What Could Be Addressed in an Evidence-Informed State Workplace Health Promotion Law?
Acknowledgments

Disclaimer
The findings and conclusions of this document are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

Acknowledgments
This guide was developed by the Division for Heart Disease and Stroke Prevention within the Centers for Disease Control and Prevention (CDC) and in collaboration with the CDC Worksite Wellness Workgroup.

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What Could Be Addressed in an Evidence-Informed State Workplace Health Promotion Law?

Workplace Health Promotion (WHP) is a coordinated set of activities and strategies at the workplace to encourage the health and safety of all employees.

In 2016, there were more than 150 million working adults in the US.

In 2012, about half of all US adults (117 million) had at least one chronic health condition, and 1 in 4 had at least two.

As of 2013, 41 states had enacted some type of law to encourage and support WHP.

To date, no research has tested the impact of state WHP laws on health. In 2016, CDC assessed best available evidence, including worksite health intervention studies and expert opinion, for 21 types of WHP interventions that could be scaled for statewide adoption with a state law. Each type of intervention is shown below by evidence level: “best,” “promising,” and “emerging.” State laws that address the 13 types of WHP interventions with “best” evidence are expected to have the greatest potential for a positive health and associated economic impact.

**Types of interventions aligning with “Best” evidence**

- Workplace Obesity Interventions*
- Workplace Health Risk Assessment with Education*
- Workplace Integration of WHP and Safety Programs
- Workplace Diabetes Interventions
- Workplace Provides Flexible Scheduling for WHP
- Workplace On-site Vaccinations*
- Workplace Incentives for Employee WHP Participation*
- Workplace Blood Pressure Interventions
- Workplace Depression and Stress Interventions
- Workplace Tobacco Interventions*
- Workplace Skin Cancer Prevention*
- Workplace Cholesterol Interventions
- Workplace Includes Family in WHP

*Recommended by the Community Guide to Preventive Services

**Types of interventions aligning with “Promising” or “Emerging” evidence**

- Workplace Lactation Support
- Workplace Public Access Defibrillation
- State Tax Credits for WHP
- State Grants for WHP
- State Raises Awareness for WHP
- State WHP Evaluation
- State Certification of WHP Programs
- Workplace Education About Signs of Heart Attack/Stroke

![CDC logo](https://www.cdc.gov)
The Big Picture

Workplace Health Promotion (WHP) is a coordinated set of activities and strategies for promoting and protecting health at the workplace. Evidence shows that well-designed and well-executed WHP programs, founded on evidence-based principles, can achieve positive health and financial outcomes.a

While most states have enacted laws to support WHP,b no research has tested the impact of any state WHP law. Therefore, to understand what types of WHP interventions could be addressed in an evidence-informed state WHP law, CDC DHDP conducted an assessment of early (best available) evidence.

About This Report

This report assesses best available evidence for 21 types of WHP interventions that could be scaled up for statewide adoption with a state law.c These interventions were all a) recommended by experts on WHP and b) addressed by at least one state’s law as of July 31, 2016. Evidence associated with each type of WHP intervention is assessed here for strength and quality. For more on the method used, see the Appendix.

Results of this evidence assessment offer public decision makers real-world options for supporting WHP that are grounded in best available evidence. The figure below provides 21 types of interventions addressed in state WHP laws, prioritized by evidence level.

There are 13 types of WHP interventions found to have "best” evidence; 6 of these are recommended by The Community Guide to Preventive Services. State laws that address the 13 types of WHP interventions with "best” evidence are expected to have the greatest potential for a positive health and associated economic impact. State laws addressing the 8 types of WHP interventions with "promising” or “emerging” evidence (Figure) could also have positive impacts, but there is less evidence to support them at this time.

Figure. 21 types of WHP interventions that could be scaled up for statewide adoption through state lawd

Use the links in this figure to navigate to an evidence summary for each type of intervention.

*Recommended by the Community Guide to Preventive Services: https://www.thecommunityguide.org/
How To Use this Report

Consider presenting this report, along with facts about your state’s employment, employee health, and insurance coverage, to your state public health department, business and employee organizations, health care providers and payers, and others interested in WHP.

Consider planning for a state WHP policy that addresses several types of evidence-based WHP interventions. Many states already have laws addressing WHP interventions with “best” evidence. One example, from Massachusetts, is provided below. See a companion product, the State WHP Law Fact Sheet, for more examples of state laws addressing the evidence-based WHP interventions in this report.

Massachusetts’s policy approach to support WHP.

In 2013, Massachusetts law contained more WHP interventions than most other states, and it was one of the few states offering tax incentives and funding for some costs associated with WHP programs. Massachusetts directed its Public Health Department to establish mandatory components of WHP programs based on specific risk factors (including stress; poor nutrition, diet, or exercise; and smoking) and diseases (including heart disease, lung disease, cancer, and stroke). Certified Group Purchasing Cooperatives were also required to address these same risk factors in their WHP programs.

Evidence Summaries

The evidence summaries in this guide could help you consider relevance of the evidence to your state context. The links in the figure on the previous page can be used to navigate to the evidence summary for each type of intervention.

How to use an evidence summary.

Evidence summaries will help you better understand the evidence base as it relates to your individual state. Before reviewing the evidence summaries, it is helpful to research the health problems in your state. CDC offers many state health facts on its website, for example, statistics about chronic diseases like heart disease, stroke, and diabetes.

Once you know what health problems exist in your state, think about what populations experience these problems. Say your state is home to Hispanic employees experiencing high rates of diabetes. When you review the evidence summary for Workplace Diabetes Interventions, in the “health-related outcomes” and “groups of employees” sections, you find a study about a WHP program that improved diabetes self-management knowledge in Hispanic employees. At the top of the evidence summary for Workplace Diabetes Interventions, you find the example of Ohio’s state law, which offers school employee wellness programs to integrate disease management programs with diabetic risk assessment screening into wellness or healthy lifestyle programs. (Ohio Admin. Code 123-6-03 through -04)

Evidence for Potential Public Health Impact: VERY STRONG

Equity and Effectiveness: Evidence Types:

Reach: Sources:

Research:

Translation and Practice:

Evidence Quality: HIGH

Evidence for “health-related outcomes” and “groups of employees” sections

Example of Ohio’s state law

States where programs achieved positive outcomes

“Health-related outcomes” and “groups of employees” sections

Example of Ohio’s state law addressing this type of intervention

Ohio law requires all school employees wellness programs to integrate disease management programs with diabetic risk assessment screening into wellness or healthy lifestyle programs. (Ohio Admin. Code 123-6-03 through -04)

Evidence for Workplace Diabetes Interventions

Evidence Level: BEST

Potential Public Health Impact: VERY STRONG

Health-related outcomes

Diabetes interventions resulted in better blood glucose tolerance and decreased metabolic and behavioral risk factors in employees with diabetes or prediabetes. Multicomponent WHP programs including a diabetes intervention improved employees’ knowledge of diabetes management and helped them to decrease or eliminate diabetes medicines.

Groups of employees

Ohio law applies to public and private sector employers, and employees of local government.

Economic highlights

Multicomponent WHP programs that included a diabetes intervention reduced health care costs and absenteeism, and had return on investment.

States where programs achieved positive health-related outcomes

North Carolina, Ohio, Texas, Utah

c. Organizational WHP policies can be informed by the CDC Worksite Health ScoreCard: http://www.cdc.gov/workplacehealthpromotion/initiatives/healthscorecard/index.html
Evidence Summaries
To address obesity, the workplace can offer programs and activities and can change policies and environments to promote physical activity, nutrition, and weight management. These may include exercise facilities; signs to encourage stair use; group activities; education, screening for health conditions; counseling; or access to places to buy, make, and store low-cost healthy foods and beverages.

Example of a state law addressing this type of intervention
Maryland law authorizes private and public insurers to offer a benefit for wellness programs that include programs and activities for weight reduction and nutrition education, among other goals. (Md. Code Ann., Ins. § 15-1201)

Evidence for Potential Public Health Impact: VERY STRONG

Evidence
Effectiveness: ★★★
Equity and Reach: ★★★★
Efficiency: ★★★
Transferability: ★★★

Evidence Quality: VERY HIGH

Evidence Types: ★★★
Sources: ★★★
Evidence from Research: ★★★
Evidence from Translation and Practice: ★★★

Health-related outcomes
The Community Preventive Services Task Force recommends worksite programs to improve diet and physical activity based on strong evidence that they reduce weight, point-of-decision prompts to encourage stair use, and creation of or enhanced access to places for physical activity.

Groups of employees studied in the evidence base
White-collar workers, male and female workers, younger and older workers, obese and non-obese workers, various racial/ethnic subgroups, workers in industrial plants, universities, and federal agencies

Economic highlights
The Community Guide suggests that obesity prevention programs and creating or improving places for physical activity at worksites have the potential to increase employee productivity and reduce medical care and disability costs. For example, The Guide found cost-effectiveness estimates for two weight-loss competitions and a physical fitness program varied from $1.44 to $4.16 per pound lost.

States where programs achieved positive health-related outcomes
California, Colorado, Georgia, Illinois, Maryland, Massachusetts, Michigan, Minnesota, Missouri, New York, Ohio, Pennsylvania, Rhode Island, South Carolina, Texas

For more on the scoring and summary methods see the Appendix
Evidence base


Systematic reviews


Research-based studies


Practice-based studies


Workplace On-site Vaccinations

The workplace can make vaccinations, such as pneumococcal or tetanus vaccines, available to workers and promote their use on-site. To date, the best evidence is for influenza (flu) vaccinations. Future systematic reviews could look at the outcomes of other types of vaccinations.

Example of a state law addressing this type of intervention
Georgia law encourages health care providers to offer workplace influenza vaccinations for employees. (Ga. Code Ann., § 31-7-19)

Evidence for Potential Public Health Impact:

- Evidence Quality: VERY HIGH
- Evidence Types: 
  - Sources: 
  - Evidence from Research: 
  - Evidence from Translation and Practice: 
- Effectiveness: 
  - Health-related outcomes: The Community Preventive Services Task Force recommends interventions with on-site, free, and actively promoted flu vaccinations implemented alone or as part of a multicomponent intervention, based on strong evidence of their effectiveness in increasing flu vaccination coverage.2,3
- Evidence Types: 
  - Sources: 
  - Evidence from Research: 
  - Evidence from Translation and Practice: 

Groups of employees studied in the evidence base
Health care2 and non-health-care workers;3 employees in medium and large hospitals, long-term care facilities,2 and in large worksites (more than 500 workers)3

Economic highlights
The Community Guide found three economic evaluations suggesting that interventions with actively promoted vaccinations for health care workers can be cost-effective, but a firm conclusion about economic effectiveness could not be reached.2 The Guide also identified a cost-benefit analysis of a 4-week campaign to increase accessibility and improve flu vaccination coverage at a non-healthcare worksite, for which the combined direct and indirect annual cost savings were $129.41 per vaccinated person.3

States where programs achieved positive health-related outcomes

For more on the scoring and summary methods see the Appendix
Evidence base

Systematic reviews

Research-based studies

Practice-based studies
Workplace Tobacco Interventions

Evidence Level: BEST

The workplace can offer incentives and competitions along with programs and activities to increase tobacco cessation, such as referring tobacco users to telephone quitlines, providing insurance coverage for tobacco cessation medicines, and offering counseling and education.¹

Example of a state law addressing this type of intervention
Texas law authorizes coverage of tobacco cessation programs and prescription drugs that increase cessation of tobacco for state employees. (Tex. Ins. Code § 1551.226)

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Health-related outcomes
The Community Preventive Services Task Force recommends worksite-based incentives and competitions combined with additional interventions to support tobacco cessation, based on strong evidence of effectiveness at reducing tobacco use.²

Groups of employees studied in the evidence base
Employees in manufacturing plants, health care facilities, government offices, a university, chemical plants, and an ambulance service; workers at companies or worksites with more than 100 employees; workers in urban and suburban settings²

Economic highlights
A concurrent review identified two studies that found cost savings, although the Task Force did not substantiate strong conclusions about savings.²

States where programs achieved positive health-related outcomes
Alabama,¹,¹³ California,⁴,⁵,¹⁶ Illinois,⁴,⁸,¹¹ Minnesota,⁴,⁷,⁹ North Dakota,⁴,¹⁰ Oregon,⁴,⁶,¹⁰ Texas⁴,¹⁴,¹⁷

For more on the scoring and summary methods see the Appendix
Workplace Tobacco Interventions (cont.)

Evidence base


Systematic reviews


Research-based studies


Practice-based studies


Workplace Health Risk Assessment with Education

Evidence Level: BEST

The workplace can provide an assessment of health habits and risk factors or an assessment of potential health outcomes along with feedback, such as educational messages and counseling.¹

Example of a state law addressing this type of intervention
New York law makes grants available for employers to implement health promotion and disease prevention initiatives that may include compilation of individual employee health profiles on a voluntary basis with recommendations and incentives for health activities. (N.Y. Public Health Law § 2799-o)

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Health-related outcomes
The Community Preventive Services Task Force recommends health risk assessments with feedback, combined with health education, based on strong evidence of effectiveness, in the following areas: tobacco use, excessive alcohol use, seat belt use, fat intake, blood pressure, cholesterol, and health risks.²

Groups of employees studied in the evidence base
Employees of manufacturing plants, health care facilities, health insurance companies, government offices, banks, and schools; workers at companies or worksites with more than 500 employees; workers in urban and suburban workplaces with predominately white employees, though African Americans were well-represented²

Economic highlights
The Community Guide found that the benefit-to-cost ratio—defined as averted medical costs, productivity losses due to the program as both, divided by program costs—ranged from 1.4:1 to 4.6:1. This means that every dollar invested into the intervention yielded an annual gain between $1.40 and $4.60.²

States where programs achieved positive health-related outcomes
Arizona,³ ³⁸,³⁹,⁴³ California,¹⁴,¹⁵,¹⁹ Colorado,²,⁴ Florida,³,₁⁹ Georgia,³,₁⁹,₆₁ Illinois,³,₁₈,²₂,²₅ Indiana,²,₂₀,₂¹ Maryland,²⁵ Massachusetts,³,₆,₁₆,₁₇,₅₇ Michigan,³,₁₀,₁₁,₁₂,₂₀,₂₁,₃₁,₄₅,₅₁,₆₄ New Jersey,³,₂₆,₅₅,₆₀ New York,³,₈,₂₀,₂₁,₃₆,₅₂ North Carolina,³,₄₁,₅₃,₅₄ Ohio,³,₈,₂₀,₂₁,₃₁,₃⁷ Pennsylvania,³,₈,₁₈,₂₀,₂₁,₂₆,₃₇,₅₅ South Carolina,³,₆₂,₅₉ Texas,³,₁₉,₃₀ Utah,³,₅₉

Lower=↓↓↓↓ Higher=↑↑↑↑

For more on the scoring and summary methods see the Appendix.
Evidence base


Systematic reviews


Research-based studies


Practice-based studies


Practice-based studies (cont.)


Workplace Incentives for Employee WHP Participation

The workplace can offer incentives or rewards for participation in WHP programs, such as money or lottery tickets. To date, the best evidence is for incentives that encourage tobacco cessation. Future systematic reviews could look at other types of incentives for employees.

Example of a state law addressing this type of intervention
Texas designates a statewide wellness coordinator to administer certain aspects of employer worksite health promotion programs. The wellness coordinator is authorized to encourage participation in wellness programs through methods such as offering financial benefits to the employees and/or providing discounts to employees at fitness facilities throughout the state. (Tex. Govt. Code § 664.051 to .061)

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Health-related outcomes
The Community Preventive Services Task Force recommends worksite-based incentives and competitions combined with additional interventions to support tobacco cessation, based on strong evidence of effectiveness at reducing tobacco use.2

Groups of employees studied in the evidence base
Employees in manufacturing plants, health care facilities, government offices, a university, chemical plants, and an ambulance service; workers at companies or worksites with more than 100 employees; workers in urban and suburban settings2

Economic highlights
A concurrent review found two studies that reported cost savings, although strong conclusions about cost savings could not be substantiated by the Task Force.2

States where programs achieved positive health-related outcomes
Alabama,4,13 California,4,5,16 Illinois,4,8,11 Minnesota,4,7,9 North Dakota,4,10 Oregon,4,6,10 Texas4,14,17

For more on the scoring and summary methods see the Appendix
Workplace Incentives for Employee WHP Participation (cont.)

Evidence base


Systematic reviews


Research-based studies


Practice-based studies

To address skin cancer, the workplace can promote ways for workers to protect themselves from the sun through education, behavioral, and environmental approaches (e.g., providing sunscreen or shade), and policies to support sun protection practices.¹

**Evidence for Potential Public Health Impact:**

**STRONG**

**Evidence Quality:**

**VERY HIGH**

**Effectiveness:**  ●●●●

**Equity and Reach:**  ●●●●

**Efficiency:**  ●●●

**Transferability:**  ●●●●

**Evidence Types:**  ●●●●

**Sources:**  ●●●

**Evidence from Research:**  ●●●●

**Evidence from Translation and Practice:**  ●●●●

**Health-related outcomes**

The Community Preventive Services Task Force recommends interventions for people who work outdoors to prevent skin cancer based on strong evidence of effectiveness in increasing workers’ sun protective behaviors and reducing sunburns.²

**Groups of employees studied in the evidence base**

Workers of all ages, white workers (whether findings apply to other groups is unclear), full-time and seasonal workers²

**Economic highlights**

The Task Force did not conduct an economic review of this intervention.²

**States where programs achieved positive health-related outcomes**

California,³¹⁸⁹ Georgia,³⁶ Hawaii,³⁵ Iowa,³¹⁰ Kansas,³⁶ Massachusetts,³⁵ Nevada³⁶

*As of 2016, none of the states studied in the evidence base were found to have a law authorizing skin cancer interventions.

For more on the scoring and summary methods assee the Appendix

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¹ For more on the scoring and summary methods assee the Appendix
Evidence base


Systematic reviews


Research-based studies


Workplace Integration of WHP and Safety Programs

Evidence Level: BEST

The workplace can integrate health and safety promotion programs and activities.¹

Example of a state law addressing this type of intervention
Louisiana law encourages the utilization of worksites to implement preventive programs including occupational health and safety information. (La. Admin. Code tit. 48, pt. I, § 11527)

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Health-related outcomes
Companies with integrated health and safety programs reported reduced health risks and work injuries, and improved chronic conditions.³

Groups of employees studied in the evidence base
Employees of large companies (Smithsonian and Dow Chemical) and small businesses (Lincoln Industries and San Isabel Electric Association)³

Economic highlights
Companies with integrated health and safety programs reduced sick leave costs, improved absenteeism, and worker productivity.³

States where programs achieved positive health-related outcomes³
Colorado, Nebraska³

¹As of 2016, none of the states studied in the evidence base were found to have a law authorizing the integration of occupational safety and health and WHP programs.

For more on the scoring and summary methods see the Appendix.
Evidence base


Research-based studies


Practice-based studies


Narratives and commentaries

Workplace Blood Pressure Interventions

The workplace can provide interventions to workers with high blood pressure to improve management and control alone, or as part of a multicomponent WHP program. These may include screening, referral, education, counseling, self-management programs, or providing monitoring devices or insurance coverage for medicines.¹

### Example of a state law addressing this type of intervention

Maine law requires the development of community programs that provide blood pressure screening with referral and follow-up to workforce populations. (Me. Rev. Stat. Ann. tit. 22, § 1699)

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**Evidence for Potential Public Health Impact:**

**Very Strong**

**Evidence Quality:**

**High**

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**Health-related outcomes**

WHP interventions targeted at cardiac disease risk factors including screening,² telephone counseling,³ and health education³,⁴,⁵ resulted in lower blood pressure among employees. Multicomponent WHP programs including a blood pressure intervention reduced risk for high blood pressure,⁸ decreased overall blood pressure levels,⁶,¹¹,¹⁵ and increased management of high blood pressure.¹⁴

**Groups of employees studied in the evidence base**

Low-income Hispanics⁵,⁶ and African Americans;⁶ employees of a large medical center,² the Kennedy Space Center,³ Merrill Lynch Company,⁴ DIRECTV,¹⁴ Johnson & Johnson,⁸ Blue Cross Blue Shield,¹¹ and a small business¹⁵

**Economic highlights**

Multicomponent WHP programs that included a blood pressure intervention reduced health care costs,⁶,⁷,⁹,¹⁰ resulted in cost savings,⁷,⁸,¹⁰ and return on investment.⁶,⁷,⁸

**States where programs achieved positive health-related outcomes**

Florida,³ Idaho,¹⁴ Missouri,²,¹¹ Texas⁵

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For more on the scoring and summary methods see the Appendix.
Workplace Blood Pressure Interventions (cont.)

Evidence base


Research-based studies


Practice-based studies


Narratives and commentaries


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\(^a\) No health outcome – Participants’ average blood pressure decreased by 4 mm Hg, but because of the fluctuating nature of blood pressure, the authors could not necessarily consider this to be a significant decrease.

\(^b\) Mixed health outcome – “Many participants showed blood pressure increases over the study period, and some increase in blood pressure is expected with older age.”

\(^c\) Mixed health outcome – “19 patients without diabetes showed a statistically significant improvement in diastolic blood pressure (p=0.039), but the 37 patients with diabetes did not show a significant difference.”
Workplace Cholesterol Interventions

Evidence Level: BEST

The workplace can provide interventions to workers with high cholesterol to improve management and control alone, or as part of a multicomponent WHP program. Interventions could include screening, referral, self-assessment, education, counseling, self-management programs, or insurance coverage.¹

Example of a state law addressing this type of intervention
Wisconsin law authorizes WHP programs to incorporate health screenings that include cholesterol measurements. (Wis. Stat. Ann. § 250.21)

Evidence for Potential Public Health Impact:

- Effectiveness: • • • •
- Equity and Reach: • • • •
- Efficiency: • • • •
- Transferability: • • • •

Evidence Quality: HIGH

- Evidence Types: • • • •
- Sources: • • • •
- Evidence from Research: • • • •
- Evidence from Translation and Practice: • • • •

Health-related outcomes
Telephone counseling and education³ or counseling by community pharmacists⁵ reduced cholesterol levels. Multicomponent WHP programs that included a cholesterol intervention lowered risk for high cholesterol⁷ and improved cholesterol levels.²,⁸

Groups of employees studied in the evidence base
Employees of Kennedy Space Center,³ Johnson & Johnson,⁷ and DIRECTV⁸

Economic highlights
Multicomponent WHP programs that included a cholesterol intervention reduced health care costs²,⁴,⁶ and absenteeism⁵,⁸ and had cost savings⁷ and return on investment.²,⁴,⁷

States where programs achieved positive health-related outcomes
Florida,³ Idaho,⁸ Louisiana²

For more on the scoring and summary methods see the Appendix
Evidence base


Research-based studies


Research-based studies


9. Neville BH, Merrill RM, Kumpfer KL. Longitudinal outcomes of a comprehensive, incentivized worksite wellness program. Eval Health Prof. 2011; 34(1), 103-123.1


Narratives and commentaries


1 Mixed health outcome - Mean cholesterol increases were 14.1 mg/dl over the study period for those with normal cholesterol levels at baseline, but for those with elevated cholesterol at baseline, their cholesterol decreased.
Workplace Diabetes Interventions

Evidence Level: BEST

The workplace can offer interventions to increase diabetes detection, management, and control, to workers with diabetes or prediabetes, alone or as part of a multicomponent WHP program. Interventions could include screening, referral, self-assessment, education, counseling, self-management programs, or insurance coverage.¹

Example of a state law addressing this type of intervention
Ohio law requires all school employee wellness programs to integrate disease management programs with diabetic risk assessment screening into wellness or healthy lifestyle programs. (Ohio Admin. Code 123-6-03 through -04)

Evidence for Potential Public Health Impact: VERY STRONG

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Health-related outcomes
Diabetes interventions resulted in better blood glucose tolerance⁶ and decreased metabolic and behavioral risk factors² in employees with diabetes or prediabetes. Multicomponent WHP programs including a diabetes intervention improved employees’ knowledge of diabetes management⁴ and helped them to decrease or eliminate diabetes medicines.⁷

Groups of employees studied in the evidence base
Cherokee Indian workers;⁷ Hispanic and African American workers;⁴ and employees of local government⁴ and a small medical technology company⁶

Economic highlights
Multicomponent WHP programs that included a diabetes intervention reduced health care costs³,⁴ and absenteeism,⁴,⁵ and had a positive return on investment.⁴

States where programs achieved positive health-related outcomes
North Carolina,⁷ Ohio,² Texas,⁴ Utah⁶

For more on the scoring and summary methods see the Appendix
Workplace Diabetes Interventions (cont.)

Evidence base


Research-based studies


Practice-based studies


Narratives and commentaries


* Mixed outcome - Diabetes became more prevalent, but authors suggest this may represent a positive effect of increased diagnosis.
Workplace Depression and Stress Interventions

The workplace can offer interventions for depression and stress, alone or as part of a multicomponent WHP program. Interventions could include screening, referral, self-assessment, education, counseling, or insurance coverage.¹

### Example of a state law addressing this type of intervention


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<td>Translation and Practice:</td>
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</tbody>
</table>

**Evidence Quality:**

- **High**

**Health-related outcomes**

A depression screening and therapeutic management program improved depression and quality of life.⁵ Multicomponent WHP programs including a stress intervention improved stress management⁷ and cardiovascular risk,² improved health habits,² and increased knowledge about stress and heart disease.⁶

### Groups of employees studied in the evidence base

- DIRECTV employees;⁷ workers with a history of diabetes, hypertension, or hyperlipidemia;⁵ and sedentary female municipal workers with heart disease risk factors⁵

### Economic highlights

Multicomponent WHP programs that included stress interventions decreased health care costs,²,⁷ improved absenteeism,⁷ and had cost savings⁵,⁶ and return on investment.²,³,⁸

### States where programs achieved positive health-related outcomes

- Alabama,⁶ Idaho,⁷ Louisiana,² South Carolina⁵

For more on the scoring and summary methods see the Appendix
Evidence base


Research-based studies


Practice-based studies


Narratives and commentaries

Workplace Includes Family in WHP

Evidence Level: **BEST**

The workplace can make WHP programs available to family members of employees, specifically spouses, partners, and dependents.¹

**Example of a state law addressing this type of intervention**

Michigan law provides grants for employee wellness programs to reduce the prevalence of high risk factors for employees. Funded programs may also provide services to dependents. (Mich. Comp. Laws § 333.5925)

---

**Evidence for Potential Public Health Impact:**

**STRONG**

**Evidence Quality:**

**HIGH**

**Evidence Types:**

- Sources:
- Evidence from Research:
- Evidence from Translation and Practice:

---

**Health-related outcomes**

Multicomponent WHP programs that offered program benefits to employee family members reduced health risks,²,³ improved stress and energy levels,¹⁰ and decreased levels of depression.¹¹

---

**Groups of employees studied in the evidence base**

Workers with history of diabetes, hypertension, or hyperlipidemia;¹¹ school district employees³

---

**Economic highlights**

Multicomponent WHP programs that offered program benefits to employee family members improved quality of life,¹⁰,¹¹ reduced health care costs,⁵,² and had return on investment.²

---

**States where programs achieved positive health-related outcomes¹**

Louisiana,² South Carolina,¹¹ Utah³

---

¹ As of 2016, none of the states studied in the evidence base were found to have a law authorizing family inclusion in WHP programs.
² For more on the scoring and summary methods see the Appendix
Workplace Includes Family in WHP (cont.)

Evidence base


Research-based studies


Practice-based studies


Narratives and commentaries


\(^n\) Mixed economic outcome – Although the program did cut some hospitalizations, it did not save money for the employer in the short term.
The workplace can provide flexible work scheduling to employees, including flex-time and time off to attend WHP program activities.¹

Example of a state law addressing this type of intervention
Texas law allows state agencies to give employees time for exercise during working hours. (Tex. Govt. Code Ann. § 664.051 to .061)

Effectiveness:  ● ● ● ●
Equity and Reach:  ● ● ● ●
Efficiency:  ● ● ● ●
Transferability:  ● ● ● ●

Evidence for Potential Public Health Impact: STRONG

Evidence Quality: HIGH

Evidence Types: ● ● ● ●
Sources: ● ● ● ●
Evidence from Research: ● ● ● ●
Evidence from Translation and Practice: ● ● ● ●

Health-related outcomes
Sleep, physical activity, resilience techniques, and lifestyle improved when employers offered flexible schedules to employees.² Work schedule flexibility positively influences health prevention behaviors and employee well-being.³

Groups of employees studied in the evidence base
Employees of a large pharmaceutical company² and Best Buy³

Economic highlights
No economic studies as of December 31, 2015

States where programs achieved positive health-related outcomes
Minnesota³

¹As of 2016, none of the states studied in the evidence base were found to have a law authorizing family inclusion in WHP programs.

For more on the scoring and summary methods see the Appendix
Evidence base


Research-based studies

None as of December 31, 2015

Practice-based studies


Narratives and commentaries

13. Edington DW. Who are the intended beneficiaries (targets) of employee health promotion and wellness programs? North Carolina Medical Journal. 2006; 67(6).
Workplace Lactation Support

Evidence Level: **PROMISING (EVIDENCE QUALITY)**

The workplace can provide lactation support to employees by offering private spaces to pump breast milk, providing access to breast pumps, flexible break times, or breastfeeding support or education.¹

**Example of a state law addressing this type of intervention**
California requires workplaces to provide time and reasonable accommodations for breastfeeding. (Cal. Labor Code § 1030 and 1031)

<table>
<thead>
<tr>
<th>Evidence for Potential Public Health Impact: MODERATE</th>
<th>Evidence Quality: HIGH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effectiveness: 3</td>
<td>Evidence Types: 4</td>
</tr>
<tr>
<td>Equity and Reach: 3</td>
<td>Sources: 4</td>
</tr>
<tr>
<td>Efficiency: 3</td>
<td>Evidence from Research: 4</td>
</tr>
<tr>
<td>Transferability: 3</td>
<td>Evidence from Translation and Practice: 4</td>
</tr>
</tbody>
</table>

Lower=四是Higher

**Health-related outcomes**
A workplace lactation support program including telephone support and return-to-work consultation services increased duration of breastfeeding.² The Surgeon General recommends that workplaces offer comprehensive, high-quality lactation support programs.³

**Groups of employees studied in the evidence base**
Primarily older (ages 25–46), white, married, well-educated, high-income, women at a large public-sector employer²

**Economic highlights**
No economic studies as of December 31, 2015

**States where programs achieved positive health-related outcomes**
Study of lactation program² did not provide state setting

For more on the scoring and summary methods see the Appendix
Workplace Lactation Support (cont.)

Evidence base


Research-based studies

None as of December 31, 2015

Practice-based studies


Narratives and commentaries

State Tax Credits for WHP

Evidence Level: PROMISING (EVIDENCE QUALITY)

The state could offer a tax credit to employers for WHP program expenditures.¹

Example of a state law addressing this type of intervention
Massachusetts law offers a wellness tax credit for small businesses. (Mass. Gen. Laws Ann. ch. 62, § 6N and ch. 63, § 38FF)

Evidence for Potential Public Health Impact: MODERATE

<table>
<thead>
<tr>
<th>Effectiveness:</th>
<th>Evidence Quality: HIGH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equity and Reach:</td>
<td>Evidence Types:</td>
</tr>
<tr>
<td>Efficiency:</td>
<td>Sources:</td>
</tr>
<tr>
<td>Transferability:</td>
<td>Evidence from Research:</td>
</tr>
<tr>
<td></td>
<td>Evidence from Translation and Practice:</td>
</tr>
</tbody>
</table>

Rationale
Experts recommend tax credits to incentivize WHP programs, especially at small businesses.³⁻¹⁰ The Kentucky Department of Health expects that a state wellness tax credit will positively impact physical and social health and the economy.²

Groups of employees studied in the evidence base
No health-related outcome studies as of December 31, 2015

Economic highlights
No economic studies as of December 31, 2015

States where programs achieved positive health-related outcomes
No health-related outcome studies as of December 31, 2015

For more on the scoring and summary methods see the Appendix.
Evidence base


Research-based studies

None as of December 31, 2015

Practice-based studies


Narratives and commentaries


Workplace Public Access Defibrillation

Evidence Level: **PROMISING (EVIDENCE FOR POTENTIAL IMPACT)**

The workplace can provide a public access defibrillation program to respond to sudden cardiac arrest. Components of a program could include: an emergency response plan, team, and policy for cardiac arrest; access to cardiopulmonary resuscitation (CPR) and automated external defibrillator (AED) training; enough functioning and visible AEDs; or coordination with local emergency medical services.¹

**Example of a state law addressing this type of intervention**
North Carolina law requires state facilities to have and maintain AED devices. (N.C. Gen. Stat. § 143B-370)

---

**Evidence for Potential Public Health Impact:**

**VERY STRONG**

| Effectiveness: | ⬤⬤⬤⬤ |
| Equity and Reach: | ⬤⬤⬤⬤ |
| Efficiency: | ⬤⬤⬤ |
| Transferability: | ⬤⬤⬤⬤ |

**Evidence Quality:**

**MODERATE**

**Evidence Types:**

Sources: ⬤⬤⬤

Evidence from Research: ⬤⬤⬤

Evidence from Translation and Practice: ⬤⬤⬤

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**Health-related outcomes**

Federal workplaces and high schools with AEDs had sudden cardiac arrest survival rates of 39% and 64%.²³

---

**Groups of employees studied in the evidence base**

Employees and visitors in federal buildings,³ student athletes, and older non-students²

---

**Economic highlights**

No economic studies as of December 31, 2015

---

**States where programs achieved positive health-related outcomes**

All 50 states²

---

For more on the scoring and summary methods see the Appendix
Evidence base


Research-based studies

None as of December 31, 2015

Practice-based studies


Narratives and commentaries


State Grants for WHP

Evidence Level: PROMISING (EVIDENCE FOR POTENTIAL IMPACT)

The state can offer funding to employers to establish or maintain WHP programs.¹

Example of a state law addressing this type of intervention
North Carolina law authorizes the state treasurer to offer incentives to public employers to offer wellness programs. (N.C. Gen. Stat. § 135-48.30 (2013))

Evidence for Potential Public Health Impact:

- **Evidence Quality:** MODERATE
- **Evidence Types:**
  - Evidence from Research:
  - Evidence from Translation and Practice:

Effectiveness: ●●●
Equity and Reach: ●●●
Efficiency: ●●●
Transferability: ●●●

Health-related outcomes
A provision of North Carolina’s worksite wellness policy allowed the use of administrative funds to subsidize wellness activities. This provision was credited as contributing to the success and expansion of a sustainable weight-loss program.²

Groups of employees studied in the evidence base
State and federal employees²

Economic highlights
No economic studies as of December 31, 2015

States where programs achieved positive health-related outcomes
North Carolina²

For more on the scoring and summary methods see the Appendix
Evidence base


Research-based studies
None as of December 31, 2015

Practice-based studies

Narratives and commentaries
None as of December 31, 2015
State Raises Awareness for WHP

Evidence Level: EMERGING

The state could conduct efforts to increase employer awareness of WHP programs.¹

Example of a state law addressing this type of intervention
Vermont law encourages WHP through state and local health improvement plans. (Vt. Stat. Ann. tit. 18, § 5 and 11)

Evidence for Potential Public Health Impact: MODERATE

<table>
<thead>
<tr>
<th>Evidence Quality: MODERATE</th>
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</thead>
<tbody>
<tr>
<td>Evidence Types:</td>
</tr>
<tr>
<td>Sources:</td>
</tr>
<tr>
<td>Evidence from Research:</td>
</tr>
<tr>
<td>Evidence from Translation and Practice:</td>
</tr>
</tbody>
</table>

Rationale
Experts recommend that states raise awareness of WHP programs through education and dissemination efforts.²⁻⁵ The New York Department of Health raised awareness for WHP programs to increase their adoption.²

Groups of employees studied in the evidence base
No health-related outcome studies as of December 31, 2015

Economic highlights
No economic studies as of December 31, 2015

States where programs achieved positive health-related outcomes
No health-related outcome studies as of December 31, 2015

For more on the scoring and summary methods see the Appendix
Evidence base


Research-based studies
None as of December 31, 2015

Practice-based studies
None as of December 31, 2015

Narratives and commentaries


The state or an associated organization could plan to analyze or evaluate WHP programs for gathering data, maintaining uniform guidelines, or other reasons deemed by the state.¹

**Example of a state law addressing this type of intervention**

North Carolina law requires that the state’s wellness leader create a worksite wellness infrastructure by providing ongoing assessment/monitoring of programs’ effectiveness. (25 N.C. Admin. Code 1N.0501 to .0504)

**Evidence for Potential Public Health Impact:**

- **WEAK**

**Evidence Quality:**

- **MODERATE**

**Rationale**

Experts recommend that government agencies supplement private investment in large, objective, long-term studies of WHP programs.⁴ The North Carolina worksite wellness policy authorized evaluation to help support WHP program expansion.³ The New York Department of Health assessed WHP programs to increase their adoption.³

**Groups of employees studied in the evidence base**

*No health-related outcome studies as of December 31, 2015*

**Economic highlights**

*No economic studies as of December 31, 2015*

**States where programs achieved positive health-related outcomes**

*No health-related outcome studies as of December 31, 2015*

For more on the scoring and summary methods see the Appendix
Evidence base


Research-based studies
None as of December 31, 2015

Practice-based studies

Narratives and commentaries
The state could require certification for employers based on specified, uniform standards before the employer is allowed to do certain activities, such as advertise that the business offers a WHP program, or receives other benefits from the state.\(^1\)

**Example of a state law addressing this type of intervention**

Indiana law offers a certification program for workplaces interested in tax credits. (312)

**Evidence for Potential Public Health Impact:** MODERATE

<table>
<thead>
<tr>
<th>Evidence Types:</th>
<th>Evidence Quality: MODERATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sources:</td>
<td></td>
</tr>
<tr>
<td>Evidence from Research:</td>
<td></td>
</tr>
<tr>
<td>Evidence from Translation and Practice:</td>
<td></td>
</tr>
</tbody>
</table>

**Effectiveness:** •••

**Equity and Reach:** •••

**Efficiency:** •••

**Transferability:** •••

**Rationale**

Experts recommend WHP program certification to establish minimum standards for quality and performance.\(^3\) The Kentucky Department of Health expects that a wellness tax credit preceded by program certification will improve physical and social health and the economy.\(^2\)

**Groups of employees studied in the evidence base**

No health-related outcome studies as of December 31, 2015

**Economic highlights**

No economic studies as of December 31, 2015

**States where programs achieved positive health-related outcomes**

No health-related outcome studies as of December 31, 2015

For more on the scoring and summary methods see the [Appendix](#).
Evidence base


Research-based studies
None as of December 31, 2015

Practice-based studies


Narratives and commentaries

Workplace Education about Signs of Heart Attack/Stroke

Evidence Level: **EMERGING**

The workplace could provide education to employees about how to recognize and respond to a heart attack or stroke, for example, by posting communications at the worksite.¹

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**Example of a state law addressing this type of intervention**


---

**Evidence for Potential Public Health Impact:** **WEAK**

<table>
<thead>
<tr>
<th>Effectiveness:</th>
<th>Evidence Quality:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evidence Types:</td>
<td>MODERATE</td>
</tr>
<tr>
<td>Sources:</td>
<td></td>
</tr>
<tr>
<td>Evidence from Research:</td>
<td></td>
</tr>
<tr>
<td>Evidence from Translation and Practice:</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Equity and Reach:</th>
<th>Efficiency:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transferability:</td>
<td></td>
</tr>
</tbody>
</table>

Lower=●●●●● Higher=●●●●●

**Rationale**

Experts recommend that workplaces educate employees about the signs and symptoms of heart attack and stroke.² ³ ⁴

---

**Groups of employees studied in the evidence base**

No health-related outcome studies as of December 31, 2015

---

**Economic highlights**

No economic studies as of December 31, 2015

---

**States where programs achieved positive health-related outcomes**

No health-related outcome studies as of December 31, 2015

---

For more on the scoring and summary methods see the Appendix
Workplace Education about Signs of Heart Attack/Stroke (cont.)

Evidence base


Research-based studies
None as of December 31, 2015

Practice-based studies
None as of December 31, 2015

Narratives and commentaries


Appendix

A. Method

Public decision makers need to know which policies are feasible and most likely to achieve the desired impact. Early evidence assessment involves compiling and appraising all relevant, available evidence. There are no studies of the impact of state WHP laws, so understanding what types of interventions could be addressed in an evidence-informed state WHP law requires assessment of early, i.e., best available, evidence. This report uses a novel approach to complete an early evidence assessment called the Quality and Impact of Component Evidence Assessment, or QuIC. For more on the QuIC method, contact CDC DHDSP.

To select types of WHP interventions for evidence assessment, CDC DHDSP compared evidence-based recommendations by The Community Guide to Preventive Services Task Force, the CDC Worksite Health ScoreCard, and WHP subject matter experts to the content of existing state laws. Only types of interventions that 1) were recommended and 2) had been enacted into law by at least one state by July 31, 2016 were chosen for the evidence assessment. In total, 21 types of interventions common to expert recommendations and laws were identified. More on how state laws were collected and assessed for content can be found in the CDC DHDSP’s State Law Factsheet: A Summary of Worksite Health Promotions Laws in effect as of July 31, 2016 and a recently published research article.

As of January 1, 2016, there were 6 WHP interventions recommended by The Community Guide to Preventive Services Task Force and addressed in existing state laws; these were scored as having “best” evidence. To collect evidence for the remaining 15 types of interventions without this gold-standard evidence of effectiveness (i.e., comprehensive systematic review), the following search was completed in January of 2016 for best available evidence published between January 1, 2006 and December 31, 2015.

In total, 478 items of evidence were collected including studies of WHP programs as well as narratives and commentaries offering expert opinion about state and organizational WHP policies and programs.

q. Goetzel RZ, Roemer EC, Liss-Levinson RC, Samoly DK. Workplace Health Promotion: Policy Recommendations that Encourage Employers to Support Health Improvement Programs for Their Workers; 2008. https://pdfs.semanticscholar.org/074a/04b0c1e33d954a9c6faee6652ff086a328e5.pdf
To determine the evidence level for a type of intervention addressed in a state policy, a QuIC Evidence Assessment appraises 1) evidence for potential public health impact and 2) evidence quality. Three CDC policy staff assigned the WHP evidence base to the 15 types of WHP interventions. Next, each item of evidence was independently coded by 2 of the 3 coders for potential impact and quality. Coding discrepancies were reconciled through 12 hours of discussion among all 3 coders. Consensus was reached on every code, for every item of evidence, for every type of intervention (896 codes in total).

Reconciled evidence coding for each type of intervention were input into the QuIC Evidence Assessment Tool (next page). Fifteen QuIC Tools were completed, one for each type of intervention. To calculate the evidence for potential public health impact level and the evidence quality level for a type of intervention, the 8 criteria from the QuIC Tool were each assigned a numeric score for the highest level reached (1-4 points; if none of its requirements were met, a criterion was assigned a score of 0 points). The 4 criteria scores for evidence for potential impact were summed, as were the 4 criteria scores for evidence quality. The numeric evidence for potential impact and quality scores were converted back into ordinal evidence levels.

This procedure gave each of the 21 types of intervention a final evidence for potential public health impact level and a final evidence quality level, which together, were used to categorize each type of intervention as “best,” “promising (quality),” “promising (impact),” or “emerging” (Table).

Lastly, the coders developed evidence summaries for the 21 types of interventions. See page 50 for more on how an evidence summary was written.

**Table. Method for categorizing overall evidence level using evidence for potential public health impact and evidence quality levels**

<table>
<thead>
<tr>
<th>Evidence for Potential Public Health Impact Level</th>
<th>Evidence Quality Level</th>
<th>Evidence Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strong or Very Strong</td>
<td>High or Very High</td>
<td>Best</td>
</tr>
<tr>
<td>Weak or Moderate</td>
<td>High or Very High</td>
<td>Promising Evidence Quality</td>
</tr>
<tr>
<td>Strong or Very Strong</td>
<td>Low or Moderate</td>
<td>Promising Evidence for Potential Public Health Impact</td>
</tr>
<tr>
<td>Weak or Moderate</td>
<td>Low or Moderate</td>
<td>Emerging</td>
</tr>
</tbody>
</table>

s. Contact CDC DHDSP for the coding scheme as described in the QuIC Evidence Assessment Handbook

u. The evidence for potential impact level was determined using the following conversion: 1-4 points= weak evidence; 5-8 points= moderate evidence; 9-12 points= strong evidence; and 13-16 points= very strong evidence. The evidence quality level was determined using the following conversion: 1-4 points= low quality evidence; 5-8 points= moderate quality evidence; 9-12 points = high quality evidence; and 13-16 points= very high quality evidence. For example, if the Effectiveness criterion scored “very strong” and the Equity and Reach criterion scored “very strong” and the Efficiency criterion scored “strong” and the Transferability criterion scored “strong,” then 4+4+3+3=14=“very strong” evidence for potential impact.
### Section 1. Evidence for Potential Public Health Impact

<table>
<thead>
<tr>
<th>Criterion and what it measures</th>
<th>Weak Evidence</th>
<th>Moderate Evidence</th>
<th>Strong Evidence</th>
<th>Very Strong Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Effectiveness</strong>&lt;br&gt;Does it work, i.e., improve outcomes relevant to health?</td>
<td>Indirect evidence for a positive expected outcome relevant to health</td>
<td>Direct evidence for a positive expected outcome relevant to health</td>
<td>Indirect evidence of mostly positive actual outcomes relevant to health</td>
<td>Direct evidence of mostly positive actual outcomes relevant to health</td>
</tr>
<tr>
<td><strong>Equity and Reach</strong>&lt;br&gt;Does it work for target population(s)?</td>
<td>Indirect evidence for a positive expected outcome relevant to equity and reach</td>
<td>Direct evidence for a positive expected outcome relevant to equity and reach</td>
<td>Indirect evidence of mostly positive actual outcomes relevant to equity and reach</td>
<td>Direct evidence of mostly positive actual outcomes relevant to equity and reach</td>
</tr>
<tr>
<td><strong>Efficiency</strong>&lt;br&gt;Is it a good use of resources?</td>
<td>Indirect evidence for a positive expected outcome relevant to efficiency</td>
<td>Direct evidence for a positive expected outcome relevant to efficiency</td>
<td>Indirect evidence of mostly positive actual outcomes relevant to efficiency</td>
<td>Direct evidence of mostly positive actual outcomes relevant to efficiency</td>
</tr>
<tr>
<td><strong>Transferability</strong>&lt;br&gt;Does it work across diverse settings?</td>
<td>Indirect evidence for a positive expected outcome relevant to health in two or more regions of the United States</td>
<td>Direct evidence for a positive expected outcome relevant to health in two or more regions of the United States</td>
<td>Indirect evidence of mostly positive actual outcomes relevant to health in two or more regions of the United States</td>
<td>Direct evidence of mostly positive actual outcomes relevant to health in two or more regions of the United States</td>
</tr>
</tbody>
</table>

Note: if none of its requirements are met, a criterion is assigned a score of 0 points.

### Section 2. Evidence Quality

<table>
<thead>
<tr>
<th>Criterion and what it measures</th>
<th>Low Quality</th>
<th>Moderate Quality</th>
<th>High Quality</th>
<th>Very High Quality</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Evidence Types</strong>&lt;br&gt;What is the most rigorous design?</td>
<td>A narrative review or commentary suggests a positive outcome</td>
<td>A non-experimental study suggests a positive outcome</td>
<td>An experimental or quasi-experiment suggests a positive outcome</td>
<td>A systematic review suggests a positive outcome</td>
</tr>
<tr>
<td><strong>Sources</strong>&lt;br&gt;What is the most credible source?</td>
<td>A peer-reviewed journal or conference publication without conflict of interest disclosure suggests a positive outcome</td>
<td>A publication by a nonprofit or government organization suggests a positive outcome</td>
<td>A peer-reviewed journal or conference publication with conflict of interest disclosure suggests a positive outcome</td>
<td>A publication by a public health authority suggests a positive outcome</td>
</tr>
<tr>
<td><strong>Evidence from Research</strong>&lt;br&gt;Relevance to controlled settings?</td>
<td>A small amount of evidence from research suggests positive outcomes</td>
<td>A moderate amount of evidence from research suggests positive outcomes</td>
<td>A large amount of evidence from research suggests positive outcomes</td>
<td>A very large amount of evidence from research suggests positive outcomes</td>
</tr>
<tr>
<td><strong>Evidence from Translation and Practice</strong>&lt;br&gt;Relevance to real world?</td>
<td>A small amount of evidence from translation and practice suggests positive outcomes</td>
<td>A moderate amount of evidence from translation and practice suggests positive outcomes</td>
<td>A large amount of evidence from translation and practice suggests positive outcomes</td>
<td>A very large amount of evidence from translation and practice suggests positive outcomes</td>
</tr>
</tbody>
</table>

Note: if none of its requirements are met, a criterion is assigned a score of 0 points.
## Type of WHP Intervention

### Evidence Level: LEVEL

This field provides this type of intervention’s evidence level which can be used to determine its priority in policymaking. Evidence level can be “best”, “promising (quality)”, “promising (impact)”, or “emerging”. This field describes the specific interventions that have been grouped under this type of intervention.

### Example of state law addressing this type of intervention

This field briefly describes a component of state law that aligns with this intervention.

<table>
<thead>
<tr>
<th>Evidence for Potential Public Health Impact: LEVEL</th>
<th>Evidence Quality: LEVEL</th>
<th>Evidence Types:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effectiveness: ●●●● ●●●●</td>
<td>Evidence Types: ●●●●</td>
<td>Sources: ●●●●</td>
</tr>
<tr>
<td>Equity and Reach: ●●●●</td>
<td></td>
<td>Evidence from Research: ●●●●</td>
</tr>
<tr>
<td>Efficiency: ●●●●</td>
<td></td>
<td>Evidence from Translation and Practice: ●●●●</td>
</tr>
<tr>
<td>Transferability: ●●●●</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Evidence quality level can be Weak, Moderate, High, or Very High.

**Lower=●●●● ●●●● Higher=●●●● ●●●●**

### Health-related outcomes/Rationale

If there are Community Guide to Preventive Services systematic reviews or if there are individual studies analyzing health-related outcomes in the evidence base, this field provides the positive outcomes found. Non-positive outcomes for individual studies are footnoted in the “Evidence base” list below. If there were no studies finding positive outcomes, this field provides the rationale for expected health impact established by narratives and commentaries. This field will also tell you if this type of intervention was applied and studied alone or as part of a multicomponent policy or program; in most studies, positive outcomes were not directly linked with individual components.

### Groups of employees studied in the evidence base

If positive health-related outcomes were found, this field provides the groups who were studied across the evidence base finding positive outcomes, or the absence of information on groups is noted.

### Economic highlights

If there are studies analyzing economic outcomes—such as cost-effectiveness, return on investment, or quality of life—positive findings are provided in this field. Otherwise, absence of economic outcomes is noted. Most positive economic findings in this assessment are for multicomponent WHP policies or programs, providing indirect evidence. This is contrasted with findings linked to individual components, which would have provided direct evidence.

### States where programs achieved positive health-related outcomes

This field provides a list of states in which the studies finding positive health-related outcomes were set, or absence of information on state setting is noted. For example, if a WHP program including this type of intervention was found to improve health at a workplace in Des Moines, Iowa, “Iowa” would be listed here.

### Evidence base

**Research-based studies**

Here you will find the studies that took place in a research context, in which researchers were able to allocate subjects into the intervention and the control groups.

**Practice-based studies**

Here you will find the studies that took place under real-world circumstances. In these studies, evaluators were not able to allocate subjects into the intervention and the control groups. For example, in practice, employees may choose whether or not to participate in a WHP program.

**Narratives and commentaries**

Here you will find the evidence that provides additional logic and theory (but not data), including opinions from subject matter experts and practitioners.