American
Heart
Association.

## 2020 Heart Disease \& Stroke Statistical Update Fact Sheet Cardiovascular Health

## Cardiovascular Health <br> By 2020, to improve the cardiovascular health of all Americans by 20\%, while reducing deaths from cardiovascular diseases and stroke by $20 \%$.

The American Heart Association's goals for cardiovascular health (CVH) are characterized by 7 metrics (Life's Simple 7), including health behaviors (i.e, not smoking, healthy diet pattern, sufficient physical activity [PA], normal body weight) and health factors (i.e. normal blood cholesterol, blood pressure, and fasting blood glucose in the absence of drug treatment). Ideal cardiovascular health is defined by the absence of clinically manifest cardiovascular disease (CVD) together with the simultaneous presence of optimal levels of all 7 metrics for health behaviors and health factors. The table below provides the specific definitions for poor, intermediate, and ideal cardiovascular health for each of the 7 metrics, both for adults and for children

| Metric | Level of Cardiovascular Health for Each Metric |  |  |
| :---: | :---: | :---: | :---: |
|  | Poor | Intermediate | Ideal |
| Current smoking |  |  |  |
| Adults $\geq 20 \mathrm{y}$ of age | Yes | Former $\geq 12 \mathrm{mo}$ | Never or quit >12 mo |
| Children 12-19 y of age* | Tried during the prior 30 ds | $\ldots$ | Never tried; never smoked whole cigarette |
| BMI $\dagger$ |  |  |  |
| Adults $\geq 20 \mathrm{y}$ of age | $\geq 30 \mathrm{~kg} / \mathrm{m}^{2}$ | $25-29.9 \mathrm{~kg} / \mathrm{m}^{2}$ | $<25 \mathrm{~kg} / \mathrm{m}^{2}$ |
| Children 2-19 y of age | >95th percentile | 85th-95th percentile | <85th percentile |
| Physical activity |  |  |  |
| Adults $\geq 20 \mathrm{y}$ of age | None | 1-149 min/wk moderate or 1-74 min/wk vigorous or 1-149 min/wk moderate $+2 \times$ vigorous | $\geq 150 \mathrm{~min} / \mathrm{wk}$ moderate or $\geq 75$ $\mathrm{min} / \mathrm{wk}$ vigorous or $\geq 150$ $\mathrm{min} / \mathrm{wk}$ moderate $+2 \times$ vigorous |
| Children 12-19 y of age | None | $>0$ and $<60 \mathrm{~min}$ of moderate or vigorous-daily | $\geq 60 \mathrm{~min}$ of moderate or vigorous every day |
| Healthy diet score, No. of components $\ddagger$ |  |  |  |
| Adults $\geq 20$ y of age | <2 (0-39) | 2-3 (40-79) | 4-5 (80-100) |
| Children 5-19 y of age | <2 (0-39) | 2-3 (40-79) | 4-5 (80-100) |
| TC, mg/dL |  |  |  |
| Adults $\geq 20 \mathrm{y}$ of age | $\geq 240$ | 200-239 or treated to goal | <200 |
| Children 6-19 y of age | $\geq 200$ | 170-199 | <170 |

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Table 2-1 (continued)

| Metric | Level of Cardiovascular Health for Each Metric |  |  |
| :---: | :---: | :---: | :---: |
|  | Poor | Intermediate | Ideal |
| Blood pressure |  |  |  |
| Adults $\geq 20$ y of age | SBP $\geq 140 \mathrm{~mm} \mathrm{Hg}$ or DBP $\geq 90 \mathrm{~mm} \mathrm{Hg}$ | SBP 120-139 mm Hg or DBP $80-89 \mathrm{~mm} \mathrm{Hg}$ or treated to goal | $<120 \mathrm{~mm} \mathrm{Hg} /<80 \mathrm{~mm} \mathrm{Hg}$ |
| Children 8-19 y of age | >95th percentile | 90th-95th percentile or SBP $\geq 120 \mathrm{~mm} \mathrm{Hg}$ or DBP $\geq 80 \mathrm{~mm}$ Hg | <90th percentile |
| Diabetes§ |  |  |  |
| Adults $\geq 20$ y of age | FPG $\geq 126 \mathrm{mg}$ dL or HbA1c >6.5\% | FPG 100-125 or HbA1c 5.7$6.4 \%$ or treated to goal | FPG <100 or $\mathrm{HbA1c}$ < $5.7 \%$ |
| Children 12-19 y of age | $\begin{gathered} \text { FPG } \geq 126 \mathrm{mg} \mathrm{dL} \text { or HbA1c } \\ >6.5 \% \end{gathered}$ | FPG 100-125 or HbA1c 5.7- <br> $6.4 \%$ or treated to goal | FPG <100 or $\mathrm{HbA1c}$ < $5.7 \%$ |

AHA indicates American Heart Association; BMI, body mass index; DASH, Dietary Approaches to Stop Hypertension; DBP, diastolic blood pressure; ellipses (...), data not available; FPG, fasting plasma glucose; HbA1c, glycosylated hemoglobin or Hemoglobin A1c; and SBP, systolic blood pressure

* Age ranges in children for each metric depend on guidelines and data availability.
$\dagger$ Represents appropriate energy balance, that is, appropriate dietary quantity and physical activity to maintain normal body weight.
$\ddagger$ In the context of a healthy dietary pattern that is consistent with a DASH-type eating pattern, to consume $\geq 4.5 \mathrm{cups} / \mathrm{d}$ of fruits and vegetables, $\geq 2$ servings/wk of fish, and $\geq 3$ servings/d of whole grains and no more than $36 \mathrm{oz} / \mathrm{wk}$ of sugar-sweetened beverages and 1500 $\mathrm{mg} / \mathrm{d}$ of sodium. The consistency of one's diet with these dietary targets can also be described using a continuous AHA diet score, scaled from 0 to 100 (see chapter on Nutrition).
§ FPG is solely used to determine poor, intermediate, and ideal status for AHA Strategic Impact Goal monitoring purposes. For population surveillance purposes, use of HbA1c was added to define poor, intermediate, and ideal levels of this component and the name was changed to "Diabetes" to reflect this addition.
Source: Modified from Lloyd-Jones et al. ${ }^{1}$ Copyright © 2010, American Heart Association, Inc.


## Summary of Cardiovascular Health (CV) of All Americans

- For most metrics based on 2015 to 2016 data, the prevalence of ideal levels of health behaviors and health factors was higher in US children than in US adults. The exceptions are diet and PA, for which prevalence of ideal levels in children was lower than in adults.
- Based on 2015 to 2016 data, among US children aged 12 to 19 years, the prevalence (unadjusted) of ideal levels of cardiovascular health behaviors and factors varied from <1\% for the healthy diet pattern ( $<1$ in 100 US children meets at least 4 of the 5 dietary components) to $>85 \%$ for the smoking, blood pressure (BP), and fasting glucose metrics.
- Among US adults from 2015 to 2016, the age-standardized prevalence of ideal levels of cardiovascular health behaviors and factors varied from $<1 \%$ for Healthy Diet Score to up to $82 \%$ for never having smoked or being a former smoker who has quit for >12 months.


## CV Health in Children

- In 2015 to 2016, few US children 12 to 19 years of age ( $\approx 4 \%$ ) met 0,1 , or 2 criteria for ideal cardiovascular health.
- In 2015 to 2016, approximately half of US children (50\%) met 3 or 4 criteria for ideal cardiovascular health, and $\approx 45 \%$ met 5 or more criteria.
- In 2015 to 2016, less than $1 \%$ of children met all 7 criteria for ideal cardiovascular health.


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## CV Health in Adults

- In 2015 to 2016, approximately $2.5 \%$ of US adults met 0 of the 7 criteria at ideal levels, and another $15.3 \%$ met only 1 of 7 criteria.
- In 2015 to $2016,41 \%$ of US adults had 2 or fewer criteria at ideal cardiovascular health.
- In 2015 to 2016, only $3 \%$ of US adults had 5 or more components at poor levels.


## CV Health and Age/Sex

- Presence of ideal cardiovascular health is both age and sex related.
- In 2015 to 2016 , the prevalence of ideal levels of $\geq 5$ or $\geq 6$ CVH components among adults was highest in the youngest age groups ( $20-39$ years of age) and was lowest in the oldest age group ( $\geq 60$ years of age). Having $\leq 1$ ideal CVH component is much less common among younger adults (20-39 years of age), at $4.5 \%$, compared with older adults ( $\geq 60$ years of age), for whom having $\leq 1$ ideal metric is more common ( $28.6 \%$ ). At any age, a higher percentage of females had 4 or more metrics at ideal levels than did males.


## CV Health and Race

- Among children between 2015 and 2016, approximately $63 \%$ of NH Asians, $49 \%$ of NH whites, $41 \%$ of Hispanics, and $35 \%$ of NH blacks had $\geq 5$ metrics at ideal levels.
- Among adults between 2015 and 2016, approximately $26 \%$ of NH Asians, $19 \%$ of NH whites, $12 \%$ of Hispanics, and $12 \%$ of NH blacks had $\geq 5$ metrics at ideal levels.

For additional information, charts and tables, see Heart Disease \& Stroke Statistics - 2020 Update

Additional charts may be downloaded directly from the online publication or www.heart.org/statistics
Many statistics in this Fact Sheet come from unpublished tabulations compiled for this document and can be cited using the document citation listed below. The data sources used for the tabulations are listed in the full document. Additionally, some statistics come from published studies. If you are citing any of the statistics in this factsheet, please review the full Heart Disease and Stroke Statistics document to determine data sources and original citations.

The American Heart Association requests that this document be cited as follows:
Virani SS, Alonso A, Benjamin EJ, Bittencourt MS, Callaway CW, Carson AP, Chamberlain AM, Chang AR, Cheng S, Delling FN, Djousse L, Elkind MSV, Ferguson JF, Fornage M, Khan SS, Kissela BM, Knutson KL, Kwan TW, Lackland DT, Lewis TT, Lichtman JH, Longenecker CT, Loop MS, Lutsey PL, Martin SS, Matsushita K, Moran AE, Mussolino ME, Perak AM, Rosamond WD, Roth GA, Sampson UKA, Satou GM, Schroeder EB, Shah SH, Shay CM, Spartano NL, Stokes A, Tirschwell DL, VanWagner LB, Tsao CW; on behalf of the American Heart Association Council on Epidemiology and Prevention Statistics Committee and Stroke Statistics Subcommittee. Heart disease and stroke statistics- 2020 update: a report from the American Heart Association. Circulation. 2020;141:e1-e458. doi: 10.1161/CIR. 0000000000000757

If you have questions about statistics or any points made in the 2020 Statistical Update, please contact the American Heart Association National Center, Office of Science \& Medicine at statistics@heart.org. Please direct all media inquiries to News Media Relations at http://newsroom.heart.org/newsmedia/contacts.

