CME Activity Inside and Online

City Health Information

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Lipid Control: Preventing Cardiovascular Events in Patients With Atherosclerotic Disease or Diabetes

- **Counsel all patients on lifestyle modification, the cornerstone of cardiovascular disease prevention.**
- **Treat all patients with coronary or other atherosclerotic disease or diabetes to reach an LDL goal of <100 mg/dL; consider an LDL goal of <70 mg/dL for very high-risk patients.**
- **Prescribe statins to lower LDL and reduce cardiovascular events and mortality by at least 30%.**

Cardiovascular disease (CVD) is the leading cause of preventable illness and death in New York City (NYC), with nearly 25,000 deaths and more than 130,000 hospitalizations[1,2] each year. Elevated low-density lipoprotein (LDL) cholesterol is a major – but modifiable – risk factor for CVD. People with atherosclerotic disease or diabetes are at high risk of a future cardiovascular event, but two thirds of these patients in NYC (approximately 400,000 people) have not met the LDL goal of <100 mg/dL. The consequences of inadequate lipid control in this population are great: those with diabetes are 2 to 6 times more likely to die from a cardiovascular event than those without diabetes.[3]

Primary care providers need to identify patients at increased risk of future cardiovascular events and properly manage their lipid levels by promoting lifestyle changes and, for many, prescribing medication.

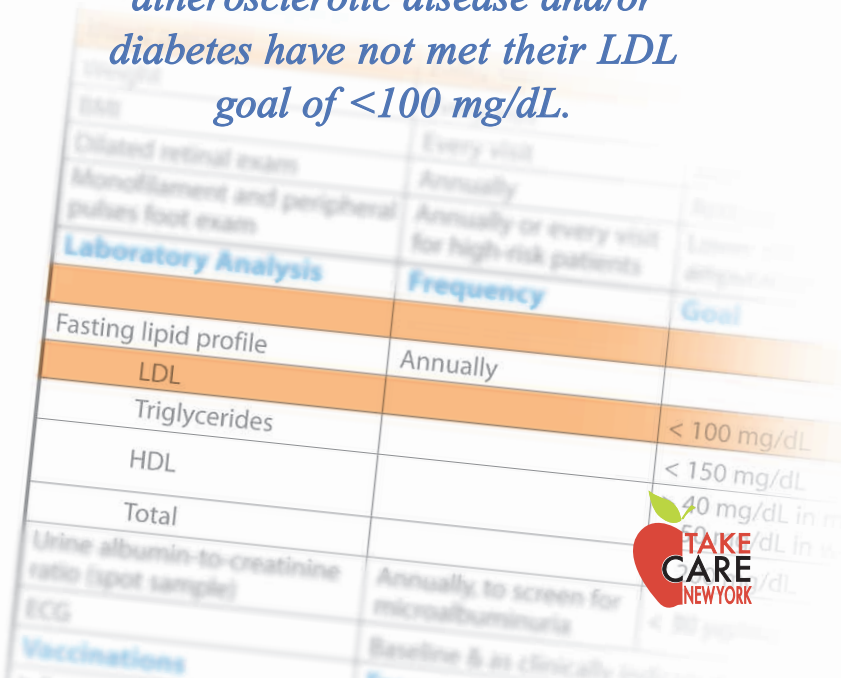
CVD Disparities by Race and Income

- In NYC, the CVD death rate among those aged 45 to 54 is 55% higher in blacks than in whites.[4]
- Stroke mortality rates in low-income neighborhoods in NYC are nearly twice those in high-income communities.[4]
- Blacks are less likely to be screened or treated for CVD risk factors, including elevated lipids.[5]

Preventing cardiovascular events through lipid control is key in patients with:

- Atherosclerotic disease
  - Coronary heart disease
  - Symptomatic carotid artery disease
  - Peripheral arterial disease
  - Abdominal aortic aneurysm
- Diabetes

Two thirds of New Yorkers with atherosclerotic disease and/or diabetes have not met their LDL goal of <100 mg/dL.



Screening and Treatment Goals for Dyslipidemia

To screen for dyslipidemia, obtain a complete lipoprotein profile yearly after a 9- to 12-hour fast. Obtain follow-up tests as needed until LDL goal is reached and periodically thereafter. LDL goals for patients with coronary or other atherosclerotic disease or diabetes are more stringent than goals for other patients (**Table 1**).

Lower LDL goals (<70 mg/dL) are an option for ***very high-risk patients,*** defined as the presence of CVD *plus one or more of the following*:[7]

- Recent acute coronary syndrome
- Multiple major CVD risk factors (especially diabetes)
- Severe and poorly controlled risk factors (especially cigarette smoking)
- Multiple risk factors of the metabolic syndrome (a condition associated with increased risk of CVD and diabetes), especially with high triglycerides (≥200 mg/dL) and low high-density lipoprotein (HDL) cholesterol (<40 mg/dL)

Table 1. Lipid Goals in Patients With CVD or Diabetes[6]

LDL*	<100 mg/dL <70 (option in very high-risk patients)
Total Cholesterol	<200 mg/dL
HDL	>40 mg/dL (men) >50 mg/dL (women)
Triglycerides	<150 mg/dL

*Lipid panels use calculated LDL: LDL = Total cholesterol – (triglycerides/5) – HDL. This formula is applicable only when triglycerides are <400 mg/dL.

Some publications suggest that LDL should be reduced by 30% to 40% in all patients with coronary or other atherosclerotic disease, or in those with diabetes who are over 40 years of age. The greater the patient's overall risk, the stronger the benefit.[7,8]

Lipid Control Strategies

Lifestyle modification and drug therapy are the key interventions for lowering lipids, with elevated LDL cholesterol as the primary target of therapy (**Table 2**). Providing guidance on lifestyle modification (**Table 3**) and prescribing appropriate drugs (**Tables 4 and 5**) are fundamental to a successful treatment regimen. Elevated triglycerides and low HDL are secondary targets (**Table 6**).

Lifestyle Modification

Up to 80% of coronary events can be attributed to smoking, inactivity, and an unhealthy diet.[9,10] In addition, smoking can cause low HDL.[6] A healthy diet, weight control, and regular physical activity can reduce both LDL and the risk of CVD.

Nutritionists offer important dietary and weight management counseling, but not all patients have access to their services. Thus, primary care providers should address fundamental nutrition issues emphasizing simple, key messages tailored to patients' needs (**Table 3**). Provide clear, personalized advice about healthier lifestyle choices; assist patients in setting achievable self-management goals; and monitor progress at each patient visit.

Table 2. LDL Management in Patients With Atherosclerotic Disease or Diabetes[6]

Initial LDL Level	Lifestyle Modification	Initiation of Drug Therapy
≥130 mg/dL	Yes (**Table 3**)	Start statin therapy simultaneously with lifestyle modification.
100-129 mg/dL	Yes (**Table 3**)	Consider starting statin therapy simultaneously with lifestyle modification. Definitely start statin therapy if still >100 mg/dL after 3 months of lifestyle modification.* In patients hospitalized with an acute cardiovascular or coronary event, initiate statin therapy prior to discharge.[22]
<100 mg/dL	Yes (**Table 3**)	Statin therapy is not required, but may further lower risk in some patients. Lowering to <70 mg/dL in very high-risk patients is an option.

*In people younger than 40 years with diabetes but without CVD, lifestyle modification alone may be sufficient; however, data for this subpopulation are limited. Use clinical judgement based on other cardiovascular risk factors to guide whether or when to start drug therapy if the LDL goal of <100 mg/dL is not met by lifestyle modification alone.

Table 3. Lifestyle Modification Information for Patients

Healthy Diet	**Limit saturated fat and cholesterol intake. Choose foods from the following groups:** • Skinless poultry, fish, and lean cuts of red meat • Fat-free or low-fat milk, yogurt, and cheese • Monounsaturated oils (olive, canola) or margarine labeled "*trans* fat-free" • Legumes (beans, peas, and lentils) • Egg whites and egg substitutes **Avoid foods containing *trans* fats.** • Read the ingredients labels on store-bought foods (for example, baked goods, snack foods, and margarine), and avoid those containing partially hydrogenated vegetable oil or shortening. **Eat more fiber.** • Choose foods rich in fiber, such as beans, lentils, barley, oats, citrus fruits, apples, pears, bananas, berries, peaches, nectarines, plums, prunes, brussels sprouts, broccoli, carrots, and beans. • Choose cereals with high soluble fiber content, such as oat bran.
Weight Management	**Even modest weight loss is beneficial. Lose weight gradually, aiming for 1 to 2 lbs/week**. **Choose nutritious foods (see Healthy Diet section) and adopt healthy eating behaviors.** • Identify and reduce sources of excess calories (for example, non-diet soda). • Read food labels to identify products that are *trans* fat-free and are low in calories and saturated fat. • Practice moderation and balance—select sensible portion sizes and avoid second helpings. • Avoid eating in front of the T.V. • Drink water between meals.
Physical Activity	**Get at least 30 minutes of moderate physical activity (such as a brisk walk) at least 5 days/week.** **Walk as much as you can.** • Get off the bus or subway a stop early and walk. • Take the stairs instead of the elevator or escalator. • Start your lunch hour with a brisk, 20-minute walk. **Look for ways to get more physical activity.** • View household chores (vacuuming, gardening, raking leaves, running errands) as a way to get more physical activity. • Limit time spent in front of the TV and computer. • Use TV-viewing time as an opportunity to do exercises or to pedal a stationary bike.
Smoking Cessation	**Partner with your health care provider, and set a quit date.** **Consider using medication, such as the nicotine patch, to help you quit.** **Seek out cessation counseling (ask your provider for referral), call 311, or visit: www.nyc.gov/html/doh/html/smoke/smoke2-cess1.shtml.** **Call the New York State Smokers Quitline (888) 609-6292.**

Table 4. Statins*

Drug	LDL-Lowering Effect[19†]	Liver Function Test (LFT) Monitoring‡	Cost/30 days[23]
Atorvastatin (Lipitor®)		Baseline, 12 weeks, and every 6 months[24]	
10 mg	34%–39%		$70.80
20 mg	42%–46%		$99.90
40 mg	48%–51%		$98.40
80 mg	46%–54%		$93.60
Simvastatin (Zocor®)		Baseline and every 6 months[25]	
10 mg	26%–33%		$76.20§
20 mg	24%–40%		$130.80§
40 mg	34%–43%		$128.10§
80 mg	43%–49%		$115.80§
Pravastatin (Pravachol®)		Baseline and every 6 months[26]	
10 mg	18%–25%		$90.90/69.90 (generic)
20 mg	23%–29%		$92.40/70.20 (generic)
40 mg	25%–34%		$133.20/101.40 (generic)
80 mg	34%–37%		$126.90/generic NA
Fluvastatin (Lescol®)		Baseline, 12 weeks, and prior to increasing dose[27]	
20 mg	17%–22%		$60.00
40 mg	22%–26%		$60.60
80 mg	30%–31%		NA
80 mg XL	35%		$74.10
Lovastatin (Mevacor®)		Baseline, 6 weeks, 12 weeks, and every 6 months[28]	
10 mg	22%–24%		$31.50/21.60 (generic)
20 mg	21%–29%		$74.40/29.10 (generic)
40 mg	28%–33%		$137.70/46.20 (generic)
80 mg	39%–48%		NA
Rosuvastatin (Crestor®)		Baseline, 12 weeks, and every 6 months[29]	
5 mg	39%–46%		$79.50
10 mg	43%–50%		$79.20
20 mg	52%		$75.00
40 mg	55%–57%		$67.80
80 mg	62%		NA

* **Contraindications for Use:**
Absolute – active or chronic liver disease, pregnancy, lactation.
Relative – concomitant use of cyclosporine, macrolide antibiotics, various antifungal agents, and other CYP3A4 inhibitors; pravastatin, fluvastatin, and rosuvastatin are not metabolized by CYP3A4.

† **Other lipid/lipoprotein effects** include an increase in HDL (5% to 15%) and a decrease in triglycerides (7% to 30%).

‡ In addition to elevated liver enzymes, **other adverse effects** include myositis, rhabdomyolysis (rare), and renal failure (rare).

Use of brand names is for informational purposes only and does not imply endorsement by the New York City Department of Health and Mental Hygiene.

§ Generic price pending.

Reinforce the need for long-term lifestyle modification, which is essential even when cholesterol-lowering drugs are prescribed.

Table 5. Niacin, Fibrates, Cholesterol Absorption Inhibitors, and Bile Acid Sequestrants[6]

NIACIN

Drug	Usual daily dose	Cost/30 days[23]
Generic (immediate release)	1.5–3 g t.i.d.	$15.30–$30.60
Niacor®	1.5–3 g t.i.d.	$68.40–$136.80
• *Niaspan*® (extended release)	1–2 g h.s.	$102.30–$204.60

Lipoprotein effects: ↓LDL 5% to 25%, ↑HDL 15% to 35%, ↓triglycerides 20% to 50%
Adverse effects: flushing, hyperglycemia, hyperuricemia (or gout), upper GI distress, hepatotoxicity
Absolute contraindications: chronic liver disease, severe gout
Relative contraindications: diabetes, hyperuricemia, peptic ulcer disease
Caution: increased risk of myositis and hepatitis when using niacin and statins together; may cause increased blood sugar in persons with diabetes

FIBRATES

Drug	Usual daily dose	Cost/30 days[23]
Gemfibrozil		
• Generic	600 mg b.i.d.	$20.40
• *Lopid*®	600 mg b.i.d.	$93.00
Fenofibrate		
• Generic	200 mg q.d.	$51.30
• *Lofibra*® (micronized)	200 mg q.d.	$69.90
• *Tricor*®	160 mg q.d.	$93.60

Lipoprotein effects: ↓LDL 5% to 20%, ↑HDL 10% to 20%, ↓triglycerides 20% to 50%
Adverse effects: dyspepsia, gallstones, myopathy
Absolute contraindications: severe renal disease, severe hepatic disease
Caution: increased risk of myositis when using fibrates and statins together

CHOLESTEROL ABSORPTION INHIBITORS

Drug	Usual daily dose	Cost/30 days[23]
Ezetimibe – *Zetia*®	10 mg q.d.	$75.90

Lipoprotein effects: ↓LDL 18%, ↑HDL 1%, ↓triglycerides 8%
Adverse effects: GI distress
Contraindications: active liver disease or elevated LFTs, especially when in combination with a statin; lactation

BILE-ACID SEQUESTRANTS

Drug	Usual daily dose	Cost/30 days[23]
Cholestyramine		
• Generic	4–16 g q.d. or b.i.d.	$58.50–$234.00
• *Questran*®	4–16 g q.d. or b.i.d.	$121.80–$487.20
Colesevelam		
• *WelChol*®	3.75 g q.d. (6 tabs)	$790.20
Colestipol		
• *Colestid*®	5–20 g t.i.d.—q.d.	$249.00–$996.00

Lipoprotein effects: ↓LDL 15% to 30%, ↑HDL 3% to 5%, triglycerides: no change or increase
Adverse effects: GI distress, constipation, decreased absorption of other drugs
Absolute contraindications: dysbetalipoproteinemia

COMBINATION DRUGS

Drug	Usual daily dose	Cost/30 days[23]
Niacin (500 mg) + Lovastatin (20 mg) [Advicor®]	1-2 tabs h.s.	$90.60–$181.20
Ezetimibe (10 mg) + Simvastatin (20 mg) [Vytorin®]	1 tab q.d.	$79.50

See individual drug components for **lipoprotein effects, adverse effects,** and **contraindications**.

Drug Therapy

Most patients at high risk for a future cardiovascular event will not meet their LDL goal with lifestyle modification alone. Three quarters of those with heart disease require at least a 30% reduction in LDL.[6] Drug therapy can improve vasodilation and prevent, slow, or reverse atherosclerotic lesions.[11] For example, the use of statins in high-risk patients can reduce LDL by as much as 60%; coronary heart disease mortality and major cardiovascular events can be reduced by 30% to 40%.[12-19] Indications for other pharmacotherapeutic measures to reduce cardiovascular risk, such as aspirin, beta-blockers, or smoking cessation medication, should be assessed in all patients with atherosclerotic disease or diabetes.

Statins are usually the drug of choice for high-risk patients with elevated LDL (**Table 4**). All currently marketed statins lower LDL cholesterol and are generally safe. Serious, though rare, adverse effects — rhabdomyolysis and renal failure — are seen in fewer than 5 per 1,000,000 prescriptions.

When prescribing statins, particularly in combination with fibrates, discuss the signs and symptoms of myositis with patients, and monitor liver function at 3 months and every 6 to 12 months thereafter.

Statin selection and dosage considerations include maximizing safety, meeting LDL goals, facilitating adherence, and ensuring financial accessibility.

Consider the following in making a selection:

- **Simvastatin, atorvastatin,** and **pravastatin** show the strongest evidence of reducing cardiovascular mortality, events, and stroke.[21] Atorvastatin is the most potent of the three.
- **Lovastatin, pravastatin, and simvastatin** are currently the only statins available as generics. Lovastatin is an option for those requiring reductions of less than 30% in LDL.[20]
- **Rosuvastatin,** while very effective in lowering LDL, has been associated with higher rates of renal insufficiency and acute renal failure.[21]

Niacin, fibrates, cholesterol absorption inhibitors, and bile acid sequestrants can be used to treat elevated triglycerides and low HDL, and have a modest impact on LDL levels (**Table 5**). Cholesterol absorption inhibitors or fibrates can be used in combination with statins when further LDL lowering is needed. The risk of myositis is increased when using fibrates and statins together.

Treatment of Elevated Triglycerides and Low HDL Cholesterol

Elevated serum triglycerides (>150 mg/dL) and low HDL cholesterol (<40 mg/dL in men; <50 mg/dL in women) are both independent predictors of coronary heart disease. Treatment may require lifestyle modification in combination with drug therapy (**Table 6**). Be certain to rule out secondary causes such as hypothyroidism, estrogen use, alcohol or carbohydrate excess, or use of beta-blockers, anabolic steroids, or progestational agents. ◆

Table 6. Approach to Treating Elevated Triglycerides and Low HDL Cholesterol[6]

- Counsel patients on lifestyle modification (**Table 3**)
- If triglycerides ≥500 mg/dL
  - Initiate very low-fat diet (≤15% kcal from fat)
  - Control blood sugar and treat alcohol abuse, if present
  - Initiate niacin or fibrate therapy to lower triglyceride level to <500 mg/dL
- When triglycerides <500 mg/dL
  - Initiate statin if not at LDL goal (**Table 4**)
  - Continue niacin or fibrate to reach triglycerides goal (**Table 5**)
- If triglycerides 150–499 or HDL<40 mg/dL in men or <50 mg/dL in women
  - Depending on patient's risk profile, consider niacin or fibrate therapy to reach triglyceride goal (<150 mg/dL) and/or HDL goal (>40 mg/dL in men; >50 mg/dL in women) (**Table 5**), and initiate statin if not at LDL goal.
  - If a patient drinks alcohol daily, the limited intake of one drink a day for women or 2 drinks a day for men may raise their HDL.

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RESOURCES

Clinician resources

National

- National Cholesterol Education Program
  (301) 592-8537
  www.nhlbi.nih.gov/about/ncep/
- American Association of Clinical Endocrinologists
  (904) 353-7878
  www.aace.com
- American Dietetic Association
  (800) 366-1655
  www.eatright.org
- American Heart Association
  (800) AHA-USA-1
  (800) 242-8721
  www.americanheart.org
- Centers for Disease Control and Prevention
  (770) 488-2424
  Cardiovascular Health Program
  www.cdc.gov/dhdsp

State

- New York State Department of Health
  Cardiovascular Health Program
  (518) 474-6683
  www.health.state.ny.us/nysdoh/heart/healthy/program.htm

Local

- NYC Department of Health and Mental Hygiene
  Cardiovascular Disease Prevention and Control
  www.nyc.gov/html/doh/html/cardio/cardio.shtml
  Diabetes Prevention and Control
  www.nyc.gov/health/diabetes
- NYC Region American Heart Association
  (212) 878-5900
  www.americanheart.org

Other

- Motivational Interviewing Techniques for Physicians
  Introduction: www.motivationalinterview.org/clinical/whatismi.html
- User-friendly provider handbook: *Lifestyle Change* (Rapid Reference series), by Chris Dunn and Stephen Rollnick, Chicago, Ill, Mosby, 2003

Patient resources

Cholesterol, Dietary Fats

- Call 311 or visit www.nyc.gov/health for free NYC DOHMH Health Bulletins including:
  Healthy Heart–Cholesterol (available in English and Spanish)
  Healthy Heart–Eat Less Trans *Fat* (available in English, Spanish, Chinese, Russian, Urdu, Bengali, and Creole)
- National Heart, Lung, and Blood Institute: NIH Institute and Center Resources
  http://health.nih.gov/result.asp/139
- American Heart Association
  www.americanheart.org/presenter.jhtml?identifier=1516

Fitness and Weight Loss

- NYC DOHMH Fitness Resource Directories for Harlem, Brooklyn, and the South Bronx
  www.nyc.gov/html/doh/downloads/pdf/cdp/cdp-resource-harlem.pdf
  www.nyc.gov/html/doh/downloads/pdf/dpho/dpho-brooklyn-fitnessprog.pdf
  www.nyc.gov/html/doh/downloads/pdf/cdp/cdp-resource-sobronx.pdf
- NYC Department of Parks and Recreation
  www.nycgovparks.org
- The President's Council on Physical Fitness and Sports
  www.fitness.gov

Drug Assistance Programs for Patients

- RxOutreach (800) 769-3880. Application can be accessed at: www.rxoutreach.com
- EPIC www.health.state.ny.us/nysdoh/epic/faq.htm

For an e-mail subscription to *City Health Information*: visit: www.nyc.gov/html/doh/html/chi/chi.shtml

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CME Activity – Lipid Control: Preventing Cardiovascular Events in Patients With Atherosclerotic Disease or Diabetes

1. A 25-year-old man with diabetes and no other risk factors for cardiovascular disease presents to you for his yearly comprehensive exam. All of the statements below are TRUE EXCEPT:

- ❑ **A.** He should be screened yearly with a full lipid panel (LDL, total cholesterol, HDL, and triglycerides).
- ❑ **B.** The goal for his LDL is < 70 mg/dL.
- ❑ **C.** Diabetes places him at high risk of a future cardiovascular event.
- ❑ **D.** People with diabetes are 2 to 6 times more likely to die from a cardiovascular event than those without diabetes.

2. A 65-year-old man has stable angina and severe gout. He has an LDL of 115 mg/dL and an HDL of 35. He presents to you to discuss his need for lipid treatment. All of the statements below are TRUE EXCEPT:

- ❑ **A.** The goal for his LDL is < 50 mg/dL.
- ❑ **B.** This patient should be started on lifestyle modification immediately.
- ❑ **C.** Niacin can raise HDL by 15% to 35%.
- ❑ **D.** He is not a candidate for niacin therapy because of his severe gout.

3. A 60-year-old woman with coronary heart disease and obesity who smokes 1 pack of cigarettes per day presents to you for advice on how to prevent having a heart attack. All of the statements below about lifestyle modification are TRUE EXCEPT:

- ❑ **A.** Clinicians can play an important role in counseling smokers to quit by providing clear, individualized counseling, such as: assessing readiness to quit; helping the patient set a quit date; prescribing cessation drug therapy; and referring for counseling.
- ❑ **B.** Working toward a fitness routine that includes 30 minutes of moderate-to-vigorous physical activity at least 5 days/week is a recommended physical activity goal.
- ❑ **C.** A reasonable weight loss is no more than 1 to 2 pounds per week.
- ❑ **D.** *Trans* fat in partially hydrogenated vegetable oil is a healthier choice than fat in monounsaturated oils, such as in olive or canola.

4. A 70-year old man with symptomatic carotid artery disease who regularly binge drinks presents to you to discuss the results of his lipid panel. His LDL is 170 mg/dL, total cholesterol is 210 mg/dL, triglycerides are 350 mg/dL, and HDL is 30 mg/dL. All of the statements below are TRUE EXCEPT:

- ❑ **A.** The goal for his LDL is < 100 mg/dL, total cholesterol < 200 mg/dL, triglycerides < 150 mg/dL, and HDL > 40 mg/dL.
- ❑ **B.** Three quarters of people with heart disease require at least a 30% reduction in LDL.
- ❑ **C.** Lifestyle modification alone, without drug therapy, will probably be enough for this patient to reach his goal LDL.
- ❑ **D.** The use of statins in high-risk patients can reduce LDL by as much as 60% and reduce coronary heart disease mortality and major cardiovascular events by 30% to 40%.

5. A 65-year old man with a history of a 4 vessel CABG in 2004 has been placed on a statin by his cardiologist. You see him today because he is complaining of severe muscle pain. All of the statements below about statins are TRUE EXCEPT:

- ❑ **A.** Clinicians should discuss signs and symptoms of myopathy with all patients taking statins and monitor liver function tests (LFTs).
- ❑ **B.** Rhabdomyolysis and renal failure are common adverse effects of statins.
- ❑ **C.** Simvastatin, atorvastatin, and pravastatin have the strongest evidence of reducing cardiovascular mortality, events, and stroke.
- ❑ **D.** Statins can improve vasodilation and prevent, slow, or reverse atherosclerotic lesions.

6. How well did this continuing education activity achieve its educational objectives?

❑ **A.** Very well ❑ **B.** Adequately ❑ **C.** Poorly

PLEASE PRINT LEGIBLY.

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Continuing Education Activity

This issue of *City Health Information*, including the continuing education activity, can be downloaded from the publications section at nyc.gov/health. To access *City Health Information* and Continuing Medical Education online, visit www.nyc.gov/html/doh/html/chi/chi.shtml.

Instructions

Read this issue of *City Health Information* for the correct answers to questions. To receive continuing education credit, you must answer 4 of the first 5 questions correctly.

To Submit by Mail

1. Complete all information on the response card, including your name, degree, mailing address, telephone number, and e-mail address. PLEASE PRINT LEGIBLY.

2. Select your answers to the questions and check the corresponding boxes on the response card.

3. Return the response card (or a photocopy) postmarked **no later than July 31, 2007.** Mail to:

CME/CNE Administrator, NYC Dept. of Health and Mental Hygiene,
2 Lafayette, CN-65, New York, NY 10277-1632.

To Submit Online

Visit www.nyc.gov/html/doh/html/chi/chi.shtml to complete this activity online. Your responses will be graded immediately, and you can print out your certificate.

Continuing Education Activity

Lipid Control: Preventing Cardiovascular Events in Patients With Atherosclerotic Disease or Diabetes

SPONSORED BY
THE NEW YORK CITY DEPARTMENT OF HEALTH AND MENTAL HYGIENE (DOHMH)
CITY HEALTH INFORMATION
VOL. 25(5):33-40; JULY/AUGUST 2006

Objectives

At the conclusion of the course, the participants should be able to:

1. Identify and manage dyslipidemia in patients at risk for cardiovascular events.
2. Counsel patients on lifestyle modification.
3. Prescribe medications to reach lipid goals, especially LDL goals.

Accreditation

The DOHMH is accredited by the Medical Society of the State of New York to sponsor continuing medical education for physicians. The DOHMH designates this educational activity for a maximum of one *AMA PRA Category 1 Credit(s)™*. Physicians should only claim credit commensurate with the extent of their participation in the activity.

Participants are required to submit name, address, and professional degree. This information will be maintained in the Department's CME program database. If you request, the CME Program will verify your participation and whether you passed the exam.

We will not share information with other organizations without your permission, except in certain emergencies when communication with health care providers is deemed by the public health agencies to be essential or when required by law. Participants who provide e-mail addresses may receive electronic announcements from the Department about future CME activities as well as other public health information.

Participants must submit the accompanying exam by July 31, 2007.

CME Activity Faculty:
Diana K. Berger, MD, MSc; Lynn Silver, MD

All faculty are affiliated with the New York City DOHMH, Division of Health Promotion and Disease Prevention.

The faculty does not have any financial arrangements or affiliations with any commercial entities whose products, research, or services are discussed in this issue.

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