

CBRNe Defense - Market Share Analysis, Industry Trends & Statistics, Growth Forecasts (2025 - 2030)

Market Report | 2025-07-01 | 125 pages | Mordor Intelligence

AVAILABLE LICENSES:

- Single User License \$4750.00
- Team License (1-7 Users) \$5250.00
- Site License \$6500.00
- Corporate License \$8750.00

Report description:

CBRNe Defense Market Analysis

The CBRNe defense market size is estimated at USD 18.70 billion in 2025, and is expected to reach USD 24.93 billion by 2030, reflecting a CAGR of 5.92% during the forecast period. Spending growth is tied to defense modernization, favoring chemical, biological, radiological, nuclear, and explosive (CBRNe) capabilities over conventional tools. Nations are shifting resources toward AI-enabled autonomous detection networks that reduce risk to personnel and keep situational awareness high in contested zones. Budget re-allocations are evident in the US Chemical and Biological Defense Program's USD 1,656.70 million FY-2025 outlay and Europe's EUR 800 billion (USD 938.36 billion) ReArm Europe fund, which allocates meaningful shares to next-generation CBRNe programs. Demand is further shaped by threats from non-state actors that exploit commercial drones and 3D printing, prompting militaries and civil agencies to purchase portable sensors, UAV-borne payloads, and mixed-reality training kits. Although North America retains leadership, Asia-Pacific shows rising procurement as regional tensions keep defense budgets upward.

Global CBRNe Defense Market Trends and Insights

Defense Budget Modernization and Strategic Reprioritization

Defense ministries are channeling larger shares of multi-year programs into CBRNe readiness as part of multi-domain deterrence strategies. The US Strategic Management Plan 2022-2026 frames CBRNe preparedness as essential to maintaining freedom of maneuver. Parallel efforts such as Europe's ReArm Europe initiative earmark sizeable sums for CBRNe sensor suites that integrate

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

with broader air- and missile-defense networks. Procurement priorities now favor scalable detection grids, autonomous decontamination assets, and protective ensembles compatible with joint-force logistics. Vendors able to demonstrate dual-use value stand to benefit as governments look to stretch budgets across military and civil protection mandates.

Rising Threat of Asymmetric Warfare and Non-State Actor Capabilities

Accessible technologies, including additive manufacturing and commercial drones, enable small groups to weaponize toxic chemicals or biological agents, raising the attractiveness of CBRNe attacks against superior conventional forces. Intelligence reports underscore evolving tactics that bypass traditional warning indicators, demanding adaptive sensors that recognize atypical signatures. This risk profile accelerates the CBRNe defense market's adoption of analytics that spot real-time anomalies and identify materials previously unseen in defense databases.

High Procurement and Total Lifecycle Costs

Advanced CBRNe gear demands long-term investments that multiply once training, maintenance, and mid-life upgrades are added. Over a typical 20-year span, sustainment can run three to five times the original purchase price, pushing smaller defense establishments to limit quantities or delay refresh cycles. Vendors increasingly pitch modular upgrades to ease this burden, yet locked-in proprietary ecosystems often offset near-term savings with higher downstream fees, keeping budget pressure intense.

Other drivers and restraints analyzed in the detailed report include:

Broader Civil Defense and Homeland Security Integration / Emergence of AI-Driven Autonomous Detection Networks / Stringent Export Regulations and Technology Transfer Restrictions /

For complete list of drivers and restraints, kindly check the Table Of Contents.

Segment Analysis

Protection systems commanded 35.78% of the CBRNe defense market share in 2024, confirming the enduring importance of individual and collective protection across all services. They range from next-generation respirators to over-pressurized shelters that shield personnel from aerosolized agents. Demand is supported by NATO standards that prescribe minimum personal protective equipment inventories for forward-deployed units. Detection systems trail closely, serving as the trigger for activating protective measures once a threat cloud is sensed. Decontamination assets complete the triad by restoring platforms to service and preventing mission attrition.

Simulation and training solutions represent the fastest-growing slice at a 7.67% CAGR to 2030. Defense organizations deploy mixed-reality suites to replicate complex release scenarios without hazardous agents, reducing live-agent range usage and cutting per-trainee costs. ForgeFX's HoloLens-based program is emblematic of immersive tools that foster skills retention while shortening course timelines. As digital twins mirror actual detection gear, commanders can rehearse wide-area response plans and refine tactics in secure virtual sandboxes. This learning curve efficiency amplifies adoption across military and civil jurisdictions, cementing a robust outlook for this subsegment.

The military end-user segment accounted for 70.01% of the CBRNe defense market size in 2024, reflecting the armed forces' mandate to fight through contamination and preserve combat power. Large budgets allow investment in ruggedized sensor arrays, hardened command-and-control nodes, and extensive protective suit inventories. Platform roadmaps emphasize drone-based reconnaissance and AI-enabled threat analytics that integrate with broader battlefield networks.

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

Civil and law-enforcement agencies are growing at a 7.54% CAGR, spurred by homeland security directives designating first responders as primary stakeholders in domestic incidents. Initiatives like India's "Year of CBRN Preparedness" program funnel funds into municipal hazmat teams, boosting procurement of handheld detectors and mobile decontamination units. The convergence of military-grade technology with civil budgets promotes common standards, improving interoperability when joint task forces deploy during large-scale emergencies.

The CBRNe Defense Market Report is Segmented by Purpose (Detection, Protection, Decontamination, and Simulation and Training), End-User (Military, and Civil and Law Enforcement), Platform (Portable and Wearable Systems, Vehicle-Mounted, and More), Type (Chemical, Biological, Radiological, Nuclear, and More), and Geography (North America, Europe, Asia-Pacific, and More). The Market Forecasts are Provided in Terms of Value (USD).

Geography Analysis

North America led the CBRNe defense market with 33.47% share in 2024, anchored by the United States' deep industrial base and stable funding lines that cover detection, protection, and training. Significant R&D centers-spanning Edgewood, Aberdeen Proving Ground, and multiple national labs-accelerate technology maturation and transition to field units. Canada complements US spending with its Joint CBRN Defense Program, which fields interoperable systems for NATO operations.

Europe ranks second, bolstered by the ReArm Europe initiative that injects fresh capital into collective defense. Standardization agreements smooth cross-border equipment compatibility, while EU civil-protection funding invites suppliers to tailor dual-use products. The United Kingdom, France, and Germany allocate notable portions of recapped budgets toward upgrading legacy reconnaissance vehicle fleets, with the UK's Fox fleet overhaul illustrating demand for sensor and comms retrofits.

Asia-Pacific is the fastest-growing region at 7.86% CAGR. Heightened tensions in East Asia pushed combined military outlays to USD 411 billion in 2023 and fueled the appetite for CBRNe deterrence tools. South Korea fielded enhanced K216 NBC Recon Vehicles capable of chemical detection at 5-km standoff, and Australia continues to test immersive training kits for explosive hazard response. India's National Disaster Response Force presses with nationwide CBRN drills that create pull-through demand for detectors and decon gear. Regional industrial partnerships, including technology transfers from Japan and the United States, speed deployment while building indigenous support ecosystems.

List of Companies Covered in this Report:

Teledyne FLIR LLC (Teledyne Technologies Incorporated) / Smiths Detection (Smiths Group PLC) / Bruker Corporation / Rheinmetall AG / Saab AB / Leidos, Inc. / Thales Group / Karcher Futuretech GmbH / Battelle / QinetiQ Group / Drägerwerk AG & Co. KGaA / Argon Electronics (UK) Ltd. / KNDS / Avon Protection (Avon Technologies plc) / Bertin Environics / OSI Systems Inc. /

Additional Benefits:

 The market estimate (ME) sheet in Excel format /
3 months of analyst support /

Table of Contents:

1 INTRODUCTION

- 1.1 Study Assumptions and Market Definition
- 1.2 Scope of the Study

2 RESEARCH METHODOLOGY

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

3 EXECUTIVE SUMMARY

4 MARKET LANDSCAPE

4.1 Market Overview

4.2 Market Drivers

4.2.1 Defense budget modernization and strategic reprioritization

4.2.2 Rising threat of asymmetric warfare and non-state actor capabilities

4.2.3 Broader civil defense and homeland security integration

4.2.4 Emergence of AI-driven autonomous detection networks

4.2.5 Development of bio-digital pathogen analyzer chips

4.2.6 Mandates for dual-use decontamination infrastructure

4.3 Market Restraints

4.3.1 High procurement and total lifecycle costs

4.3.2 Stringent export regulations and technology transfer restrictions

4.3.3 Supply chain vulnerability in rare-earth and exotic sensor materials

4.3.4 Operator cognitive burden due to complex system interfaces

4.4 Value Chain Analysis

4.5 Regulatory Landscape

4.6 Technological Outlook

4.7 Porter's Five Forces Analysis

4.7.1 Bargaining Power of Buyers

4.7.2 Bargaining Power of Suppliers

4.7.3 Threat of New Entrants

4.7.4 Threat of Substitutes

4.7.5 Competitive Rivalry

5 MARKET SIZE AND GROWTH FORECASTS (VALUE)

5.1 By Purpose

5.1.1 Detection

5.1.2 Protection

5.1.3 Decontamination

5.1.4 Simulation and Training

5.2 By End-User

5.2.1 Military

5.2.2 Civil and Law-Enforcement

5.3 By Platform

5.3.1 Portable and Wearable Systems

5.3.2 Vehicle-mounted

5.3.3 Fixed and Facility-Based Installations

5.3.4 Drone-/UAV-based

5.4 By Type

5.4.1 Chemical

5.4.2 Biological

5.4.3 Radiological

5.4.4 Nuclear

5.4.5 Explosive

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

- 5.5 By Geography
 - 5.5.1 North America
 - 5.5.1.1 United States
 - 5.5.1.2 Canada
 - 5.5.1.3 Mexico
 - 5.5.2 Europe
 - 5.5.2.1 United Kingdom
 - 5.5.2.2 France
 - 5.5.2.3 Germany
 - 5.5.2.4 Russia
 - 5.5.2.5 Rest of Europe
 - 5.5.3 Asia-Pacific
 - 5.5.3.1 China
 - 5.5.3.2 India
 - 5.5.3.3 Japan
 - 5.5.3.4 South Korea
 - 5.5.3.5 Rest of Asia-Pacific
 - 5.5.4 South America
 - 5.5.4.1 Brazil
 - 5.5.4.2 Rest of South America
 - 5.5.5 Middle East and Africa
 - 5.5.5.1 Middle East
 - 5.5.5.1.1 Saudi Arabia
 - 5.5.5.1.2 United Arab Emirates
 - 5.5.5.1.3 Rest of Middle East
 - 5.5.5.2 Africa
 - 5.5.5.2.1 South Africa
 - 5.5.5.2.2 Rest of Africa

6 COMPETITIVE LANDSCAPE

- 6.1 Market Concentration
- 6.2 Strategic Moves
- 6.3 Market Share Analysis
- 6.4 Company Profiles (includes Global level Overview, Market level overview, Core Segments, Financials as available, Strategic Information, Market Rank/Share for key companies, Products and Services, and Recent Developments)
 - 6.4.1 Teledyne FLIR LLC (Teledyne Technologies Incorporated)
 - 6.4.2 Smiths Detection (Smiths Group PLC)
 - 6.4.3 Bruker Corporation
 - 6.4.4 Rheinmetall AG
 - 6.4.5 Saab AB
 - 6.4.6 Leidos, Inc.
 - 6.4.7 Thales Group
 - 6.4.8 Karcher Futuretech GmbH
 - 6.4.9 Battelle
 - 6.4.10 QinetiQ Group
 - 6.4.11 Drägerwerk AG & Co. KGaA
 - 6.4.12 Argon Electronics (UK) Ltd.

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

6.4.13 KNDS

6.4.14 Avon Protection (Avon Technologies plc)

6.4.15 Bertin Environics

6.4.16 OSI Systems Inc.

7 MARKET OPPORTUNITIES AND FUTURE OUTLOOK

7.1 White-space and Unmet-need Assessment

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

CBRNe Defense - Market Share Analysis, Industry Trends & Statistics, Growth Forecasts (2025 - 2030)

Market Report | 2025-07-01 | 125 pages | Mordor Intelligence

To place an Order with Scotts International:

- Print this form
- Complete the relevant blank fields and sign
- Send as a scanned email to support@scotts-international.com

ORDER FORM:

Select license	License	Price
	Single User License	\$4750.00
	Team License (1-7 Users)	\$5250.00
	Site License	\$6500.00
	Corporate License	\$8750.00
		VAT
		Total

*Please circle the relevant license option. For any questions please contact support@scotts-international.com or 0048 603 394 346.

** VAT will be added at 23% for Polish based companies, individuals and EU based companies who are unable to provide a valid EU Vat Numbers.

Email*	<input type="text"/>	Phone*	<input type="text"/>
First Name*	<input type="text"/>	Last Name*	<input type="text"/>
Job title*	<input type="text"/>		
Company Name*	<input type="text"/>	EU Vat / Tax ID / NIP number*	<input type="text"/>
Address*	<input type="text"/>	City*	<input type="text"/>
Zip Code*	<input type="text"/>	Country*	<input type="text"/>
		Date	<input type="text" value="2026-02-26"/>
		Signature	

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

