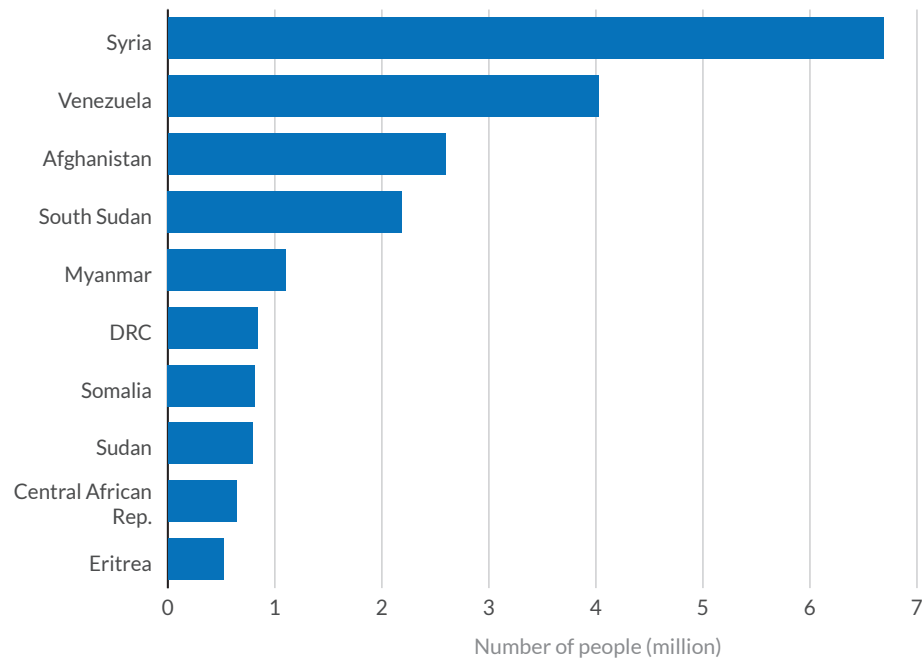


Source: UNHCR
© UNHCR, The UN Refugee Agency

Comparison

Bar chart

People displaced across borders by country of origin | 2020

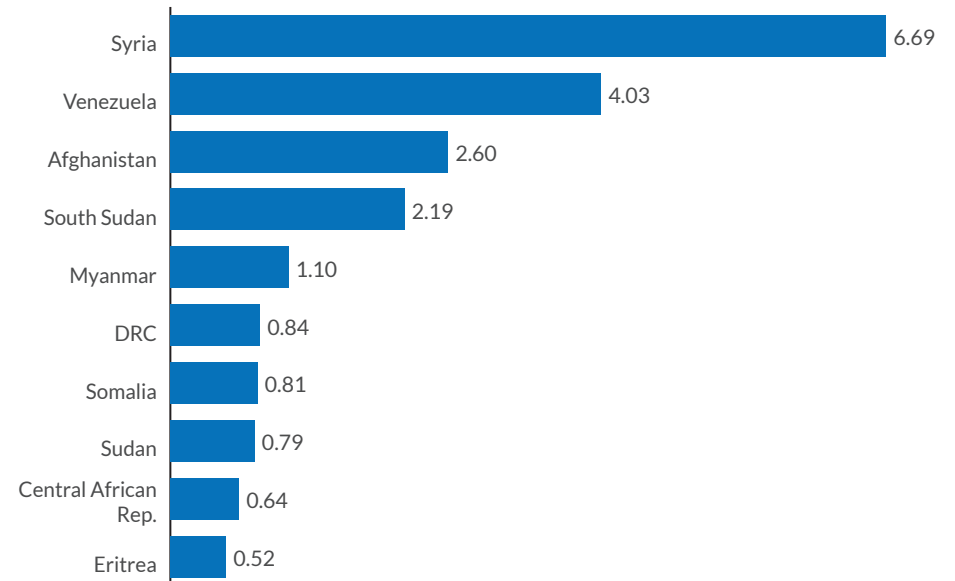


Source: UNHCR Refugee Data Finder
© UNHCR, The UN Refugee Agency

Bar chart with data labels

People displaced across borders by country of origin | 2020

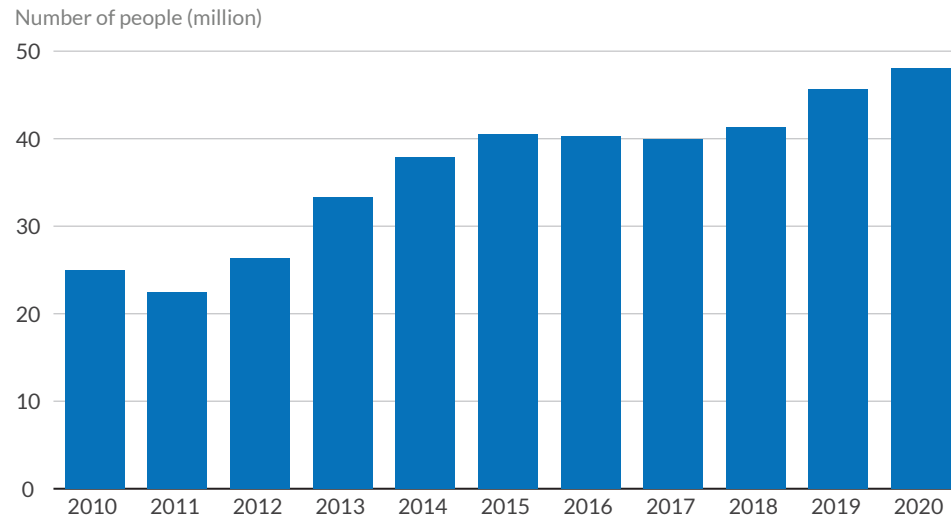
Number of people (million)



Source: UNHCR Refugee Data Finder
© UNHCR, The UN Refugee Agency

Column chart

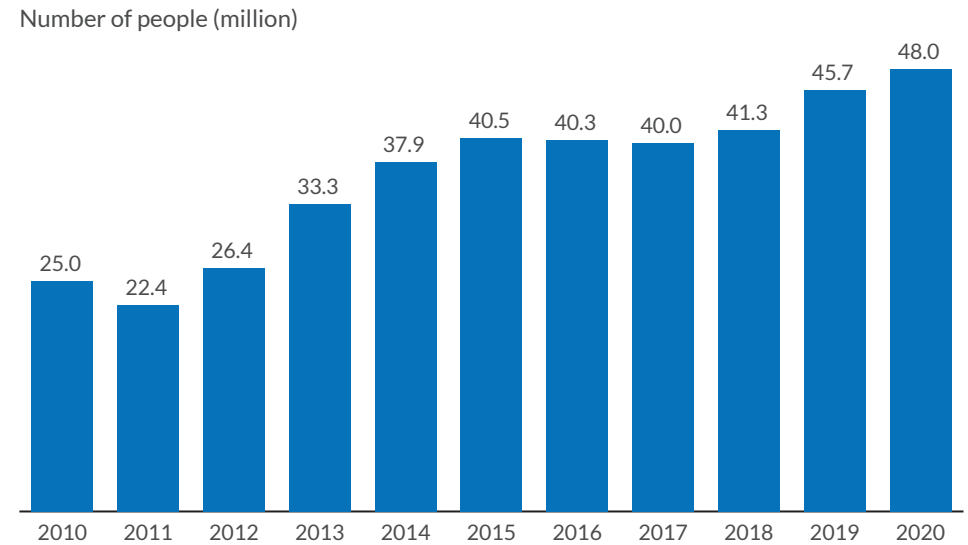
Global IDP displacement | 2010-2020



Source: UNHCR Refugee Data Finder
© UNHCR, The UN Refugee Agency

Column chart with data labels

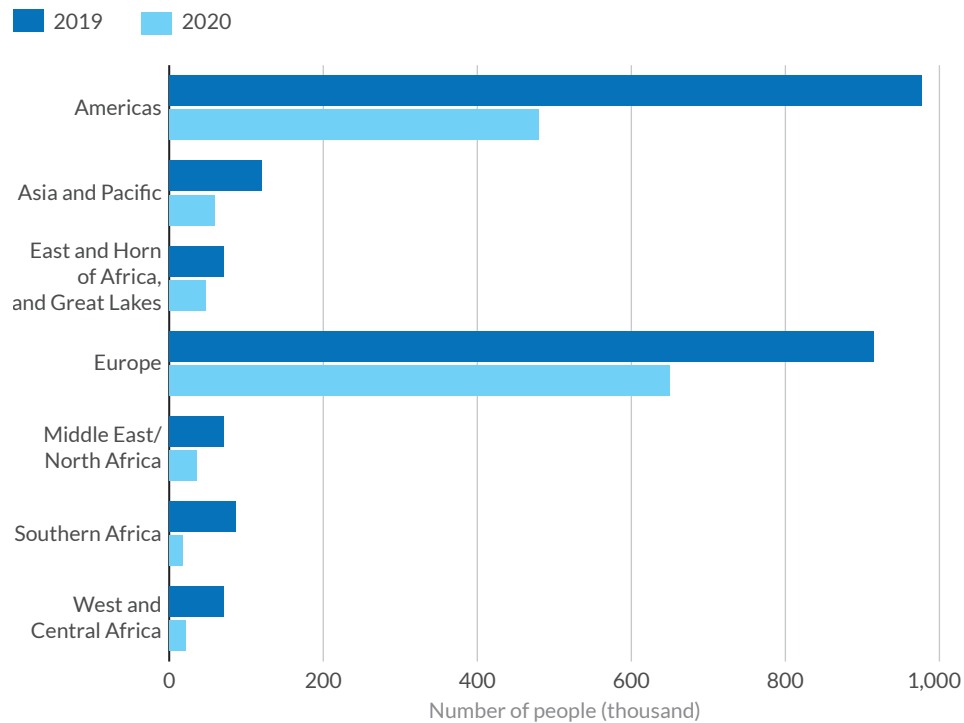
Global IDP displacement | 2010-2020



Source: UNHCR Refugee Data Finder
© UNHCR, The UN Refugee Agency

Grouped bar chart

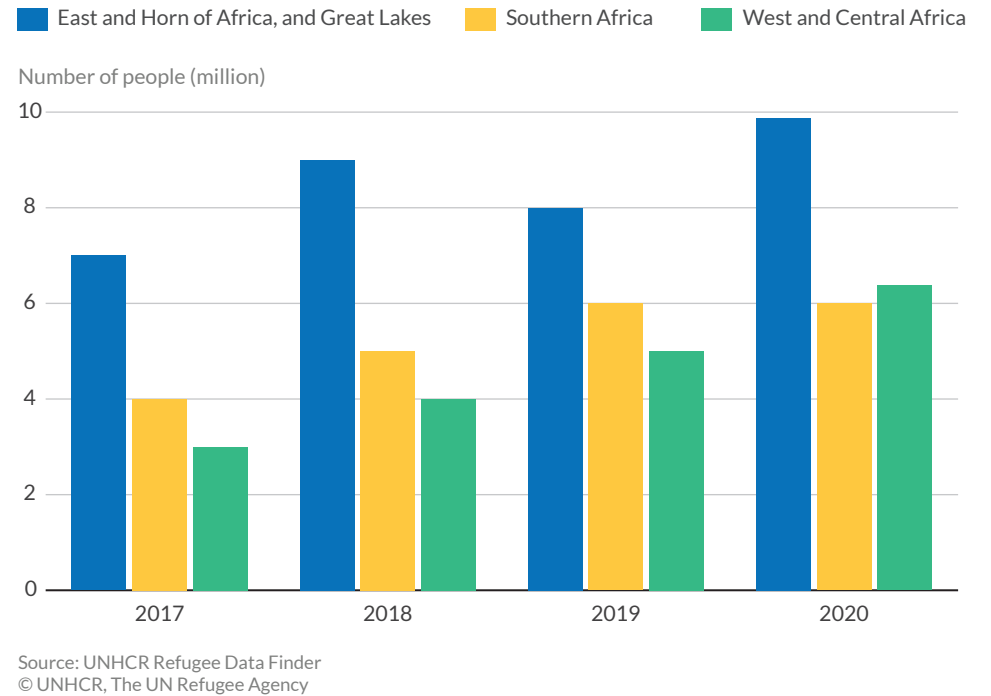
Individual asylum applications registered by region | 2019-2020



Source: UNHCR Refugee Data Finder
© UNHCR, The UN Refugee Agency

Grouped column chart

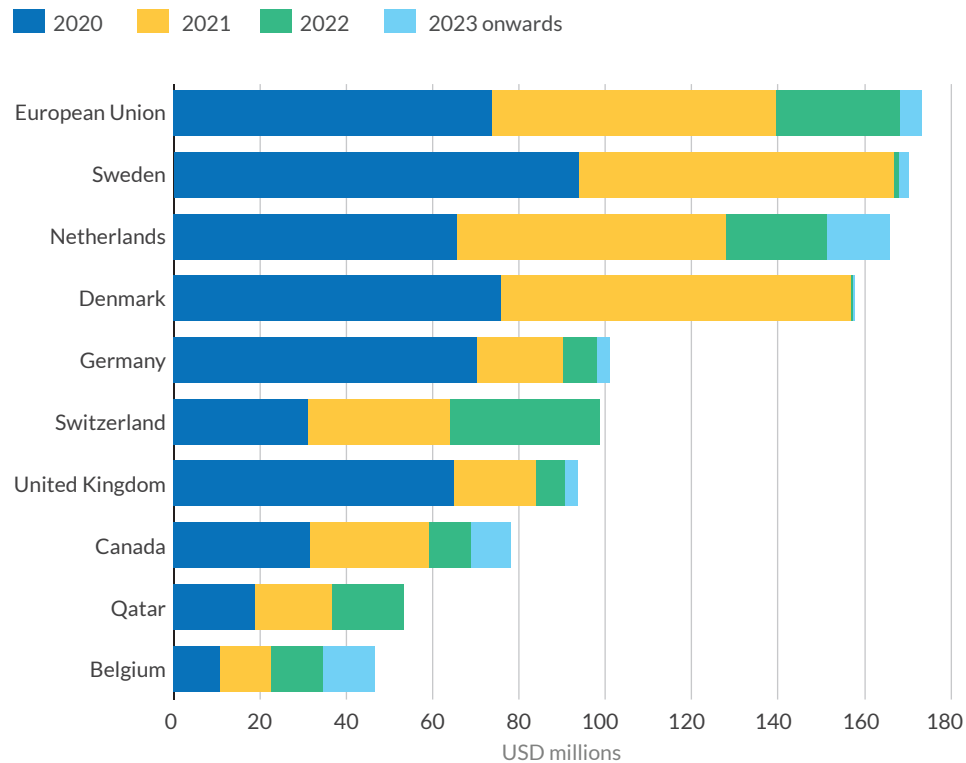
IDPs of concern to UNHCR in Africa region | 2017-2020



Source: UNHCR Refugee Data Finder
© UNHCR, The UN Refugee Agency

Stacked bar chart

Top ten donors of multi-year contributions of UNHCR

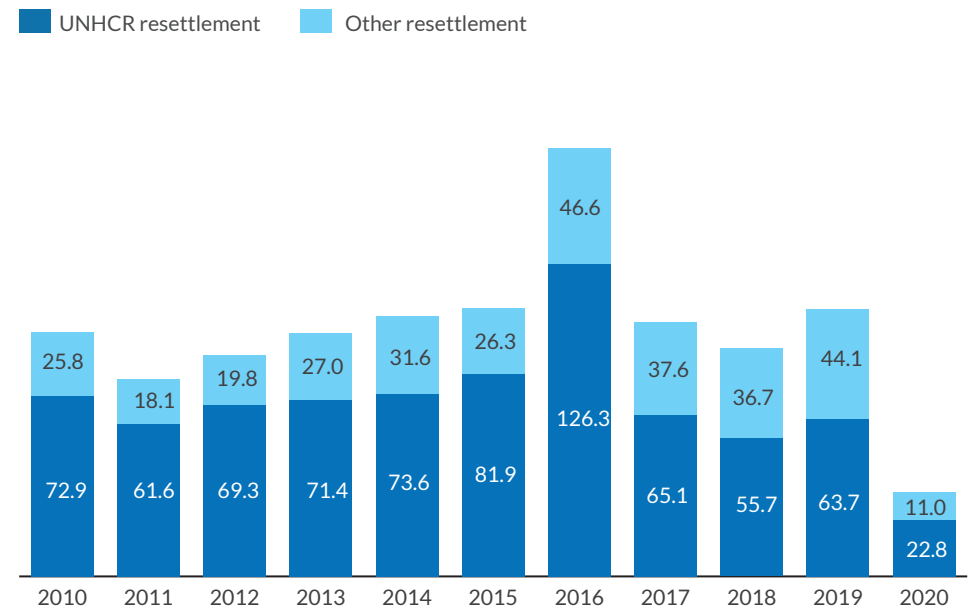


Source: UNHCR
© UNHCR, The UN Refugee Agency

Stacked column chart

Resettlement by UNHCR and others | 2010-2020

Number of people (thousand)

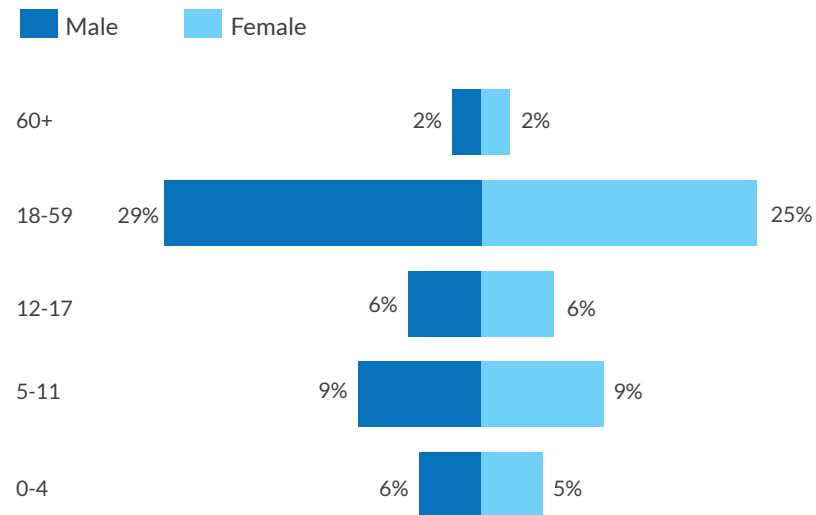


Source: UNHCR Refugee Data Finder
© UNHCR, The UN Refugee Agency

Distribution

Population pyramid

Estimated demographic composition of the global population displaced across borders | 2020



Note: figures do not add up to 100 per cent due to rounding

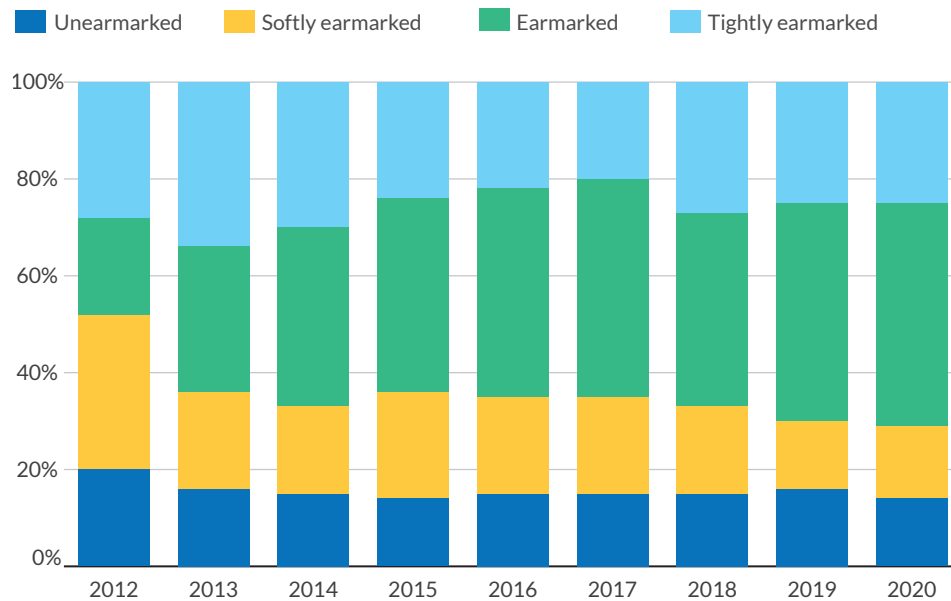
Source: UNHCR Refugee Data Finder

© UNHCR, The UN Refugee Agency

Part-to-a-whole

100% stacked column chart

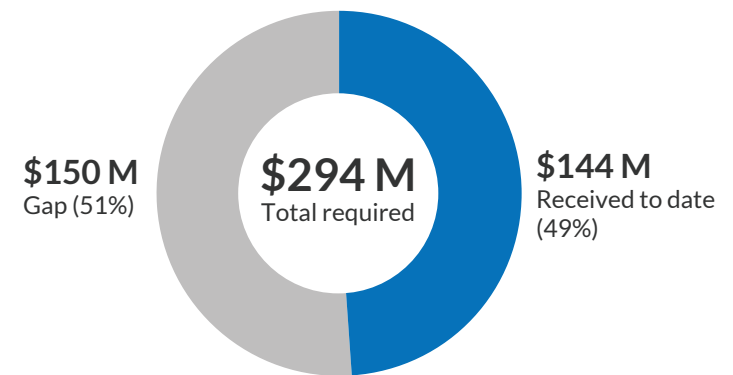
Levels of earmarking | 2012-2020



Source: UNHCR
© UNHCR, The UN Refugee Agency

Donut chart

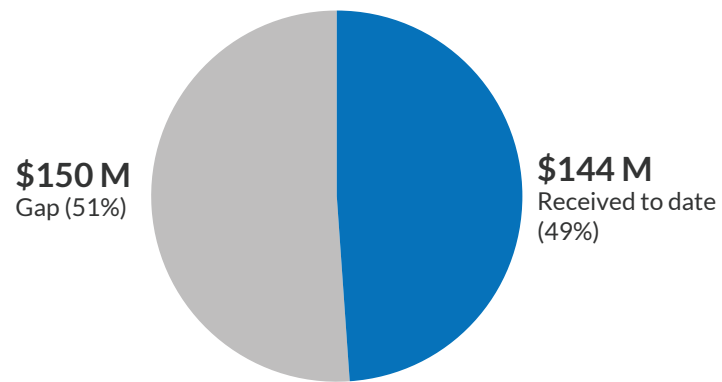
UNHCR Funding (as of August 2021)



Source: UNHCR
© UNHCR, The UN Refugee Agency

Pie chart

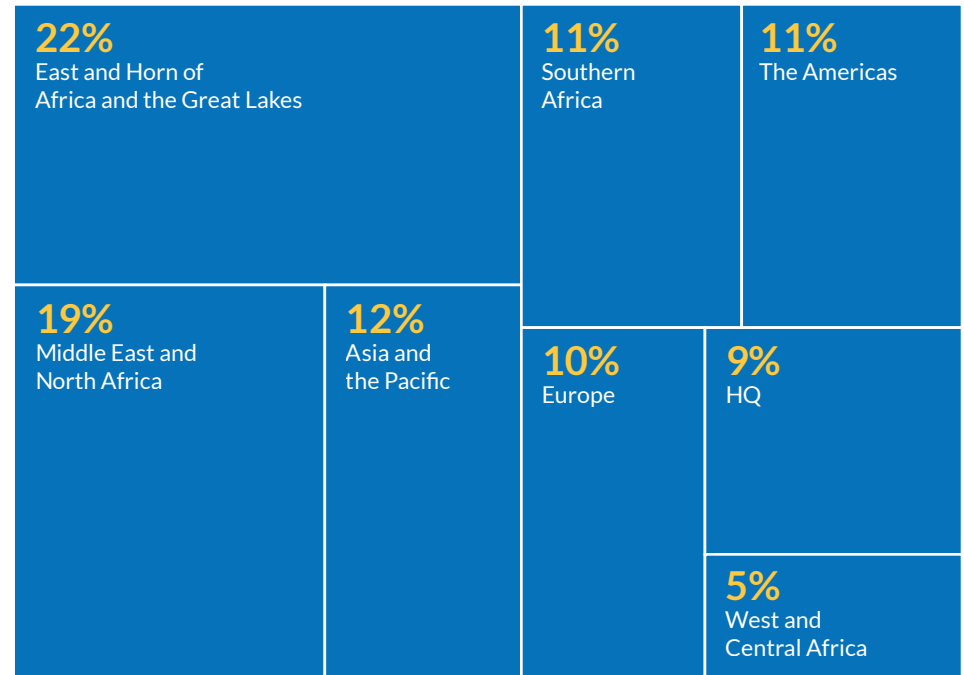
UNHCR Funding (as of August 2021)



Source: UNHCR
© UNHCR, The UN Refugee Agency

Treemap

UNHCR global workforce by region | 2020

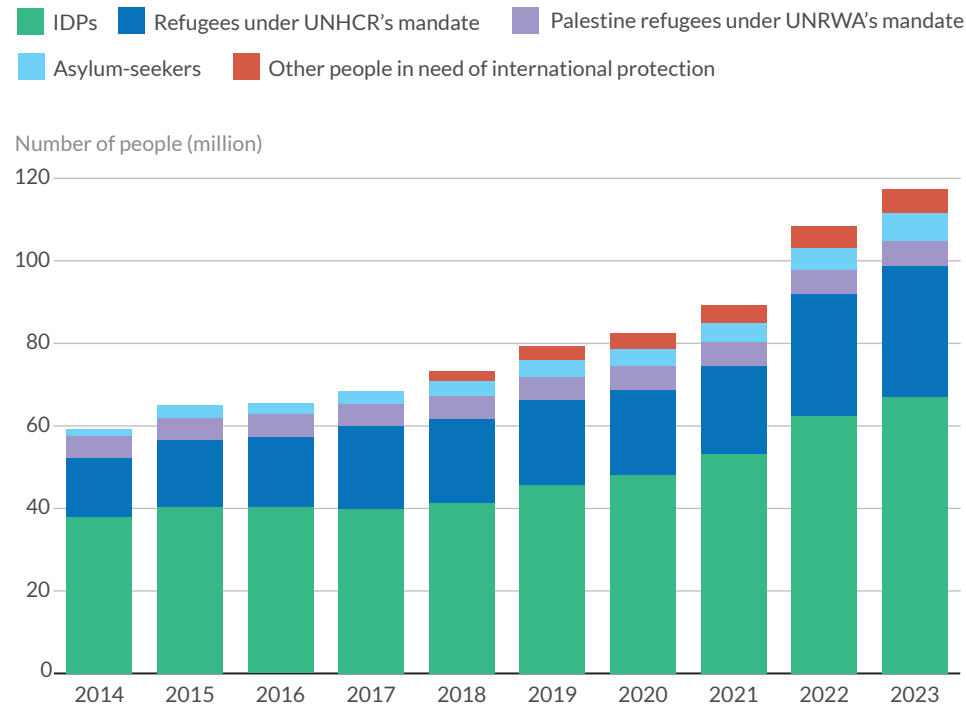


Note: figures do not add up to 100 per cent due to rounding
Source: UNHCR
© UNHCR, The UN Refugee Agency

UNHCR specific

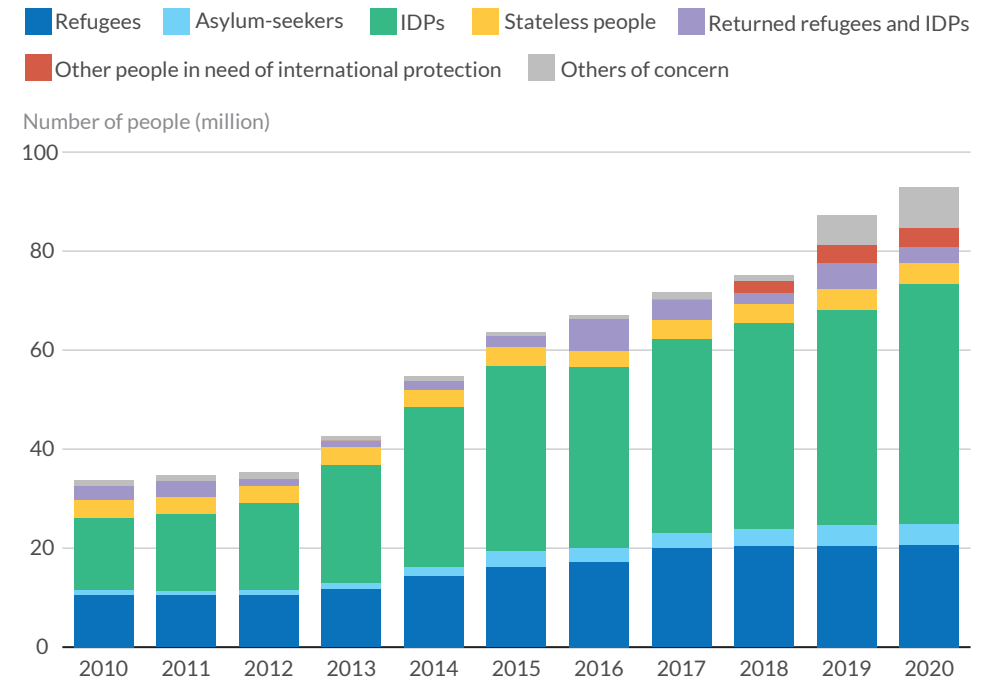
Population type

People forced to flee worldwide | 2014 - 2023



Source: UNHCR Refugee Data Finder
© UNHCR, The UN Refugee Agency

Persons who are forcibly displaced, stateless and others of concern to UNHCR | 2010-2020



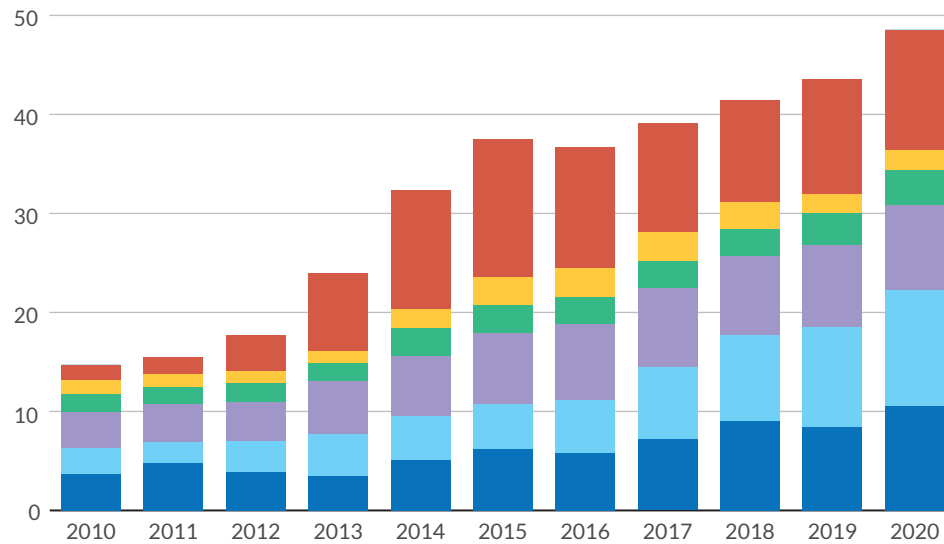
Source: UNHCR Refugee Data Finder
© UNHCR, The UN Refugee Agency

UNHCR regions

IDPs of concern to UNHCR by region | 2010-2020



Number of people (million)



Source: UNHCR Refugee Data Finder
© UNHCR, The UN Refugee Agency

