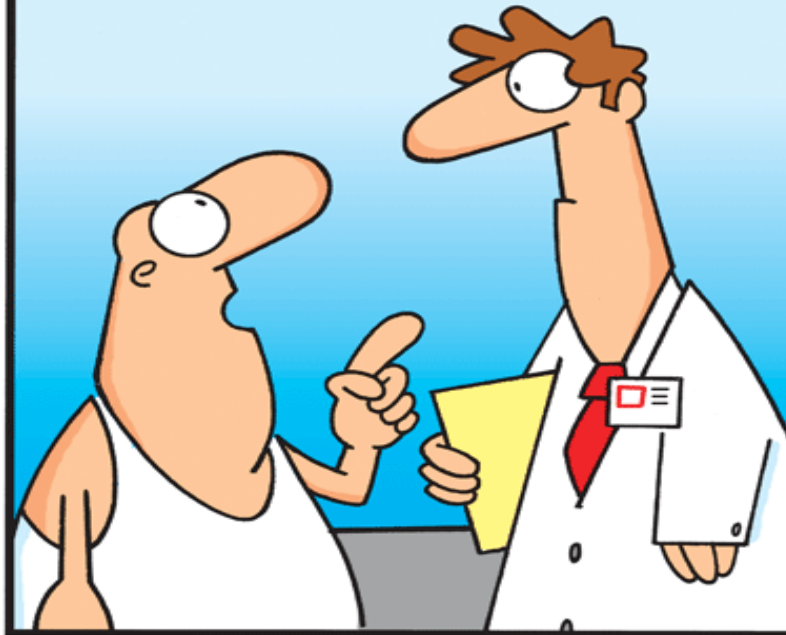


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“Diabetes has increased dramatically over the past 20 years. That proves that diabetes is caused by global warming!”

Diabetes Prevention and Workplace Wellness



“The secret of change is to focus all of your energy, not on fighting the old, but on building the new.”

— Socrates

What is Pre-diabetes?

- Pre-diabetes is a medical condition where blood glucose levels are higher than normal but not high enough to be diagnosed as diabetes

Pre-Diabetes in the U.S.

- o **78 million** adults aged 20 and older have **pre-diabetes**
- o Pre-diabetes raises the risk for type 2 diabetes and cardiovascular disease

How to diagnose type 2 diabetes and prediabetes

- **Fasting glucose test.** This measures blood glucose in people who have not eaten anything for at least eight hours. Fasting glucose levels of 100 to 125 mg/dL are diagnostic of impaired fasting glucose (IFG), also called prediabetes.
- **Glucose tolerance test.** This test measures blood glucose after people fast for at least eight hours, and two hours after they drink a sweet liquid provided by a doctor or laboratory. A blood glucose level between 140 and 199 mg/dL is called impaired glucose tolerance (IGT) also called prediabetes.
- **Hemoglobin A1c test.** This test measures the amount of glucose that is on the red blood cells. Fasting is not necessary. An A1c value of 5.7% to 6.4% indicates prediabetes.

Risk Factors for Type II Diabetes

- o Lifestyle
- o Race and Ethnicity
- o Age
- o Family History
- o History of Gestational Diabetes
- o Pre-diabetes

3 Modifiable Risk Factors

Weight

Food Choices

Level of Physical Activity



Modifiable Risk Factors

- o How do we know these modifiable risk factors matter?
 - o The **Original** Diabetes Prevention Program Study Demonstrated:
 - o Lifestyle Change decreased risk by 58% (by 71% in people over 60)
 - o Medication decreased risk by 31%
 - o No Treatment yielded no change in risk



NATIONAL

Diabetes

PREVENTION

PROGRAM

A wellness program for people with prediabetes.

The CDC-led National Diabetes Prevention Program is an evidence-based lifestyle change program for preventing type 2 diabetes.

- o It can help people cut their risk of developing type 2 diabetes in half.
- o The Diabetes Prevention Program research study showed that making modest behavior changes helped participants lose 5% to 7% of their body weight—that is 10 to 14 pounds for a 200-pound person.
- o These lifestyle changes reduced the risk of developing type 2 diabetes by 58% in people with prediabetes.
- o Participants work with a lifestyle coach in a group setting to receive a 1-year lifestyle change program that includes 16 core sessions (usually 1 per week) and 6 post-core sessions (1 per month).

o The Program:

https://www.youtube.com/watch?feature=player_embedded&v=mRVZ9lkubag

Why the Workplace?

- o The workplace is an important setting for health protection, health promotion and disease prevention programs.
- o On average, Americans working full-time spend more than one-third of their day, five days per week at the workplace.
- o The use of effective workplace programs and policies can reduce health risks and improve the quality of life for American workers.
- o Maintaining a healthier workforce can lower direct costs such as insurance premiums and worker's compensation claims. It will also positively impact many indirect costs such as absenteeism and worker productivity.

The New Value Model: Health and Productivity

- o The old model was confined to a medical view of cost and quality
 - o Direct medical costs of care
 - o Quality defined clinically and by patient satisfaction
- o The new model gets outside the "medical box" to look at the workplace for value
 - o The value of health benefits-and health care-for employers is seen in healthy employees who are productive

Health and Productivity

- o Cost-savings opportunities in the new value model are much larger
 - o Medical cost offsets
 - o Reduced absence from work
 - o Reduced productivity loss while at work
 - o Enhanced quality of goods and services
- o Thus employee health becomes a big contributor to business performance
 - o No longer just an expense to be controlled
 - o But an investment with a return to be gained

<https://diabetesatwork.org/GettingStarted/HealthAndProductivity.cfm>

Workplace Health Programs

- Refer to a coordinated and comprehensive set of strategies which include programs, policies, benefits, environmental supports, and links to the surrounding community designed to meet the health and safety needs of all employees.

Diabetes in the Workplace

- o Nearly 26 million American (8.3% of the population) have diabetes and many of them are employed in our workforce.
- o An estimated 57 million Americans have a high risk for developing type 2 diabetes—a condition known as pre-diabetes. People with pre-diabetes have impaired fasting glucose (IFG), impaired glucose tolerance (IGT), or both

Why the workplace as a site of **disease** education?

- o Unique opportunity for education
- o Less time away from work
- o Improves employer-employee relations and shows employer cares about employees

General Electric Pre-Diabetes Presentation;
https://diabetesatwork.org/SuccessStories/GE_Energy.cfm

Do Any of These Things Work?

- o Bottom Line: Does better glucose control translate to better outcomes or better health in the individual?
- o Does better glucose control translate into improved productivity in the workplace?
- o *Workers with better Hba1c had fewer days lost to absenteeism*
- o *Fewer days of restricted activity*
- o *Testa et al, JAMA, Nov 1, 1998*

General Electric Pre-Diabetes Presentation;
https://diabetesatwork.org/SuccessStories/GE_Energy.cfm

Ensure sufficient resources are available to support the workplace health program

- o Resources include financial resources, such as vendor contracts, purchasing of equipment or supplies (e.g., influenza vaccine or renting mobile screening equipment), marketing or educational materials, or hiring staff to oversee and manage the program
- o Resources for all phases of the program's development including assessment, planning and implementation of programs, and evaluation
- o Additional resources include staff time for planning and implementation, space, and employee's time to participate

Resources

- o Community partners can bring additional resources into the program to meet needs or fill gaps that the workplace health coordinator or committee can not accomplish alone:
 - o Experts from local hospitals or universities can be brought in to conduct health promotion seminars
 - o Organizations such as the YMCA can provide access to fitness facilities for opportunities for physical activity
 - o State or local health departments can provide health data that can be used for benchmarking
 - o Voluntary health organizations such as the American Cancer Society or American Heart Association have educational materials or programs that address employee health needs

Incentives

- o Incentives used to motivate employees to participate in program activities, including the type and amount, should be accounted for in the overall workplace health improvement plan budget as well as the manner in which employees will be eligible to receive them. Incentives can come in many forms including:
 - o Financial rewards such as gift cards or subsidies for health promotion classes or gym memberships
 - o Time off from work
 - o Lower health insurance premiums related to achieving health goals
 - o Merchandise or prizes such as t-shirts or pedometers, or
 - o Recognition by coworkers or supervisors

Caution:

- Incentives are effective in increasing participation in health promotion programs, but it is unclear if they are effective on long term behavior change.

Workplace health promotion programs

- o are more likely to be successful if occupational safety and health is considered in their design and execution, In fact, a growing body of evidence indicates that workplace-based interventions that take coordinated, planned, or integrated approaches to reducing health threats to workers both in and out of work are more effective than traditional isolated programs. Integrating or coordinating occupational safety and health with health promotion may increase program participation and effectiveness and may also benefit the broader context of work organization and environment.¹⁻⁴

The systematic process of building a workplace health promotion program emphasizes four main steps:

- o An assessment to define employee health risks and concerns and describe current health promotion activities, capacity and needs
- o A planning process to develop the components of a workplace health programs including goal determination; selecting priority interventions; and building an organizational infrastructure
- o Program implementation involving all the steps needed to put health promotion strategies and interventions into place and making them available to employees
- o An evaluation of efforts to systematically investigate the merit (e.g., quality), worth (e.g., effectiveness), and significance (e.g., importance) of an organized health promotion action/activity

Success Stories

- o Lockheed Martin
- o Dallas Federal Reserve Bank
- o Lands' End
- o General Motors
- o Inland Northwest Health Services
- o Pitney Bowes
- o General Electric Energy

<https://diabetesatwork.org/SuccessStories/SuccessStories.cfm>

Questions?
Comments?

Thank you for your time and attention! 😊