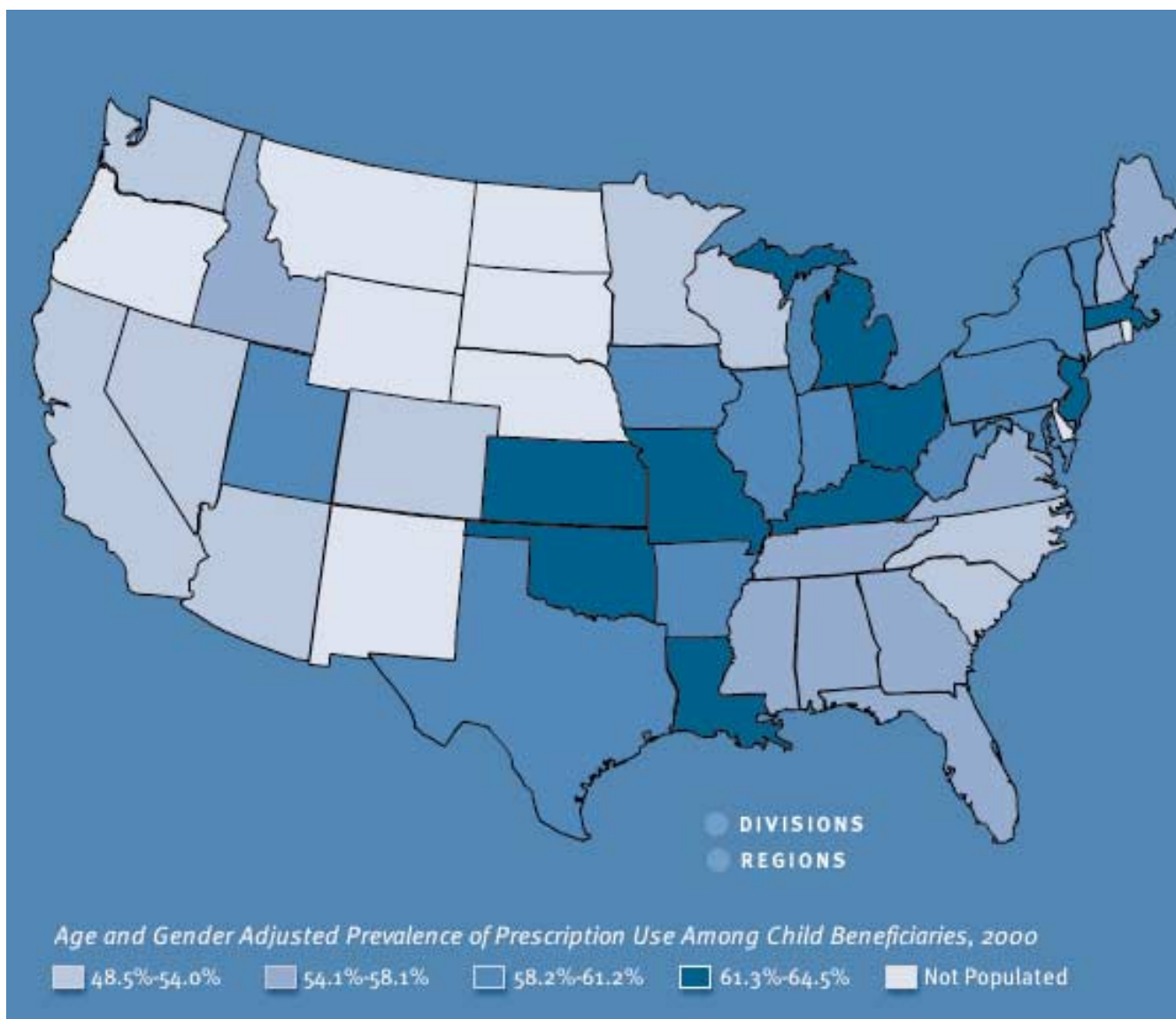


Variation Among Child Beneficiaries

OVERALL PREVALENCE OF USE

Prevalence of prescription use among children varied from a high of 64% to a low of 48%. Regional patterns of variation show that use was highest in the Midwest and West South Central. The lowest use was seen in the West.

Figure 4.1: Age and Gender Adjusted Prevalence of Prescription Use Among Child Beneficiaries Less than 18 Years of Age, 2000

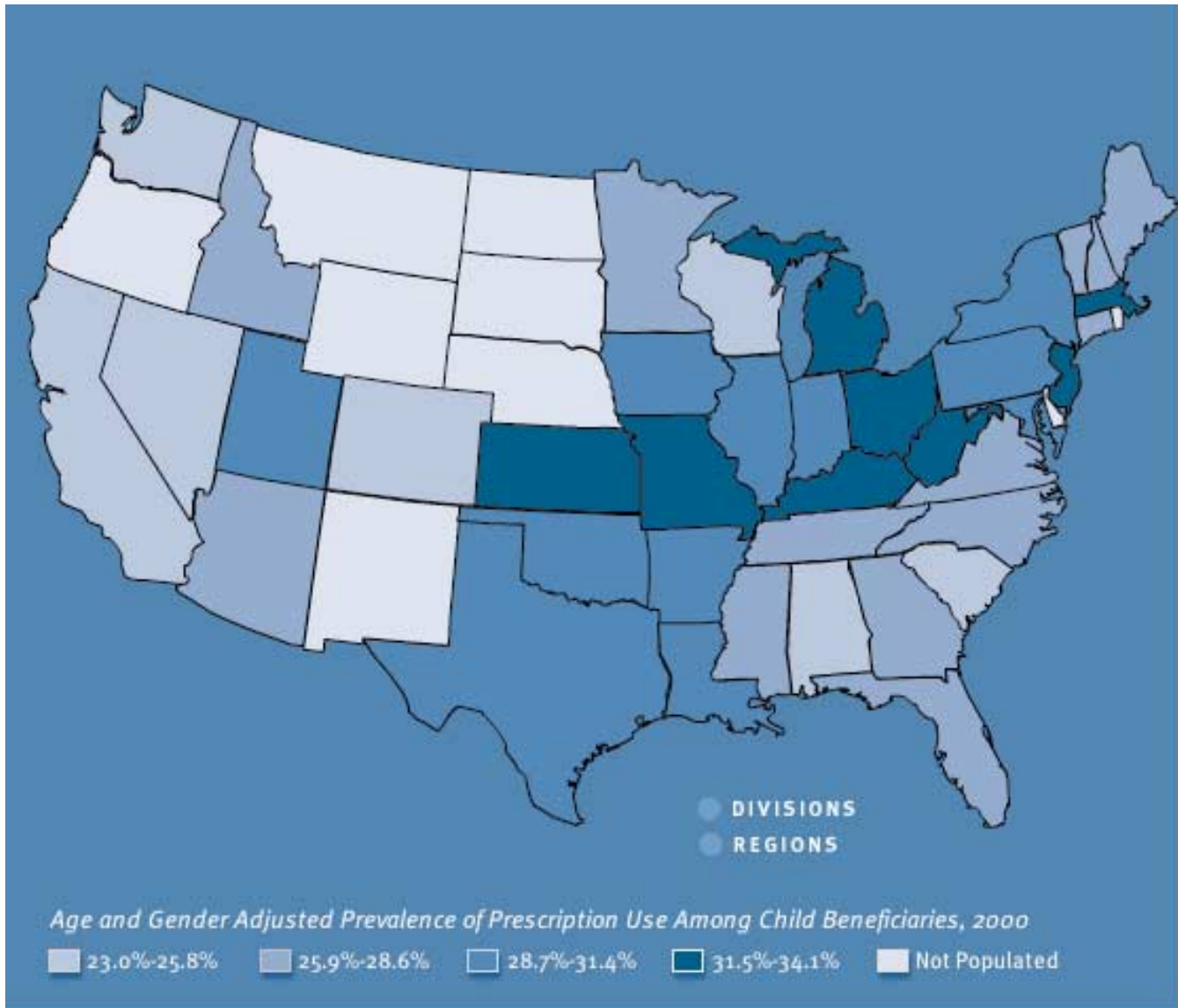


PENICILLINS

Penicillins are usually the first choice of antibiotic therapy for most pediatric use. Familiar to parents of most young children, penicillins are given in three or sometimes four doses a day. Penicillins are commonly prescribed for otitis media and are particularly useful for bacterial infections of the upper respiratory tract.

The Midwest had the greatest use of penicillin, followed by the West South Central. Use was lowest in the Pacific division.

Figure 4.2: Age and Gender Adjusted Prevalence of Penicillin Prescription Use Among Child Beneficiaries Less than 18 Years of Age, 2000



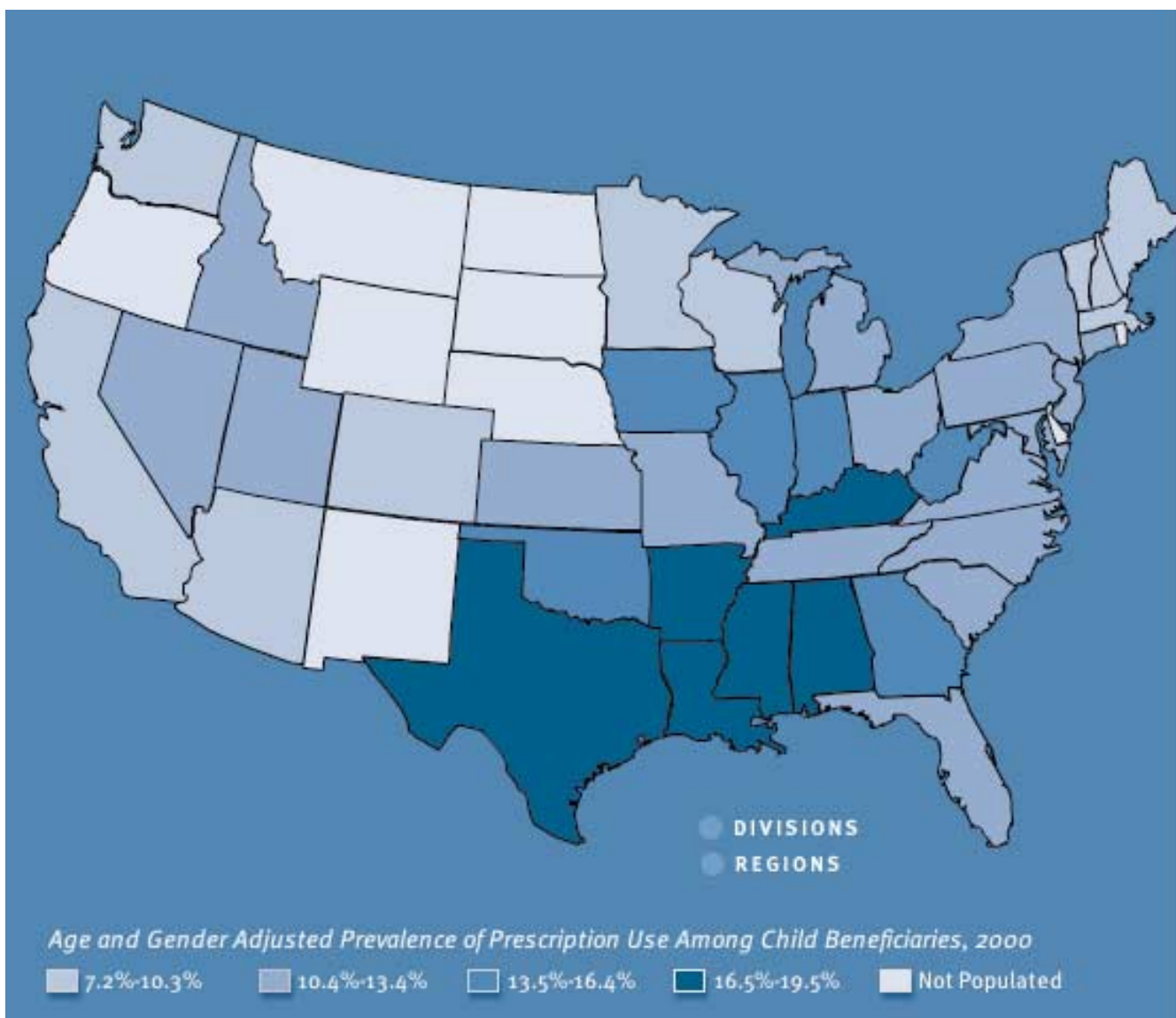
CEPHALOSPORINS

Cephalosporins are antibiotics that offer coverage and safety similar to the penicillins, but in another way. They are subdivided into four “generations” that have effectiveness for different kinds of bacteria.

The prevalence of use of cephalosporins varied from a high of 19.5% to a low of 7.2%.

Among children, states with the highest prevalence of use of cephalosporins were located in the West South Central and East South Central divisions of the country. Prevalence of cephalosporins was lowest in the West and New England.

Figure 4.3: Age and Gender Adjusted Prevalence of Cephalosporin Prescription Use Among Child Beneficiaries Less than 18 Years of Age, 2000

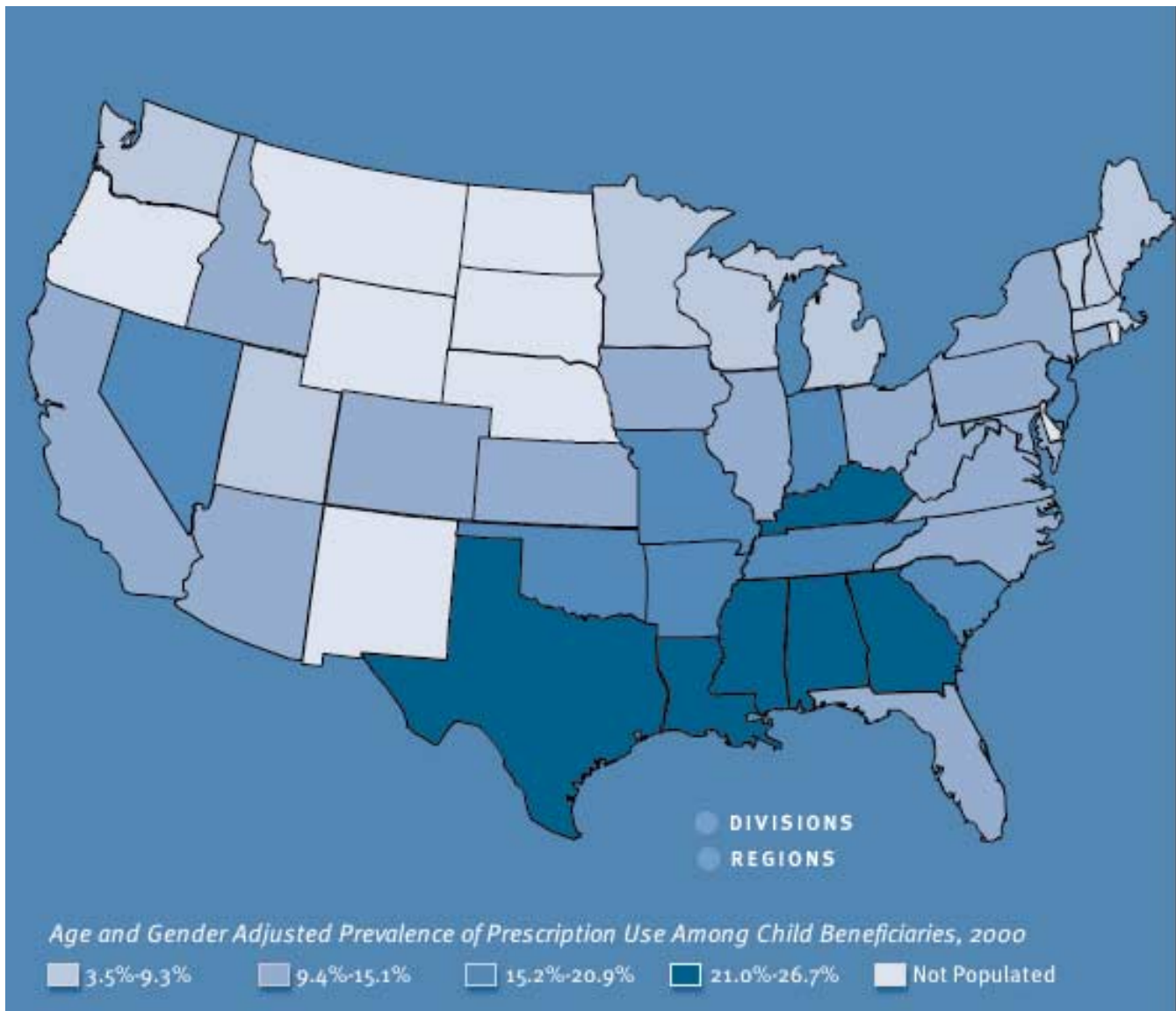


COUGH/COLD/ALLERGY

Often cough and cold products are used in addition to antibiotics. They are usually available in many different combinations of ingredients that relieve symptoms of nasal stuffiness, coughing, fever and pain, or runny nose and sneezing. Although they may be useful for symptoms of childhood colds, flu, and allergies, they are not curative. They have no effect on the bacteria or virus that may be causing infections.^{32 33 34}

For children, the prevalence of cough, cold, and allergy medications ranged from a low of 3.5% to a high of 26.7%. States in the Southern region of the country showed, by far, the highest use of products in this therapy class. Prevalence of use was lowest in New England.

Figure 4.4: Age and Gender Adjusted Prevalence of Cough/Cold/Allergy Prescription Use Among Child Beneficiaries Less than 18 Years of Age, 2000

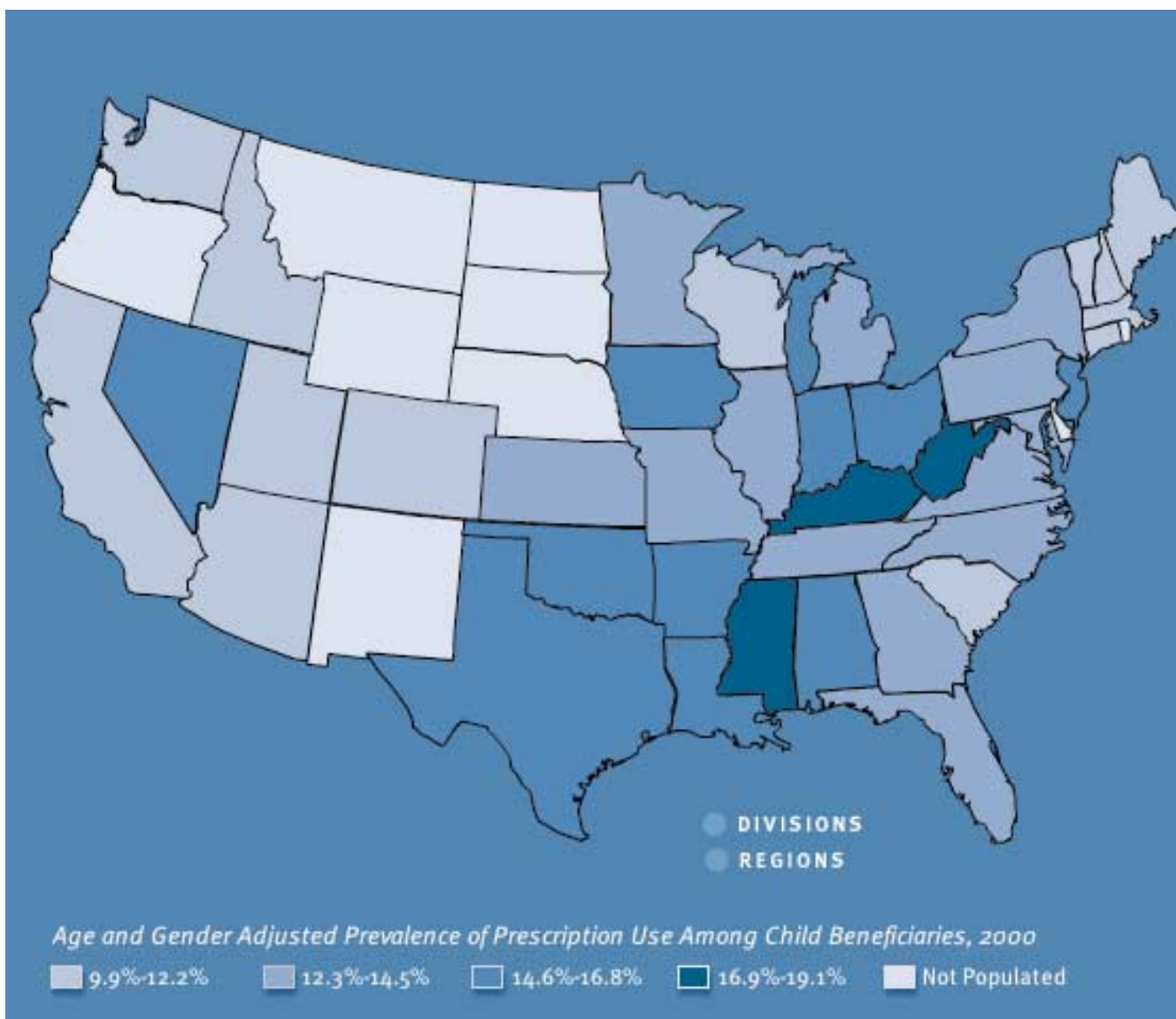


MACROLIDES

Macrolide antibiotics, including erythromycins and newer ones like azithromycin and clarithromycin, are generally safe and effective for children who cannot take penicillins. In addition, they attack bacteria differently from penicillins, so they are used in areas of penicillin-resistant bacteria. The newer macrolides can be given fewer times a day, some only require one daily dose, making them easier for parents to manage when children are going to school. In clinical trials, the newer macrolides generally produced fewer and milder side effects than penicillins.

Prevalence of macrolide antibiotic use varied from a high of 19% to a low of 10%. Use was highest in the West South Central and East South Central and lowest in the West and New England.

Figure 4-5: Age and Gender Adjusted Prevalence of Macrolide Prescription Use Among Child Beneficiaries Less than 18 Years of Age, 2000



STIMULANT THERAPY FOR THE TREATMENT OF ATTENTION-DEFICIT/HYPERACTIVITY DISORDER (ADHD)

Attention-deficit/hyperactivity disorder (ADHD) is among the most prevalent chronic conditions affecting school-aged children and it is the most common neurobehavioral disorder of childhood.³⁵

Recent estimates of the prevalence of ADHD in school-aged community samples indicates rates varying from 4% to 12%.³⁶ It is estimated that 77% of children with a diagnosis of ADHD are prescribed psychotherapeutic medications.³⁷ Among the medications prescribed for ADHD, 80% are stimulants – considered the hallmark of treatment for ADHD.³⁸ By far, the most commonly prescribed stimulant is methylphenidate (e.g., Concerta®, Ritalin®).³⁷

Prevalence of ADHD stimulant use varied from a high of 6.5% to a low of 1.9%. States with the highest prevalence of ADHD stimulant use were located in the South followed by the Midwest. Prevalence was lowest in the West and Northeast.

Figure 4.6: Age and Gender Adjusted Prevalence of ADHD Stimulant Prescription Use Among Child Beneficiaries Age 5-14, 2000

