

**CHRONIC VENOUS DISEASE (CVD)
EPIDEMIOLOGY, PREVALENCE, INCIDENCE AND PROGRESSION**

Mary L. Yost
404-520-6652
THE SAGE GROUP

THE SAGE GROUP, LLC
RESEARCH AND CONSULTING
23 Ridge Rd
Beaufort SC 29907

Copyright Pending
2025

All rights reserved, including the right of reproduction
in whole or in part in any form.

Table of Contents

| | |
|---|-----------|
| INTRODUCTION..... | 6 |
| DEFINITIONS | 6 |
| Prevalence | 6 |
| Incidence | 6 |
| METHOD | 6 |
| Prevalence and Incidence Estimates | 6 |
| Disease Progression | 7 |
| Bilateral Disease Prevalence | 7 |
| CEAP CLASSIFICATION SYSTEM..... | 7 |
| CHRONIC VENOUS DISEASE | 8 |
| Definition | 8 |
| Characterized by Chronic Venous Hypertension..... | 8 |
| Adverse Impact | 8 |
| Causes | 9 |
| Reflux..... | 10 |
| Secondary Reflux Due to Post-Thrombotic Syndrome | 10 |
| Obstruction—Deep Vein Thrombosis | 10 |
| Extrinsic Obstruction | 11 |
| Risk Factors | 11 |
| Symptoms | 12 |
| Impact on Quality of Life | 12 |
| CHRONIC VENOUS DISEASE IS FREQUENTLY UNDERESTIMATED..... | 12 |
| CHRONIC VENOUS DISEASE PREVALENCE..... | 13 |
| Literature Review of Percent Prevalence..... | 13 |
| Conclusion: Percent Prevalence..... | 14 |
| CHRONIC VENOUS DISEASE PREVALENCE 2020-2040..... | 15 |
| CHRONIC VENOUS DISEASE INCIDENCE..... | 15 |
| Literature Review of Incidence..... | 15 |
| CHRONIC VENOUS DISEASE INCIDENCE 2020-2040 | 15 |
| VARICOSE VEINS | 16 |
| Definition | 16 |
| Symptoms | 16 |
| Quality of Life..... | 16 |
| Reflux Increases the Risk..... | 17 |
| VARICOSE VEIN PREVALENCE..... | 17 |
| Literature Review of Percent Prevalence | 17 |
| Conclusion: Percent Prevalence | 18 |
| VARICOSE VEIN PREVALENCE 2020-2040..... | 18 |
| VARICOSE VEIN INCIDENCE..... | 19 |
| Literature Review of Incidence..... | 19 |
| VARICOSE VEIN INCIDENCE 2020-2040 | 19 |
| VARICOSE VEINS PROGRESSION TO MORE SEVERE DISEASE..... | 20 |
| Progression to Chronic Venous Insufficiency | 20 |
| Risk Factors for Progression to Chronic Venous Insufficiency..... | 20 |
| Progression to Ulcers After Interventional Treatment..... | 21 |

| | |
|--|-----------|
| Risk Factors for Developing Ulcers..... | 21 |
| CHRONIC VENOUS INSUFFICIENCY..... | 21 |
| Definition | 21 |
| Associated with Cardiovascular Disease | 21 |
| Increased Risk of Death..... | 21 |
| CHRONIC VENOUS INSUFFICIENCY..... | 22 |
| Literature Review of Percent Prevalence..... | 22 |
| Conclusion: Percent Prevalence..... | 23 |
| CHRONIC VENOUS INSUFFICIENCY PREVALENCE 2020-2040..... | 23 |
| CHRONIC VENOUS INSUFFICIENCY INCIDENCE..... | 24 |
| Literature Review of Incidence..... | 24 |
| Chronic Venous Insufficiency Incidence 2020-2040 | 24 |
| CHRONIC VENOUS INSUFFICIENCY PROGRESSION TO MORE SEVERE DISEASE | 24 |
| Risk Factors for Progression..... | 25 |
| VENOUS ULCERS..... | 25 |
| Definition | 25 |
| Cause—Primarily Reflux..... | 25 |
| Deep Vein Thrombosis and Post-Thrombotic Syndrome | 26 |
| Incidence of Ulcers After Deep Vein Thrombosis | 26 |
| Economic Burden..... | 26 |
| Factors That Increase Costs | 26 |
| Reduced Quality of Life..... | 27 |
| VENOUS ULCER PREVALENCE (C5-C6)..... | 27 |
| Literature Review of Percent Prevalence..... | 27 |
| Three European Studies with Less Than One Percent Prevalence | 27 |
| Conclusion: Percent Prevalence..... | 28 |
| VENOUS ULCER (C5-C6) PREVALENCE 2020-2040 | 29 |
| VENOUS ULCER (C6) INCIDENCE | 29 |
| Literature Review of Incidence..... | 29 |
| Conclusion: Incidence..... | 30 |
| Venous Ulcer Incidence 2020-2040..... | 31 |
| Commonly Quoted Incidence Numbers Inaccurate | 31 |
| EDEMA PREVALENCE | 31 |
| Literature Review of Percent Prevalence | 31 |
| Conclusion: Percent Prevalence..... | 32 |
| EDEMA PREVALENCE 2020-2040..... | 33 |
| EDEMA INCIDENCE | 33 |
| EDEMA PROGRESSION TO MORE SEVERE DISEASE | 34 |
| SKIN CHANGES PREVALENCE | 34 |
| Literature Review of Percent Prevalence | 34 |
| Conclusion: Percent Prevalence | 35 |

| | |
|---|-----------|
| SKIN CHANGES PREVALENCE 2020-2040 | 35 |
| SKIN CHANGES INCIDENCE | 36 |
| SKIN CHANGES PROGRESSION TO MORE SEVERE DISEASE..... | 36 |
| TELANGIECTASIAS OR RETICULAR VEINS PREVALENCE 2020-2040 | 36 |
| SUMMARY: 2025 CHRONIC VENOUS DISEASE PREVALENCE BY CEAP CLASS..... | 37 |
| SUMMARY: 2025 CHRONIC VENOUS DISEASE INCIDENCE BY CEAP CLASS..... | 37 |
| REFERENCES..... | 38 |
| INDEX OF TABLES | 44 |
| CONTACT INFORMATION..... | 47 |

CONTACT INFORMATION

Mary L. Yost

(404) 520-6652

yost@thesagegroup.us