



**THE REVISED CONSUMER
PROTECTION INDICATOR:**

Evaluating national
legislative and
regulatory frameworks
protecting consumers
from unsafe products



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Background

The UL Safety Index™ is the quantification of the relative state of safety in 187 countries across the world. Based on societal drivers and outcomes related to unintentional injury, the UL Safety Index measures the contributions of national resources and institutions, safety systems and frameworks, and safety outcomes. The consumer protections indicator (CPI), one indicator within the Safety Frameworks driver, addresses the extent to which 99 nations of the world have established the legislative and regulatory frameworks necessary to ensure the proper protection of their citizens from the hazards of the consumer products they purchase and use. The CPI takes into account the protective measures mandated by law in a country, such as the adoption of product standards, required marking and labeling of products, market monitoring and surveillance schemes, recall programs and oversight by regulatory agencies.

Methodology

The CPI score for each country is computed as a total value of the individual reported consumer product protective measures in place, each weighted according to the consensus of a panel of product safety experts. The presence or absence of each consumer product protective measure was determined from the responses to the Consumers International (CI) Consumer Protection Survey 2017. The weighting factors representing the relative protective value of each protective measure were determined by consensus of a panel of international consumer product safety experts.

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CI Consumer Protection Survey

The presence or absence of protective measures was determined through the responses to CI State of Consumer Protection Survey.¹ CI is a world federation of consumer groups that represent consumer interests through a variety of organizational models, including nonprofit advocacy, political action groups and government agencies. In partial fulfillment of its mission, CI conducts a regular survey of its membership to assess the state of consumer protection measures around the world. Specifically, the survey addresses the following consumer protection measures:

- General laws relating to safety of consumer products
- Specific legislation relating to the marketing and sale of specific products, e.g., toys
- Voluntary and mandatory standards
- Labeling of products
- Institutions/agencies that regulate safety aspects of products and services in the market
- Bans on the supply of unsafe goods
- Mechanisms to prohibit the entry of products banned elsewhere into national markets
- Public service announcements to alert consumers to the presence of unsafe consumer products in the market
- Voluntary and mandatory product recall systems
- Market monitoring/surveillance schemes

Representatives of governmental bodies; consumer organizations; and testing, inspecting and certifying enterprises from 99 nations responded to the CI survey. Underwriters Laboratories funded the survey in 2017.

Interpreting the results of the CI Consumer Protection Survey

Twenty multiple choice items from the CI survey were used to determine the presence or absence of 62 potential consumer product protective measures. Only survey items that directly address legislative and regulatory based protective measures were included; items not addressing legislative and regulatory protective measures, such as civil law proceedings or items of a purely aspirational basis, were excluded. Since there were multiple responses from a single country in some cases, a rule for determining the presence of a measure was required. The simple rule of majority wins was selected: The preponderance of responses determined the presence or absence, with a tie vote going in favor of the presence of a measure.

Determining weighting factors

The weighting factors applied to the consumer product protective measures were developed by an international panel of experts using a modified Delphi technique. Our modified Delphi technique utilized a two-stage web-based survey process to arrive at consensus weights for each of the 62 protective measures. Due to the large number of consumer product protective measures that required weighting factors, the 62 protective measures were divided among two subgroups of five and four members respectively with each subgroup handling half the weighting, i.e., 31 measures.

In the first stage, experts were asked to apply a weight to each of 31 potential consumer protective measures on a five-point scale from zero to four (where zero = no protective value and four = the greatest level of protection) and provide a brief rationale (250 words or less) for their decision. Each expert was then provided with a consolidated report detailing the weights and rationale submitted on each of the 31 mechanisms. This consolidated report included their own weighting and rationale, as well as the anonymous weights and rationale from their fellow panel members (Figure 1).

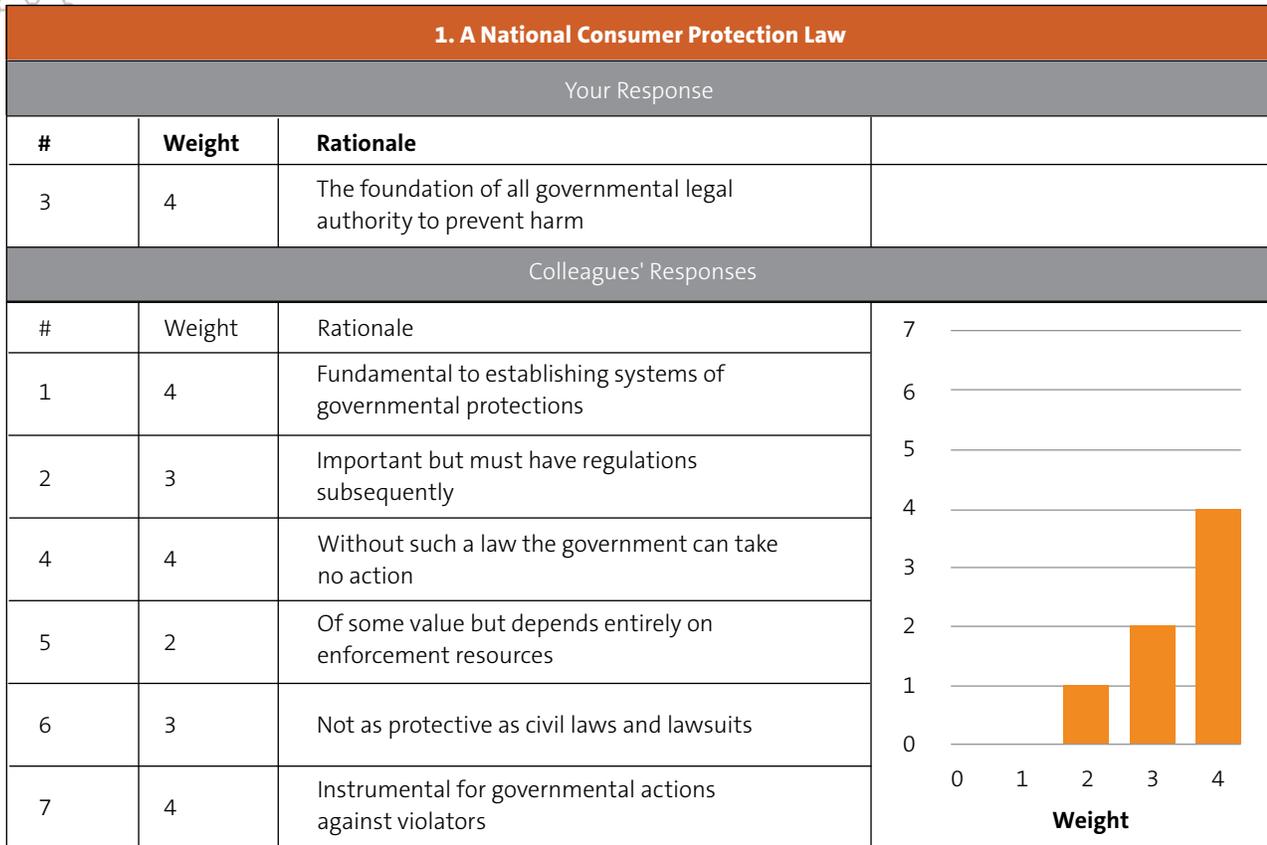
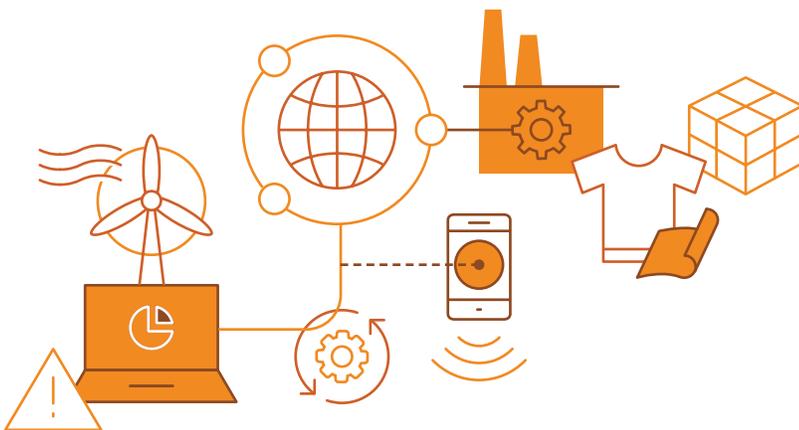


Figure 1: Example page from round 1 consolidated weighting report

After reviewing the report and considering their fellow experts' opinions (weights and the rationale for those weights), each panelist participated in the second and final round of weighting. This second round allowed for adjustments to the weights assigned to each mechanism based on their review of their previous entries and those of their fellow panel members. Since there were only two rounds of weighting, there was no rationale given in this second stage. At the completion of this second stage, the arithmetic mean of all the panelists' weights was entered as the weighting factor for that protective mechanism.



Establishing the CPI score

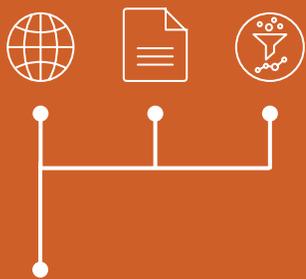
The raw score calculated from the arithmetic mean of the weighted protective mechanisms was then transformed into the CPI score using a min-max normalization on a scale of 0 to 100 using the following equation:

$$\text{Index}_{\text{Country indicator}}^{\text{Country}} = \frac{\text{Country indicator value} - \text{Minimum indicator value}}{\text{Maximum indicator value} - \text{Minimum indicator value}} \times 100$$

Thus, the maximum score for the best performing country is 100, and the minimum score for the lowest performing country is zero.

Limitations

The CI Consumer Protection Survey 2017 provides data on 99 of the 187 nations included in the UL Safety Index, and as consequence 88 nations in the index will have no CPI score. The data taken from the CI survey captures information on the legislation and regulatory actions taken by central governments (de jure protections) and does not contain any information on the adherence to these requirements by the various entities within the country (the de facto protections). Consequently, enforcement or application of the laws is not included in the determination of the CPI score.



The CI Consumer
Protection Survey 2017
PROVIDES DATA ON **99**

OF THE **187** NATIONS
nations included in
the UL Safety Index

Statistics across nations

The CPI was calculated for 99 nations. The scores ranged from a low of zero to a high of 100, with a mean score of 62.29, a standard deviation of 21.56, and a median score of 67.74 (Figure 2).

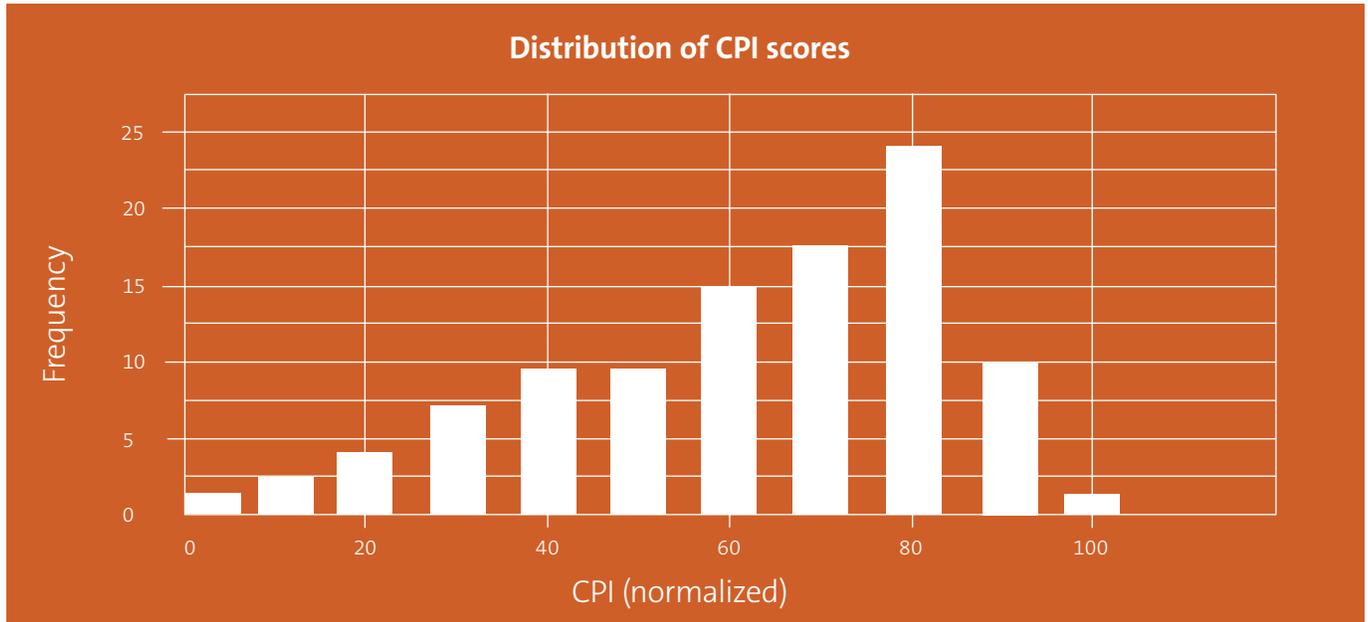
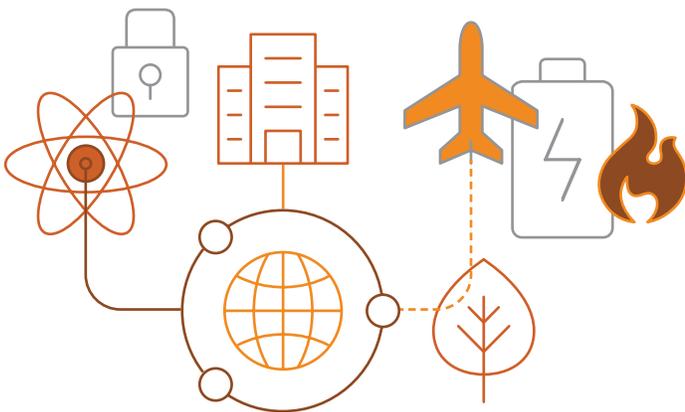


Figure 2: Distribution of CPI scores



Twenty-four nations made up the top quartile with CPI scores above 77.68 (Table 1). These nations came from all categories of U.N. Development status. However, just one nation in the top quartile, Rwanda, was categorized as least developed with the remainder classified as developed (9) or developing (14).



Country	CPI score	Country	CPI score
Netherlands	78.51	Vietnam	85.77
Argentina	78.79	Sweden	86.48
Rwanda	78.85	South Korea	87.00
Belgium	80.15	Turkey	87.43
New Zealand	80.92	Chile	87.53
Spain	81.32	Nigeria	87.71
Lithuania	81.66	Saudi Arabia	88.79
Mexico	82.19	Kenya	89.60
Costa Rica	82.93	Bahrain	92.37
Australia	84.47	United States of America	93.15
Uzbekistan	84.47	Croatia	96.91
Colombia	84.81	Jamaica	100.00

Table 1: Nations with top quartile CPI scores



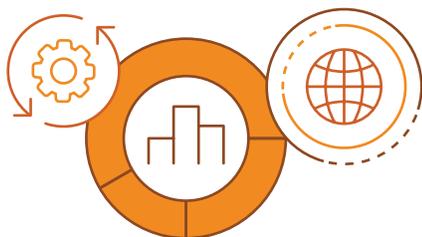
The bottom quartile of nations with CPI scores below 48.04 included 25 countries from across the development scale, including four from the developed classification, 13 classified as developing, and eight as least developed (Table 2).



Country	CPI score	Country	CPI score
Namibia	0.00	China	35.07
Burundi	6.17	Seychelles	35.91
Canada	6.73	Mauritius	36.62
Lesotho	15.96	Chad	38.41
Democratic Republic of the Congo	20.62	Venezuela	40.82
Gambia	24.08	Japan	40.97
Lebanon	29.08	Peru	42.76
Indonesia	29.61	Libya	44.09
Sudan	30.81	United Kingdom	44.09
Pakistan	33.74	Ukraine	45.82
Cabo Verde	33.93	Senegal	46.06
Togo	34.15	Slovenia	48.04
India	34.89		

Table 2: Nations with bottom quartile CPI scores

While at first it may appear that the level of economic development is not associated with CPI score, a simple Spearman's rank correlation was conducted on quartile ranking of a nation against that nation's level of development that indicated a moderate relationship between development status and CPI score. The analysis revealed a positive correlation ($p(97) = 0.27$, $p = .006$), indicating that a higher economic development status is associated with a higher CPI score quartile.



Statistics across protective elements

There is a large variation in the way that different countries protect consumers from unsafe products (Table 3). No single protective measure is in place in all 99 countries. The five most widely implemented consumer product protective measures include: mandatory product safety requirements imposed on importers by law (84 nations); the presence of a market surveillance authority in a country (82 nations); mandatory product safety requirements imposed on manufacturers, or their national representatives by law (82 nations); the use of fines as enforcement action in response to product safety violations (82 nations); and the promulgation of a national consumer protection law (82 nations).

The five least widely implemented consumer product protective measures include: a national internet-based rapid alert system for unsafe consumer products (22 nations); mandatory compliance with any national, regional or international standards, e.g., ISO or IEC, for all products (20 nations); the presence of a system for reporting product safety issues to the relevant authorities for certain products (20 nations); the concurrence of other national provisions, such as public health law, requiring product safety in certain sectors (12 nations); and the availability of voluntary tools to address product safety, e.g., standards (eight nations).

Consumer product protective measures	Implementation
Mandatory product safety requirements imposed on importers by law	85%
A market surveillance authority in a country	83%
Mandatory product safety requirements imposed on manufacturers, or their national representatives by law	83%
Use of fines as enforcement action in response to product safety violations	83%
A national consumer protection law	82%
A national law that defines that a product must comply with all safety regulations and requirements imposed by law	78%
A national law that defines that a product should not harm consumer health and physical safety	75%
A national law that defines that a product must provide information about safe use	75%
Suppliers withdraw existing stock of unsafe products from the marketplace	75%
A national government mandated institution(s) with responsibility for regulating or having authority over product safety	74%
A national government mandated institution(s) with responsibility for standardization for product safety	72%
A national government mandated institution(s) with responsibility for enforcement of product safety	71%
Mandatory product safety requirements imposed on distributors by law	68%
A product safety institution in a country operating as a centralized organization, at the national level	67%
A national law that defines that a product is considered safe if it complies with existing standards	66%



Consumer product protective measure	Implementation
Consumer products certified by an accredited conformity assessment body before being placed on the market, i.e., a test certificate or test report from a third party	66%
Supplier's identification required on the product	66%
Seizure of goods as enforcement action in response to product safety violations	66%
A country coordinates its product safety regulations with other countries	65%
Mandatory compliance with any national, regional or international standards, for example ISO or IEC, for some products	64%
Mandatory product safety requirements imposed on retailers by law	63%
Consumer product suppliers preregistered and approved by authorities	63%
Imported consumer products cleared by customs as safe for the market	62%
Consumers have the ability to submit complaints to the product safety reporting system	62%
Suppliers notify the responsible authorities of products found to be unsafe after they have been placed on the market	62%
A national law that defines that a product should be suitable for use by all consumers, including the elderly, children and people with reduced mobility	59%
A national government mandated institution(s) with responsibility for policy making for product safety	58%
Use of media to provide rapid alerts of unsafe products, e.g., newspapers, TV	57%
Separate national laws or regulations for different product sectors, e.g., one piece of legislation for electrical appliances, another for toys	56%
Consumer products carry a national or regional quality mark, e.g., EC	55%
Official or recognized bodies, e.g., consumer organizations, have the ability to submit complaints to the product safety reporting system	55%
Suppliers institute a program to recall unsafe products	55%
Suppliers may "self-certify" the product as conforming to relevant national or international standards or safety requirements, e.g., ISO, EC	51%
A system for reporting product safety issues to the relevant authorities for all products	51%
A national law that defines that a product must specifically cover foreseeable misuse or similar	49%
A national policy on consumer protection	48%
A general national law on consumer protection with provisions relating to product safety	48%
General product safety awareness programs through newspapers, TV or other media	44%



Consumer product protective measure	Implementation
A country cooperates with the authorities responsible for product safety in other countries through shared market enforcement	44%
Fair compensation to consumers who bought an unsafe product that is recalled or withdrawn from the market	42%
Suspension or revocation of a business license as enforcement action in response to product safety violations	41%
A country cooperates with the authorities responsible for product safety in other countries through a rapid alert system	39%
A general national law on product safety states that only safe products can be placed on the marketplace	39%
Suppliers have the ability to submit complaints to the product safety reporting system	35%
A country cooperates with the authorities responsible for product safety in other countries through sharing the results of market enforcement activities	31%
A regional internet-based rapid alert system for unsafe consumer products, e.g., RAPEX or SIAR	31%
The government supports consumer organizations and/or programs through specific legal provisions/requirements	30%
A national master plan/strategic plan for consumer protection efforts, e.g., 5 or 10 years	28%
A system for collecting data about accidents caused by unsafe products, e.g., through hospitals	28%
Data collected from a system for collecting data about accidents caused by unsafe products is made public	28%
Separate national laws or regulations for individual products, e.g., metal content of children's toys	26%
Consumer products are automatically cleared at customs if they have been certified by a foreign accredited conformity assessment body	26%
The government supports consumer organizations and/or programs through funding to support costs of consumer organization	26%
Second-hand consumer products are required to be safety tested before being placed on your market	24%
A publicly accessible system for assessing the risk of a possibly unsafe product, e.g., the RAPEX Risk Assessment Guidelines	24%
Use of imprisonment as enforcement action in response to product safety violations	23%
Suppliers make repayment of any testing or legal costs that the authority has incurred during its investigation into a product found to be unsafe	22%
A national internet-based rapid alert system for unsafe consumer products	22%
Mandatory compliance with any national, regional or international standards, for example, ISO or IEC, for all products	20%
A system for reporting product safety issues to the relevant authorities for certain products	20%
Other national provisions, such as public health law, requiring product safety in certain sectors	12%
Voluntary tools available to address product safety, e.g., standards	8%

Table 3: Implementation of consumer protective measures across nations

Conclusion



The newly revised consumer protections indicator addresses the extent to which a nation has implemented the legislative and regulatory mechanisms necessary to protect its citizens from the hazards of consumer products. A method of arriving at a consensus of a panel of international experts on consumer product safety was established to develop a weighting factor representing the relative protective value of the consumer product protective measures in place in a nation. These weights were applied to those protective measures in place in the 99 nations for which data was available. These weighted values were summed within each nation to determine the consumer protection's raw score for that nation. These raw scores were then normalized to create the CPI score. Some limitations on the CPI are observed, most notably the absence of data for 99 of the countries included in the UL Safety Index, and the lack information on the application to these legal and regulatory requirements within each nation scored (the de facto protections).

There is a large variation across the approaches the 99 countries take to protect consumers from unsafe products. No single protective element is present in more than 84 nations, and the availability of voluntary tools such as standards to address product safety occurs in only eight nations. In between these two extremes, we see adoption rates for protective measures ranging from 83% to 12 %. There is a moderate relationship between U.N. Development status of a nation and its CPI score, but we still see great variation here as well with one least developed status nation in the top quartile of scores and one developed nation in the bottom quartile. CI sums the situation up in the executive summary of its report on the 2017 survey when it describes the current global situation as a fragmented system that still struggles to respond effectively to the product safety challenges of the 21st century.

For more information about the UL Safety Index™, visit [ULSafetyIndex.org](https://www.ulsafetyindex.org)

End Notes

1. For more information on the CI survey and the results see "The Challenge of Protecting Consumers from Unsafe Products: A Global Picture." May 2018. Consumers International, London.

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