

Physical Activity Writing Group

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Approach to Addressing Topic Area

1. DGAC agreed to use existing systematic reviews and reports to address physical activity topic.
2. Identified Physical Activity Guidelines for Americans (PAG) reports to serve as primary sources of evidence.
3. Reviewed and extracted key findings and methodology considerations from each PAG report, developed questions, and identified key findings.

Approach to Addressing Topic Area (cont.)

5. Carried forward verbatim conclusion statements and evidence grades from the PAG reports to answer the questions.
6. Drafted conclusion statements to answer questions.
7. Developed overall implications statement and research recommendations.

Key Topic Areas

- Physical activity and health outcomes
 - Children
 - Adults
 - *People with disabilities**
 - *Pregnancy and postpartum period**
 - *Adverse events**
- Physical activity dose
 - Children
 - Adults
 - Older adults
- Physical activity interventions
 - Children

**Addressed today*

Population Physical Activity Trends

Proportion of Americans who meet the
Physical Activity Guidelines for Americans*

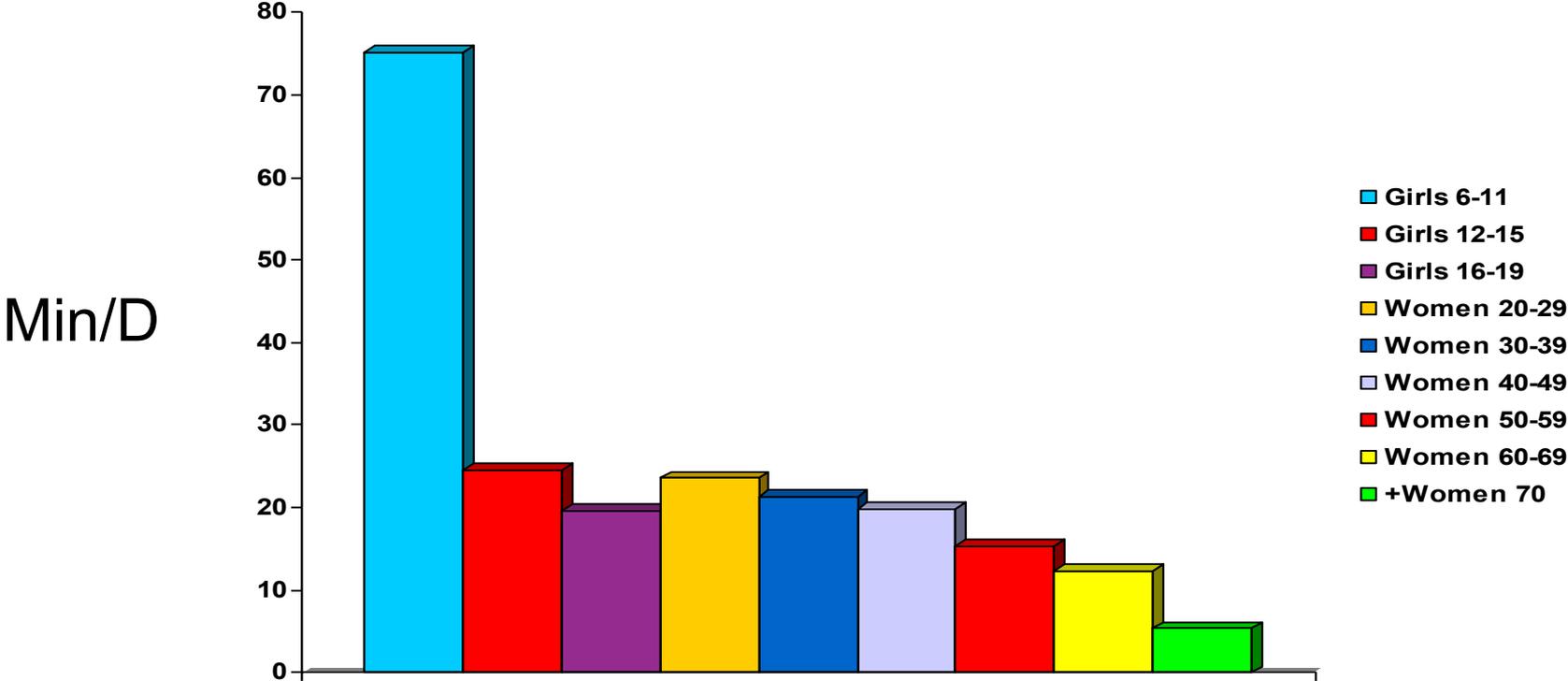
Population	2008	2009	2012
Adult Total:	43.5%	47.2%	50.0%
Adult Male	47.4%	51.1%	53.8%
Adult Female	39.9%	43.6%	46.5%
Adolescent Total:		18.4%	
Adolescent Boys		24.8%	
Adolescent Girls		11.4%	

**Recommendations for aerobic physical activity*

Source: National Health Interview Survey (CDC/NCHS) and Youth Risk Behavior Surveillance System (CDC/NCHHSTP)

Population Physical Activity Levels

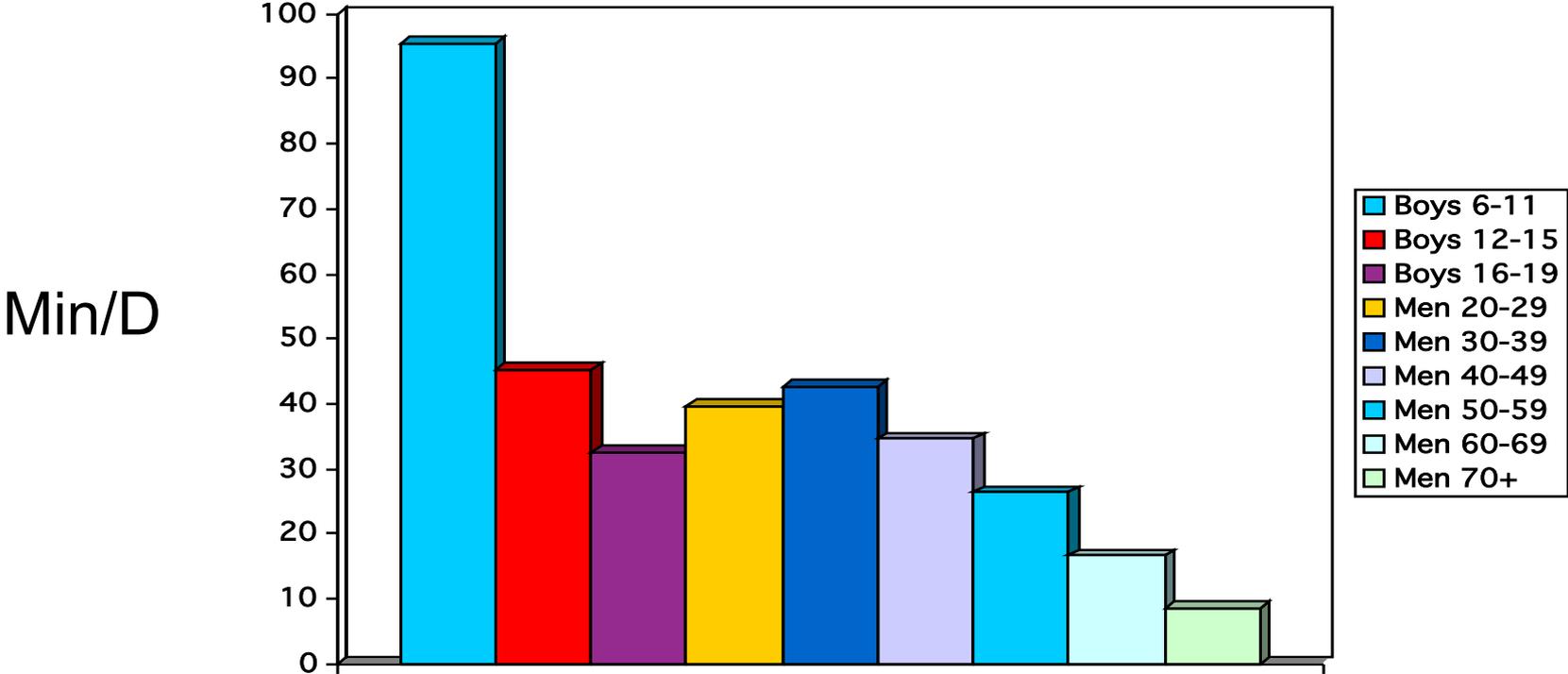
US Girls and Women: Minutes per Day Combined Moderate and Vigorous Activity



Source: RP Troiano et al., MSSE, 2008

Population Physical Activity Levels

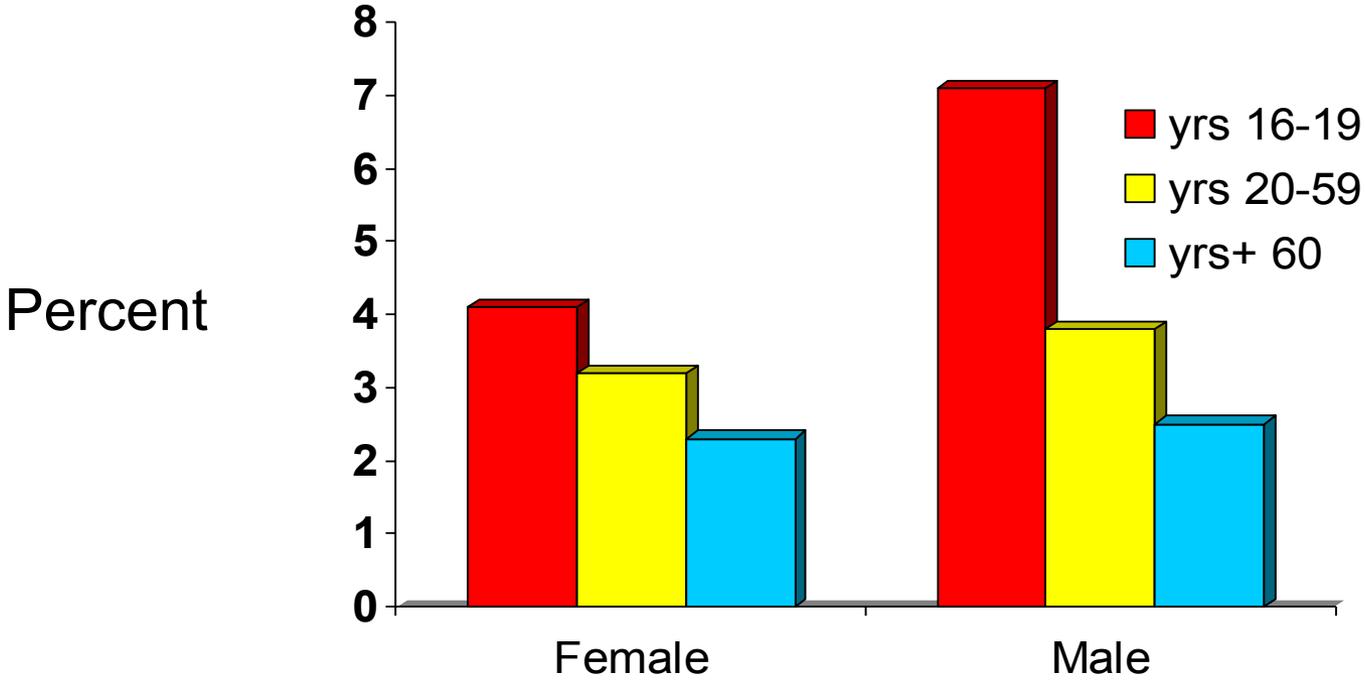
US Boys and Men: Minutes per Day Combined Moderate and Vigorous Activity



Source: RP Troiano et al., MSSE, 2008

Population Physical Activity Levels

US Adolescents, Adults, and Older Adults Meeting the Guidelines



Source: Troiano R, MSSE 2008;40(1):181-188

Physical Activity and Health Outcomes in the People with Disabilities

- What is the relationship between physical activity and health outcomes in people with disabilities?

Sources of evidence:

2008 Physical Activity Guidelines for Americans;
Physical Activity Guidelines Advisory Committee Report,
2008

Physical Activity and Health Outcomes in the People with Disabilities

Draft Conclusion Statement:

- The 2015 DGAC concurs with findings of the Physical Activity Guidelines Advisory Committee Report, 2008, which states that for people with physical disabilities, strong evidence shows that exercise can increase cardiorespiratory, musculoskeletal and mental health outcomes.
- For people with cognitive disabilities, strong evidence shows that exercise can improve musculoskeletal health, select functional health and mental health outcomes.

DGAC Grade: Strong

Physical Activity and Health Outcomes in the People with Disabilities (cont.)

Draft Conclusion Statement:

- For people with physical disabilities, moderate evidence indicates that physical activity improves a variety of functional health outcomes and reduces the effects of certain types of secondary conditions (i.e., pain and fatigue associated with the primary disability).
- For people with cognitive disabilities, moderate evidence indicates that physical activity improves cardiorespiratory health outcomes, musculoskeletal fitness, and metabolic health, and helps maintain healthy weight.

DGAC Grade: Moderate

Physical Activity and Health Outcomes in the People with Disabilities (cont.)

Draft Conclusion Statement:

- For people with physical disabilities, limited evidence suggests physical activity may promote a healthy weight and improve metabolic health.
- For people with cognitive disabilities, limited evidence suggests that physical activity may reduce secondary conditions.

DGAC Grade: Limited

Physical Activity and Health Outcomes in the People with Disabilities (cont.)

Draft Conclusion Statement (from the 2008 PAG):

- Adults with disabilities, who are able to, should get at least 150 minutes a week of moderate-intensity, or 75 minutes a week of vigorous-intensity aerobic activity, or an equivalent combination of moderate- and vigorous-intensity aerobic activity.
- Aerobic activity should be performed in episodes of at least 10 minutes, and preferably, it should be spread throughout the week.
- Adults with disabilities, who are able to, should also do muscle-strengthening activities of moderate or high intensity that involve all major muscle groups on 2 or more days a week, as these activities provide additional health benefits.

Physical Activity and Health Outcomes in the People with Disabilities (cont.)

Draft Conclusion Statement (from the 2008 PAG):

- When adults with disabilities are not able to meet the Guidelines, they should engage in regular physical activity according to their abilities and should avoid inactivity.
- Adults with disabilities should consult their health-care provider about the amounts and types of physical activity that are appropriate for their abilities.

Physical Activity and Health Outcomes During Pregnancy and the Postpartum Period

- Does being physically active during pregnancy and the postpartum period provide health benefits?

Sources of evidence:

2008 Physical Activity Guidelines for Americans;
Physical Activity Guidelines Advisory Committee Report,
2008

Physical Activity and Health Outcomes During Pregnancy and the Postpartum Period

Draft Conclusion Statement:

- The 2015 DGAC concurs with findings of the Physical Activity Guidelines Advisory Committee Report, 2008, which states that while the benefits of maternal physical activity have clearly been demonstrated, there is a lack of prospective, randomized intervention studies in diverse populations.
- Based on current evidence, unless there are medical reasons to the contrary, a pregnant woman can begin or continue a regular physical activity program throughout gestation, adjusting the frequency, intensity, and time as her condition warrants.

Physical Activity and Health Outcomes During Pregnancy and the Postpartum Period (cont.)

Draft Conclusion Statement:

- Little evidence exists for the dose of activity that confers the greatest health benefits to women during pregnancy and the postpartum period.
- In the absence of data, it is reasonable for women during pregnancy and the postpartum period to follow the moderate-intensity physical activity recommendations set for adults unless specific medical concerns warrant a reduction in activity.

DGAC Grade: Limited

Physical Activity and Health Outcomes During Pregnancy and the Postpartum Period (cont.)

Draft Conclusion Statement (from the 2008 PAG):

- Healthy women who are not already highly active or doing vigorous-intensity activity should get at least 150 minutes of moderate-intensity aerobic activity a week during pregnancy and the postpartum period.
- Preferably, this activity should be spread throughout the week.
- Pregnant women who habitually engage in vigorous-intensity aerobic activity or who are highly active can continue physical activity during pregnancy and the postpartum period, provided that they remain healthy and discuss with their health-care provider how and when activity should be adjusted over time.

Physical Activity and Adverse Events

- What is the relationship between the amount and type of physical activity and the risk of adverse events?

Sources of evidence:

2008 Physical Activity Guidelines for Americans;
Physical Activity Guidelines Advisory Committee Report,
2008

Physical Activity and Adverse Events

Draft Conclusion Statement:

- The 2015 DGAC concurs with findings of the Physical Activity Guidelines Advisory Committee Report, 2008, which states that the benefits of regular physical activity outweigh the inherent risk of adverse events.
- Risk of musculoskeletal injuries is lower for non-contact (e.g., walking) and limited contact (e.g., baseball) activities than for contact (e.g., basketball) and collision (e.g., football) activities.

Physical Activity and Adverse Events (cont.)

Draft Conclusion Statement:

- The usual dose of regular physical activity is directly related to the risk of musculoskeletal injury and inversely related to the risk of sudden adverse cardiac events.
- The risk of musculoskeletal injuries and sudden cardiac adverse events is directly related to the size of the difference between the usual dose of activity and the new or momentary dose of activity.
- The most consistently reported risk factor for musculoskeletal injuries and sudden cardiac adverse events is inactivity and low fitness.

DGAC Grade: Strong

Physical Activity and Adverse Events (cont.)

Draft Conclusion Statement (from the 2008 PAG):

- The DGAC concurs with the Physical Activity Guidelines for Americans, 2008 that to do physical activity safely and to reduce risk of injuries and other adverse events, people should:
 - Understand the risks and yet be confident that physical activity is safe for almost everyone.
 - Choose to do types of physical activity that are appropriate for their current fitness level and health goals, because some activities are safer than others.

Physical Activity and Adverse Events (cont.)

Draft Conclusion Statement:

- Increase physical activity gradually over time whenever more activity is necessary to meet the guidelines or health goals.
- Inactive people should “start low and go slow” by gradually increasing how often and how long activities are done.
- Protect themselves by using appropriate gear and sports equipment, looking for safe environments, following rules and policies, and making sensible choices about when, where, and how to be active.

Physical Activity and Adverse Events (cont.)

Draft Conclusion Statement:

- Be under the care of a health-care provider if they have chronic conditions or symptoms.
- People with chronic conditions and symptoms should consult their health-care provider about the types and amounts of activity appropriate for them.

Physical Activity Implications Statement

Draft Implications statement:

- Given the low rates at which children, adults, and older adults engage in regular physical activity, coupled with the strong evidence for health benefits from physical activity, every effort should be made to encourage and facilitate programs at multiple levels so that children, adults, and older adults can meet the *2008 Physical Activity Guidelines for Americans*.
- Ultimately, we as a nation need to develop programs, policies, and communication strategies across sectors, and improve the built environment to create a culture of health that facilitates participation in regular physical activity.

Physical Activity Implications Statement (cont.)

Draft Implications statement:

- Individuals, communities, schools, health care, and the private and public sector should:
 - Ensure that all individuals, particularly those with the greatest health disparities, have access to safe, affordable, and enjoyable modes of physical activity.
 - Support policies and promote programs for children, youth, adults, and older adults that help set and re-enforce a personal value system that instills a lifetime of physical activity.

Physical Activity Implications Statement (cont.)

Draft Implications statement:

- Enact effective policies and strengthen existing policies within schools, communities, health care settings, housing, and worksites that promote physical activity in combination with the *Dietary Guidelines for Americans*.
- Enact effective policies and strengthen existing policies that promote active transport (e.g., walking and bicycling) within and between communities nationwide.

Next Steps

1. Complete physical activity chapter for 2015 DGAC Report.

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