

Health and Life Sciences

Advancing the development of safe, compliant medical products and systems.

Within UL Solutions we provide a broad portfolio of offerings to many industries. This includes certification, testing, inspection, assessment, verification and consulting services. In order to protect and prevent any conflict of interest, perception of conflict of interest and protection of both our brand and our customers brands, UL Solutions has processes in place to identify and manage any potential conflicts of interest and maintain the impartiality of our conformity assessment services.



Safety. Science. Transformation.™

Enabling safety, compliance and sustainability for medical innovation

Health and life sciences companies must streamline regulatory affairs, manage cybersecurity risks, build a skilled and competent workforce, enhance supplier risk management and strengthen ESG management capabilities to develop safer, compliant medical products and systems.

Our safety science expertise and software enable industry innovators across the medical product lifecycle in overcoming critical challenges and developing safer, more effective products that empower users globally.



Market access

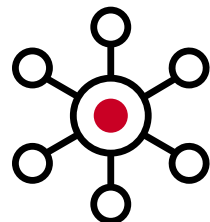
- Product and process development
- Testing and certification
- Regulatory readiness and compliance



Cybersecurity



Supply chain resilience



Workforce training and competence



ESG stewardship





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Challenges for health and life sciences industry innovators

Advances in medical technology and associated safety risks along with the lack of regulatory expertise and software capabilities complicate paths to market and device delivery for customers. Before you can bring safer, more sustainable and compliant medical products to market, there are critical industry challenges to overcome such as lack of regulatory compliance automation, evolving cybersecurity risks, expertise gaps in workforce training and poor supplier risk management.

We help health and life sciences companies:



Automate regulatory affairs

Streamline compliance with digital tools and create global market access strategies with Emergo by UL experts.



Manage cybersecurity risks

Demonstrate safety for users and industrial systems through testing, certification and evaluation of connected devices.



Expand supplier visibility

Build greater visibility into suppliers and materials for quality and risk management.



Innovate product development

Leverage human factors (HF) expertise and software from Emergo by UL for safer, user-centric medical products.



Build qualified workforces

Create automated and role-based training programs to reduce noncompliance risks and increase workplace safety.



Elevate ESG performance

Navigate ESG frameworks and streamline data collection, reporting and disclosure.

Market access



Streamline your market access journey

Gaining market access for health and life sciences companies involves:

- User-centered product development
- Rigorous testing for product safety, effectiveness and usability
- Regulatory certification for compliance with industry and market standards
- Expert knowledge of complex global legislation
- Streamlined regulatory processes

Our expertise and robust software help customers streamline regulatory affairs and compliance management. Our testing and regulatory certification services help demonstrate compliance with product safety, performance and usability standards and market regulations.

Market access challenges



Digital health proliferation

The rise of digital health products is leading to advanced forms of risks.



Expertise gaps

Firms may not have the in-house resources required to develop user-centric products or the regulatory expertise and work force training to avoid quality and safety issues.



Complex regulatory climate

Inadequate strategic regulatory planning, automation tools and local expertise can hinder market access.



Higher user expectations

Consumers dismiss products that do not provide a good user experience.

35%

U.S. adults use wearable healthcare devices at least once per day

Source: [Adults use health apps and wearables 2023](#)

14%

Rise in medical device recalls in 2024, driven by stricter regulations and enforcement

Source: [Medical Device Recalls 2024](#)

34%

Of medical product recalls are due to poor design controls

Source: [MedTech Quality Costs](#)

Product and process development

Leverage our HF expertise to develop safer, more effective and more usable medical products.



Mitigate use-related risks

Develop usable medical products with clear instructions to reduce risks to patients and users and build user trust.



Reduce costly redesigns

Confidently deliver safer, more effective and usable products, and reduce the risk of recalls.



Meet regulator expectations

Comply with human factors engineering (HFE) requirements to access global markets.



What we offer



HFE and Usability Consulting

The Emergo by UL team provides comprehensive HFE and usability support throughout the development and evaluation of:

- Medical devices
- Combination products (devices containing drugs)
- In vitro diagnostic devices (IVDs)
- Software as a medical device (SaMD)

Services include:

- User research and analysis
- User interface design consulting
- Usability testing
- HF training
- Corrective and preventive actions support

Optimal Product Usability Suite (OPUS™)

Empower your medical device customers to perform HF activities in compliance with regulatory requirements and industry standards.

OPUS is Emergo by UL's HF software as a service (SaaS) platform, which delivers:

- Quick access to HFE expertise
- Regulatory guidance
- Project planning
- Training and instructor-led courses
- Tools and templates

Stages

Develop digital ecosystems supporting accelerated time-to-market and software-centered product development approaches.

Stages process management software from UL Solutions enables customers to:

- Streamline software-driven medical devices and technology product development processes
- Reduce development time with established process templates
- Decrease the risk of noncompliance with safety, security and other quality standards and regulations



Testing and certification

We conduct rigorous product evaluations and independent testing and provide regulatory certification services to help health and life sciences customers demonstrate compliance with market requirements and industry standards.



Verify product safety and performance

Deliver safer, higher-performance medical devices by meeting regulatory requirements and industry standards.



Meet market access requirements

Use testing and regulatory certification results to reach users and patients globally with confidence.



Demonstrate electromagnetic compatibility (EMC)

Meet EMC regulations and mitigate risks of electromagnetic interference.



Support safety claims of wearable or implantable devices

Leverage our biocompatibility testing capability to demonstrate user safety.



What we offer



Medical Device Safety and Performance

Demonstrate safety and performance claims through our rigorous product evaluation, independent testing and certification services. Assess your products according to health and life sciences regulatory requirements and industry standards such as:

- IEC/AAMI 60601 for medical electrical equipment
- IEC 61010, Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use
- IEC 62304, Medical Device Software – Software Life Cycle Processes



Medical Device Packaging Testing

Medical products must also meet standards for safe packaging, transportation and storage to maintain product quality and stability during shipments to and within markets.

We offer packaging validation and stability testing according to standards such as ISO 11607-2:2019, Packaging for terminally sterilized medical devices. Testing covers:

- Seal integrity
- Sterility
- Qualification of packaging materials
- Air permeability

Medical Device EMC Testing and Evaluation

Electromagnetic interference can pose severe risks to patients. UL Solutions conducts comprehensive evaluations of electromagnetic compatibility (EMC) and wireless technologies in medical products, providing comprehensive assessments, testing and certification services to help customers address:

- Conformance to the IEC 60601-1-2 standard for safety and essential performance
- Demonstrating compliance with global market access requirements
- EMC regulations for medical devices in specific markets, such as the United States, European Union and Canada





Restricted Substances Testing and Advisory Services

Demonstrate compliance with fast-changing laws and regulations that prohibit or limit the use of chemicals and substances.

Use test results to support efforts to:

- Reduce the use of restricted materials in their product manufacturing
- Lower the risk of noncompliance to requirements such as:
 - The Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) regulation
 - The Restriction of Hazardous Substances (RoHS) regulations covering hazardous chemicals



SaMD and Health Software Certification

The proliferation of software as a medical device (SaMD) and health software presents new risks to patients and users. Companies must define their SaMD development processes and safety requirements in advance.

We provide testing, evaluation and certification services to key industry standards:

- IEC 82304-1
- IEC 60601-1 part 14
- IEC 62304

Healthcare Personal Protective Equipment (PPE) Testing

Evaluate whether your PPE performs as expected to help protect the safety of workers, patients and visitors against contamination.

PPE testing and certification services:

- Biological resistance
- Chemical resistance
- Protective ensemble
- Protective hand and footwear
- Medical and surgical face mask
- Gown and drape



Regulatory readiness and compliance

Our global network of regulatory experts, automation capabilities and local expertise help health and life sciences customers reduce market access complexity and take their medical innovation and products to users globally.

Our global network of consultants guides our health and life sciences customers through the latest regulatory updates and requirements, including:



Global medical market expertise in 20+ countries



Product registration support for 100,000+ products



Regulatory compliance automation with widely used software



Quality management system (QMS) implementation



In-country representation services



What we offer

Medical Device and IVD Regulatory Affairs and Quality Consulting

Emergo by UL's network of consultants helps customers achieve their market access goals in more than 20 countries across North and South America, Europe and the Middle East, Asia and Australia.

The Emergo by UL team helps medical device and IVD manufacturers:

- Solve complex regulatory challenges
- Understand global regulatory requirements
- Develop and execute customized medical device market access strategies
- Maintain compliance with post-market requirements

Global Registration Consulting for Medical Devices and IVDs

Medical device and IVD companies must register their products with regulators in their target markets. Our worldwide network of regulatory experts helps customers:

- Prepare application materials, such as technical and clinical data
- Register devices across North and South America, Europe, Asia and Australia

In-country Representation for Medical Device Manufacturers

Medical device and IVD companies without a local presence in their target markets must appoint an in-country representative.

Emergo by UL provides professional local in-country representation for more than 2,000 medical device and IVD companies in more than 15 countries, helping customers:

- Communicate with regulatory authorities
- Maintain compliance
- Respond quickly to local regulatory changes
- Manage medical device registrations
- Perform post-market surveillance and vigilance obligations

Regulatory Affairs Management Suite (RAMS®)

Automate regulatory affairs processes and leverage our medical device intelligence according to market, device type and classification.

RAMS software from Emergo by UL also includes:

- Digital quality management tools
- Regulatory tracking
- Registration application capabilities for multiple markets

Medical Device Post-market Surveillance

Regulators usually require registrants to meet post-market surveillance (PMS) obligations to maintain compliance. However, PMS rules can vary between medical device markets, requiring manufacturers to develop tailored rather than one-size-fits-all approaches.

With deep expertise in global post-market surveillance requirements, Emergo by UL can help:

- Design and implement a PMS system according to the legislation in multiple markets
- Navigate regulatory challenges throughout the device lifecycle
- Act as a compliance partner long after the device goes on the market



ULTRUS™ WERCS Studio Chemical Data and Compliance Management

Our ULTRUS™ WERCS Studio enables health and life sciences customers to automate and centralize data to streamline chemical compliance processes and simplify the management of environmental, health and safety (EHS) initiatives.

- Intelligently share, analyze and manage your product-related data across your supply chain
- Easily assess materials, create and distribute compliance documents for your products
- Access current regulations in our global regulatory content database with more than 8,000 regulatory lists and data on more than 600,000 substances
- Connect with our global team of 70+ regulatory and software experts, ready to help you meet requirements, improve accuracy and reduce compliance risk



ULTRUS™ ChemADVISOR® Chemical Regulatory Database

ULTRUS™ ChemADVISOR® provides a single source of substance-specific data points health and life sciences companies can use for hazard assessment and product compliance around the world.

- Contains chemical regulatory data on more than 600,000 substances and more than 8,000 regulatory lists from over 130 countries
- Chemical-level regulatory data and content needed to generate safety data sheets (SDSs) and labels
- Available as a data feed, through online web access, API data access portal or for use in SAP when creating SDSs

Chemical Regulatory Advisory Services

Along with our software offerings, we provide expert advisory support to help health and life sciences companies achieve necessary chemical regulatory compliance.

Our global network of subject matter experts collaborates with customers to:

- Identify chemical registration and compliance actions
- Create compliance documents
- Toxicity study report evaluations

Why choose UL Solutions for global medical market access?



Emergo by UL's global market access consulting team provides medical device and IVD regulatory expertise across more than 20 markets to help device companies maintain and expand market reach around the world.



Emergo by UL's HF team has helped customers bring hundreds of new medical products to market, satisfying regulatory and commercial imperatives in the process.



Emergo by UL has expertise in U.S. FDA and other regulators' HFE and usability requirements, as well as in international HFE standards for medical products.



Emergo by UL medical device and IVD regulatory management software is used by more than 15,000 companies for digital compliance and regulatory intelligence support.



Emergo by UL regulatory affairs consultants have helped customers register more than 100,000 medical devices and IVDs in markets worldwide.

Cybersecurity



Protect your connected devices and systems

The proliferation of connected medical products and the Internet of Medical Things (IoMT) have changed healthcare delivery systems around the world, increasing cybersecurity vulnerabilities that can pose serious risks to patient safety and privacy.

With our safety science expertise, testing and certification services, and a global team of experts we empower customers to integrate cybersecurity across their medical product and software lifecycle.

Challenges to delivering secure products



Volume of cyberattacks

Data theft and ransomware attacks against healthcare providers are on the rise.



High cost of data breaches

Patient data breaches have major financial impacts on health and life sciences firms.



Industrial Internet of Things

The Industrial Internet of Things (IIoT) is driving customers to smart factories, increasing cybersecurity risks.



Delayed product launches

Finding cybersecurity issues later in the product lifecycle can affect secure product launches.

\$9.77 million (USD)

Average cost per data breach for the healthcare sector is the highest across all industries

Source: [Riskiest Connected Medical Devices Revealed](#)

53%

Of digital medical products contain at least one critical vulnerability

Source: [Riskiest Connected Medical Devices Revealed](#)

1.6%

Of Operational Technology (OT) and IoMT devices are classified as "high-risk"

Source: [Cyber threat landscape statistics 2024](#)

264%

Increase in ransomware attacks for healthcare firms over the past five years

Source: [Healthcare Security in 2024: The Cyberthreat Landscape](#)

Why choose UL Solutions for cybersecurity readiness?



Regulatory support and expertise

Meet regulatory requirements with documentation, vigilance and cybersecurity testing.



Software security for network-connectable products

Integrate security requirements into your software and meet cybersecurity standards.



Industrial cybersecurity support

Meet global regulations and reduce vulnerabilities in your industrial systems.



Information security management

Strengthen your security posture and demonstrate proper security processes for business and customer data.



What we offer



Medical Device Cybersecurity Certification

We offer third-party validation of whether products and systems provide reasonable protection against cybersecurity risks. Our support spans the entire device lifecycle, helping verify that your submissions are complete, standardized and aligned with regulatory requirements.

Certification includes:

- Cybersecurity documentation
- Risk-based security approaches
- Software Bill of Materials (SBOM) development
- Post-market security management
- Cybersecurity testing

Cybersecurity Assurance Program (CAP)

The Cybersecurity Assurance Program (CAP) is a certification scheme that delivers testing and certification services based on standards recognized by the U.S. FDA and IMDRF (International Medical Device Regulators Forum).

Completing the following certifications provides customers with relevant evidence for cybersecurity compliance with regulators while enabling cybersecurity risk management and the validation of cybersecurity processes in their chosen markets:

- The UL 2900 Series of Standards, covering software security for network-connectable products
- IEC 81001-5-1, covering IT security requirements to be integrated into the software lifecycle, supplementing existing standards like IEC 82304-1 and IEC 62304

Medical Device Penetration Testing

UL Solutions provides penetration testing and vulnerability assessments for medical device manufacturers, including embedded devices, components and software.

We tailor testing to the specific medical product, component or software being evaluated, rather than a generic or unfocused testing process, by starting with threat modeling and extending to a structured penetration testing approach.

Testing includes:

- Vulnerability scanning
- Binary analysis
- Examination of security controls
- Protocol and packet analysis of communications and cryptography attacks



Workforce training and competence



Build a culture of proactive quality with integrated learning

Mitigating compliance risks and maintaining quality in an ever-evolving technological and regulatory landscape requires skilled teams and powerful tools.

We support our health and life sciences customers with automated, role-based training and compliance management programs to build competent workforces.

Failing to act early could lead to a decline in market competitiveness.



Reduced healthcare access

Facility closure and production disruptions can impact patient access.



Product recalls

Poor manufacturing standards and practices can cause costly product recalls.



Good Manufacturing Practice (GMP) decertification

Corrective actions can be costly and cause commercialization delays.



Loss of brand trust

Poorly sourced ingredients and recalls may negatively affect brand reputation.

15%

Of product recalls are due to poor production and process controls
Source: [MedTech Quality Costs: More than 'license to operate'](#)

23%

Of product recalls are caused by poor labeling and packaging
Source: [MedTech Quality Costs: More than 'license to operate'](#)

2.7

Injury- or illness-related incidents per 100 workers occurred in 2022
Source: [Federal OSHA Coverage Commonly Used Statistics](#)

Why choose UL Solutions to build a qualified and compliant workforce?



Create standardized processes

Make your manufacturing processes and procedures consistent and reliable across sites.



Comply with evolving regulations

Access up-to-date training courses for compliance with Good Practice (GxP), Health Insurance Portability and Accountability Act (HIPAA), Occupational Safety and Health Administration (OSHA), American National Standards Institute (ANSI) and more.



Train for high-risk processes

Create specialized training programs for processes such as sterilization, biologics manufacturing, etc.



Build human factors expertise

Train qualified personnel on HFE topics.

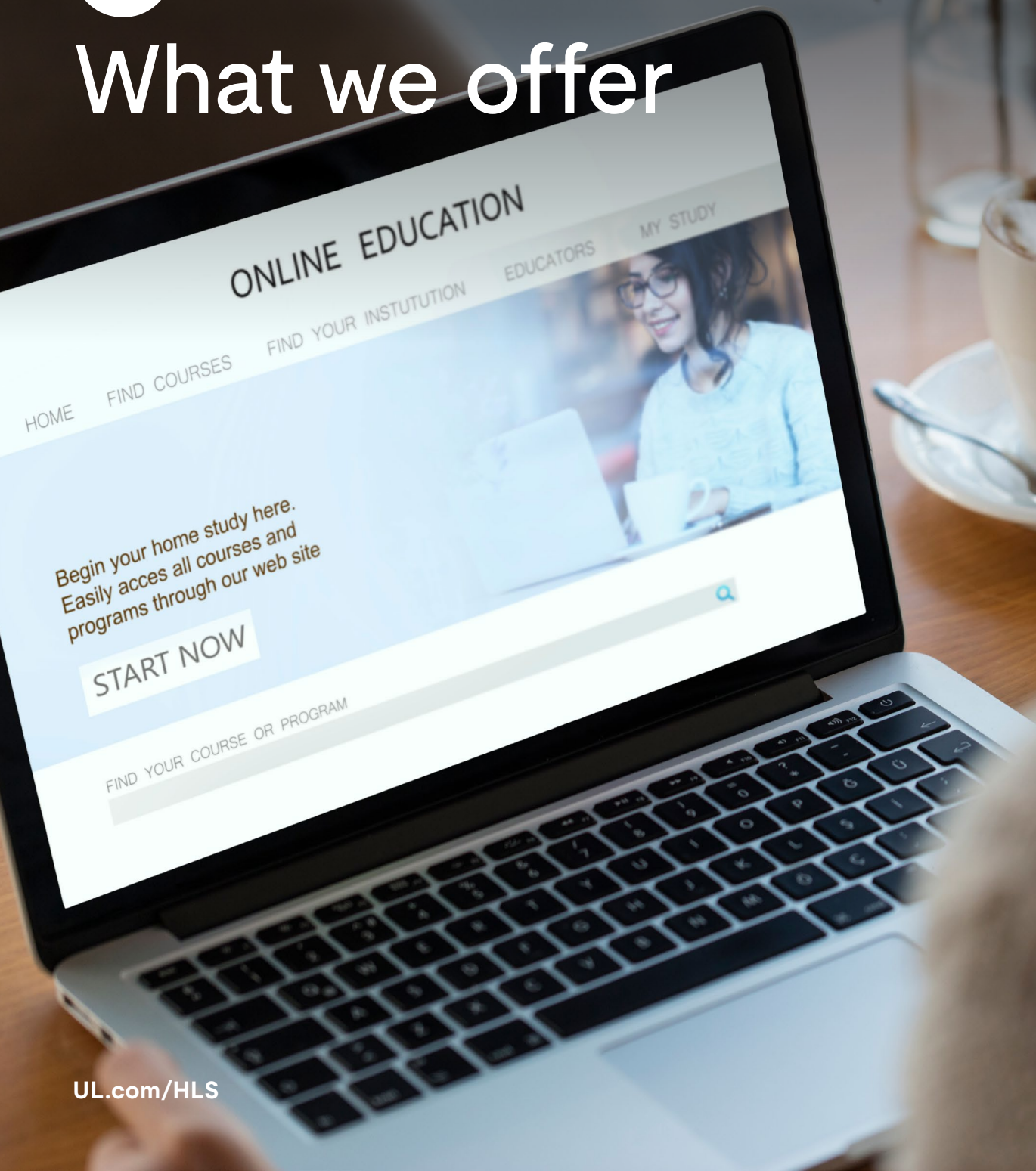


Create custom training materials

Enable subject matter experts to create customized courses for employees.



What we offer



ULTRUS™ ComplianceWire®

Learning and Qualification Management System

Equipped with ULTRUS™ ComplianceWire®, a validated and 21 CFR Part 11 compliant learning and qualification management system, health and life sciences companies gain access to powerful tools designed to help you uphold the highest standards of compliance:

- Secure auditing of communications for impeccable records
- LMS technology used globally by pharmaceutical, medical device and biologics companies as well as regulatory authorities in the U.S., China and India
- E-learning library featuring more than 50 courses developed in collaboration with the U.S. FDA.

ULTRUS™ LearnShare™ On Demand

Our ULTRUS™ LearnShare™ On Demand platform features on-demand training courses covering EHS, healthcare, pharmaceutical GMPs, pharmacovigilance and more.

Designed by our award-winning team of certified safety specialists, industry subject matter experts and learning and development professionals, course content reflects:

- Subject matter research
- Evolving regulatory standards
- Industry best practices



ULTRUS™ LearnShare™

Learning Management System

Health and life sciences companies can develop tailored compliance training and competency programs with ULTRUS™ LearnShare LMS.

Capabilities include:

- Tools for knowledge and skill assessment
- Social learning to support peer-level knowledge and skill sharing
- Performance management
- Competency management

ULTRUS™ Course Create

For companies seeking to develop customized health and life sciences training materials, we offer the ULTRUS™ Course Create rapid authoring tool.

- Enables subject matter experts, compliance officers, staff or other stakeholders to create employee process training
- Develop custom training content using our sharable content object reference model (SCORM) technology
- Customize ULTRUS ComplianceWire® content for your company or facility



HFE Training and Consulting

Emergo by UL offers expert training programs to educate health and life sciences teams on the benefits of HFE for end-users, healthcare professionals and manufacturers.

Customize in-person workshops, virtual webinars and insights from industry experts to enhance the HFE knowledge on topics such as:

- A specific HFE area, e.g., regulatory imperatives and usability testing
- Cover a full suite of HFE topics
- Or highlight points on the overall process, such as regulatory expectations, risk management, research and design considerations



Supply chain resilience



Enhance supplier risk management

Stakeholders demand more transparency to identify supplier and process-related risks that can impact patient safety and balance sheets.

We empower customers with supplier qualification tools, product insights and audit services to reduce supply chain risks by increasing visibility into supplier data, quality and compliance.

Roadblocks to mitigating supply chain risks and disruptions



Expertise gap

Lack of expertise in supplier risk assessments lead to frequent quality failures.



Lack of visibility

Poor visibility into supplier compliance and qualifications creates disruptions.



Inadequate product insights

Source material verification and diversification require digital capabilities.

52%

Of manufacturers want more collaboration with suppliers to better manage supply chains

Source: [Global Life Science Supply Chain Risk Report 2023](#)

33%

Of firms want higher-grade data to improve supply chain management

Source: [Global Life Science Supply Chain Risk Report 2023 - WTW](#)

59%

Of operational technology (OT) and IoMT devices are classified as "high -risk"

Source: [Global Life Science Supply Chain Risk Report 2023](#)

33%

Of firms cite product complexity as a key factor in supply chain risks

Source: [Global Life Science Supply Chain Risk Report 2023](#)

Why choose UL Solutions to enhance supplier risk management?



Resilient supply chain

Mitigate the risks of product quality issues or supply disruptions.



Supplier qualification

Manage qualification standards for suppliers and improve quality outcomes with audit readiness.



Product insights

Assess the sustainability attributes of materials, components and products with our digital platforms.



Audits and inspections

Verify suppliers' regulatory and quality compliance with our third-party services.



Sourcing and certifications database

Support continuous operations and compliance with our extensive UL Product iQ[®] product sourcing and certifications database.



What we offer

ULTRUS™ ComplianceWire®

Supplier Qualification Software

Our ULTRUS™ ComplianceWire® supplier qualification software is natively compliant with 21 CFR Part 11 standards, helping health and life sciences companies:

- Monitor component and material suppliers
- Track compliance and qualification
- Generate audit-ready reports for regulators and other stakeholders
- Assess supply chain risks
- Scale training with our quality and compliance courses, 150 of which are developed in direct collaboration with the U.S. FDA.

Supplier Quality Audits and Certifications

As an accredited Conformity Assessment Body, we perform third-party supplier quality audits and inspections to help health and life sciences companies reduce supply chain risks and verify supplier compliance with applicable regulations and standards.

Demonstrate conformance to:

- ISO standards
- UL Retail Certification Program (RCP®)
- UL National Brand Certification Program
- The Code of Federal Regulations (CFR) and regional requirements through GMP certification
- Others

ULTRUS™ Prospector®

Material Discovery

Our ULTRUS™ Prospector® is a digital search engine enabling companies to rapidly scan over 260,000 materials across 10 industries to source materials and ingredients for medical and healthcare products.

- Verify source material compliance with pertinent regulations
- Identify alternate sources to diversify supply chain networks
- Mitigate the risk of medical product shortages
- Analyze ingredient-level compliance information for over 200 global regulatory and advisory lists and 30 international retailer lists



ULTRUS™ PurView®

Product and Supplier Scorecard

As part of ULTRUS™ software, the PurView® product and supplier scorecard can help health and life sciences customers:

- Implement their chemical policy by screening ingredients for substances of concern based on validated data
- Evaluate ingredients, input materials and manufacturing processes for sustainability and social responsibility
- Curate and develop healthier, more sustainable products to build trust with your customers and differentiate in the market
- Achieve greater safety, compliance and business outcomes
- Connect with end consumers to drive sales of sustainable products

ULTRUS™ Product iQ® Product Sourcing and Certifications Database

Our ULTRUS™ Product iQ product sourcing and certifications database enables health and life sciences companies to verify that products have obtained UL safety certification.

It combines data from the Online Certification Directory, Product Spec and several iQ databases into one streamlined experience, helping users:

- Verify UL certification of products and components
- Locate UL Solutions guide information
- Search for alternative certified medical products



ESG stewardship



Elevate your ESG performance with our expertise and software

The evolving environmental, social and governance (ESG) reporting landscape requires substantial resources from health and life sciences companies to maintain pace.

Implementing effective ESG management can help maintain compliance and unlock competitive advantages. With our deep technical expertise, we help companies provide accurate ESG information to regulators, customers, investors and beyond.

It is crucial for companies to:

- Identify their material ESG topics
- Equip themselves with tools to measure and report their ESG performance
- Devise ESG strategies aligned with global and regional requirements

ESG reporting challenges for health and life sciences companies



Navigating evolving reporting requirements

As ESG reporting requirements proliferate, companies may find it challenging to acquire and report the necessary ESG information in a complete, accurate and timely manner.



Extension of ESG management responsibilities across the value chain

As it becomes crucial for companies to manage aspects such as supplier due diligence and Scope 3 emissions, companies may find it challenging to identify, capture and manage value chain partner performance.



Provision of assurance ready reporting

As assurance of ESG information becomes more common place, companies may find it challenging to achieve intended assurance outcomes.

75%

Of firms still in the early stages of ESG assurance preparedness

Source: [KPMG](#)

70%

Of Asia Pacific companies expecting ESG criteria to grow in importance

Source: [Bain & Company](#)

1 in 4

Companies are prepared to obtain independent assurance on their reported ESG data

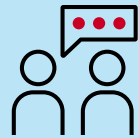
Source: [KPMG](#)

Why choose UL Solutions for ESG management?



Industry leading ESG reporting software

Leverage our Carbon Disclosure Project (CDP) accredited software, which is also recognized as market leader by Verdantix.



Decades of experience

Serving our customers' ESG management needs, we bring deep technical expertise to the business-critical challenge of providing accurate ESG information to regulators, customers, investors and beyond.



Automated ESG data management

Simplify and streamline ESG data collection, reporting and disclosure activities.



Third-party verification readiness

Make your data audit-ready and streamline verification with transparent data overviews.



Carbon measurement and tracking

Calculate your emissions in conformance with standards and regulations using our calculation engine and emission factor library.



What we offer



ULTRUS™ UL 360 ESG Data Management and Sustainability Software

Our ULTRUS™ UL 360 software helps health and life sciences customers simplify and streamline ESG and sustainability data collection, management, reporting and disclosure activities.

- Offers third-party verification readiness, automated ESG data management, streamlined CSRD data integration, comprehensive carbon tracking and measurement and a seamless user experience
- Data quality management features support accurate data for auditors and investors
- Multiple add-on modules can enhance your reporting efforts, including scope 3, incidents, supplier audits and more
- Aligns with leading ESG standards and frameworks
- Has received repeated recognition from Verdantix and Environment + Energy

ESG Advisory and Assurance Services

We offer a wide range of services to help health and life sciences companies develop ESG management program that meets their business needs:

- **Mobilize**
Establish and reinforce ESG performance programs
- **Measure**
Build robust approaches for measuring ESG performance
- **Manage**
Define ESG performance policies, targets and actions
- **Report**
Manage content for internal and external ESG reporting
- **Assure**
Assurance of data and content for ESG reporting

Verification and pre-verification engagements are conducted independently from advisory services.

Zero Waste to Landfill Validation

Our Zero Waste to Landfill (ZWTL) and Landfill Waste Diversion services validate companies' claims of environmentally responsible waste management. Through the ZWTL service, companies can achieve one of the following designations to UL 2799, the Standard for Environmental Claim Validation Procedure (ECVP) for Zero Waste to Landfill:

- **Platinum**
Consistently achieved landfill waste diversion rate of 100%
- **Gold**
Landfill diversion rate of 95%-99% or greater
- **Silver**
Landfill diversion rate of 90%-94%

Circular Economy Services

Our circular economy services help health and life sciences customers transition from traditional medical and healthcare production cycles to circular economies, emphasizing resource reduction and recycling processes.

Bring circularity to your business by measuring and reporting circular economy aspects with UL 3600 Standard for Measuring and Reporting Circular Economy Aspects of Products, Sites and Organizations certification. Evaluate material flows across three dimensions:

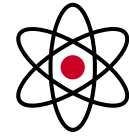
- Product
- Facility
- Enterprise

Leverage our **Circularity Facts™** Report

- Get a visual representation of your circularity efforts
- Expand your scope accordingly



Why health and life sciences companies choose UL Solutions



Science-first focus

As a global leader in applied safety science, our work puts the scientific method at the center of everything we do. We rigorously adhere to the principles of objectivity and observation to lead us towards discovery and innovation. Our commitment to safety science is reflected in our investments in new testing laboratories, a strong network of technical and regulatory experts, health and life sciences thought leadership, sustainability and more.



Empowered innovation

We offer safety science expertise, rigorous testing and certification and powerful software to support our customers meet the challenges of bringing innovative, safer and more sustainable medical products to highly regulated global markets. Our testing and certification services help customers demonstrate compliance to product safety, performance and usability standards. We also offer expertise and software to support regulatory affairs, cybersecurity risk management, supply chain resilience, workforce training and ESG management.



Navigating global compliance with localized support

Whether securing U.S. FDA clearance and approval, navigating the EU's medical device regulation (MDR), adhering to Asia Pacific healthcare legislation or looking for regulatory resources in Latin America, our team provides the tools and expertise to help our customers transform market access challenges into opportunities for growth and innovation.



Enabling secure and compliant medical technology development

From wearable health monitors to connected medical devices, we support our customers in delivering safer, more secure technologies. Build trust with users and demonstrate compliance with global standards, regulations and industry best practices.



Trusted presence in technical committees

Position your team at the forefront of medical innovations, the latest regulatory updates and other healthcare advancements. UL Solutions experts actively participate in various technical committees and panels to bring invaluable insights and the most current strategies to our health and life sciences customers.



Within UL Solutions we provide a broad portfolio of offerings to many industries. This includes certification, testing, inspection, assessment, verification and consulting services. In order to protect and prevent any conflict of interest, perception of conflict of interest and protection of both our brand and our customers brands, UL Solutions has processes in place to identify and manage any potential conflicts of interest and maintain the impartiality of our conformity assessment services.

[UL.com/HLS](https://www.ul.com/HLS)

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